2022 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, 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 use 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.

Mike Blankenheim	5/5/2022
Unit Chief	Date
Mike Blankenheim	
Docusigned by: Marc Chadderton	5/5/2022
Pre-Fire Engineer	Date
Marc Chadderton	

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 around structures.
- 5. Support implementation of the new 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 prevention operations to reduce ignitions within the Unit.
- 9. Nurture 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.

SECTION I: UNIT OVERVIEW

UNIT DESCRIPTION

AEU has a unique wildland fire environment owing to 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 (DPA¹) 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 life, property, natural resources, and ecological losses.
- Inadequate community ingress/egress routes.
- Difficulty of fire suppression, increasing safety problems for firefighters.
- Longer periods between recurring fires in many vegetation types 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. The last large fire completely within our unit boundary was the Caldor Fire in 2021 (221,835 acres) which started in the EI Dorado National Forest (ENF) and spread into the SRA. Over the past twenty years, population growth and development in the wildland have placed many additional homes and businesses at risk. Now 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 acres and over, brush fires 50 acres and over, and timber fires 10 acres and over, and wildland fires destroying three or more residential dwellings or commercial buildings.

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

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

Fire Weather & Terrain

The Wildland Fire Triangle consists of fuels, weather, and topography. The component with the most variability is the weather, and topography being the most 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 will tend to yield 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 importantly 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 Forest Service 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 with our federal cooperators and pre-fire projects outside of its DPA.

Within AEU, there are two all season trans-Sierra highways, State Highway 50 in El Dorado County and State Highway 88 in Amador County that run 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, and 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, the North Fork of the Mokelumne, 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

County	Population ²
Alpine	1,175
Amador	38,091
El Dorado	181,058
Sacramento	1,418,788
San Joaquin	685,306
Unit Total	2,324,418

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

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² 2010 Census Data

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.

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, 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 resulted in the public being more educated, especially regarding PRC-4291 defensible space requirements. This has also given them 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 upon 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 fuel breaks 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 (FSC's), Resource Conservation Districts (RCD's), 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 is 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

The Amador – El Dorado Unit of CAL FIRE acknowledged the potential for increased insect activity (specifically bark beetle) resulting from two years of successive drought leading to elevated levels of tree mortality in 2013. In January that same year, we re-issued a CAL FIRE California News Release authored by CAL FIRE Forest Entomologist Donald Owen, titled "Bark Beetles and Drought". In 2013 and 2014 insect activity levels remained at what is considered background levels within the Unit's forested landscapes. Bark beetle activity resulting in tree mortality, especially of stressed, weaken trees predisposed to attack is a normal occurrence. Individual or small pockets of dead trees are typically seen across a landscape.

In the spring of 2015, after four consecutive years of drought, a noticeable increase in tree mortality and bark beetle activity became evident over large geographic areas in the Unit. This activity has been primarily restricted to the pine belt ranging from 1500 feet to approximately 6000 feet in elevation on the west slope of the Sierra. Many small pockets of trees, primarily Ponderosa pine (*Pinus ponderosa*) began to die off. These pockets initially involved a single tree to as many 5 or 6 trees on a single acre. Throughout the summer of 2015 bark beetle activity continued to increase followed by additional tree mortality. Initial bark beetle activity and tree mortality pockets grew to encompass more acres (10 to 15 acres), and more trees succumb to mass attack (as many as 30- 45 trees per acre), new pockets began to develop over a larger expanded area. This progression and expansion of tree die off over a relatively short period of time is indicative of bark beetle's numbers reaching epidemic populations. When epidemic populations are reached, no tree, even healthy trees, are immune to attack. Throughout the fall

2015 and into the winter months of early 2016 bark beetle activity centers have continued to grow resulting in many more trees dying. The California Tree Mortality Task Force, an outcome of Governor Brown's Executive Order declaring a State of Emergency due to tree mortality in the fall of 2015, contains a map viewer based on aerial detection data tracking the progression of this epidemic. As of April 2016, the viewer depicts bark beetle activity centers as large as 2000 acres + and containing thousands of dead trees within Amador -El Dorado Unit.

Due to the record rainfall during the winter of 2017, new signs of tree mortality (bark beetle activity) decreased dramatically in the unit. AEU is cautiously optimistic that these higher levels of precipitation will have a lasting effect on bark beetle activity and tree mortality moving forward. In 2018 and the Spring of 2019 tree mortality due to bark beetle activity has continued to decrease.

AEU Pine Grove camp and Growlersburg Camp crews continue to assist counties under tree mortality mitigation and clean-up.

As of the Spring of 2020, bark beetle activity, hence tree mortality has dropped down to what maybe consider background levels. bark beetles are part of the forest system. They are always present, and will continue to kill individual trees and isolated pockets of trees. Given Bark beetles opportunistic nature. When the next drought occurs bark beetle numbers will increase again to attack drought stressed, over stocked forest stands resulting in measured levels of tree mortality.

SECTION II: 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:

Organization	Title	Contact Number
Sierra Pacific Industries	Forester	(209) 223-7170
Pacific Gas and Electric	Vegetation Program Manager	(800) 743-5000
Amador Fire Safe Council	Executive Director	(209) 304-2187
El Dorado County Fire Safe	Chairperson/Co-Chairperson	(530) 647-1700
and Satellite Council's		
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 III: 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.

Values	Public Issue Category	Location and ranking methodology
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 Energy 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.

<u>CAL FIRE</u> 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 <u>Communities at Risk List</u> 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
lone	AMADOR	
Jackson	AMADOR	F
Pine Grove	AMADOR	F
Pioneer	AMADOR	F
Plymouth	AMADOR	F
River Pines	AMADOR	

AMADOR	F
AMADOR	F
EL DORADO	F
SACRAMENTO	
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SECTION IV: 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; enforce California's Forestry and Fire Laws, Penal Codes, Health and Safety Codes and Public Resources Codes throughout the Unit, including PRC 4290 and 4291.

Engineering is a cooperative effort between CAL FIRE and County personnel assigned to ensure the compliance of Title 19 and Title 21 during the planning phase of structures. This staff also offers supportive guidance in the design of local fire safe projects; such as a Community Wildfire Protection Plans (CWPPs).

AEU incorporates a proactive approach to public information and education. Direct contact with the local schools, 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 provides media releases and articles, conducts live interviews (TV and Radio), prepares and disseminates fire information and incident information fact sheets, information on evacuations (in support of local law enforcement), etc. Duties include responding as an Incident Information Officer (Field PIO, PIO Center Manager, PIO in JIC, PIO on unified command incidents, etc.) locally or statewide.

Public Education and Awareness Program:

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

1) School Programs are done throughout the Unit and reach children from preschool through 12th 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 "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.

For 7th-12th 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, 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, 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 such as a fire agency or law enforcement.
- 3) Exhibits and Displays designed and constructed for fairs, parades, home and garden shows, wildfire awareness 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.

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 setters and program progress

ENGINEERING & STRUCTURE IGNITABILITY

The following section will discuss structure ignitability within the Amador-El Dorado Unit. Structure ignitability is a building's susceptibility to catching on fire. This is a growing concern as more homes and businesses continue to be 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: The Amador-El Dorado Unit (AEU) has seen rapid growth over the last couple of decades with homes and businesses being built farther away from population centers creating new areas of wildland-urban interface. Improper planning regarding minimizing a structure's exposure to wildfire has allowed many of the structures to be built in areas that increase their exposure to the effects of wildfires, such as building on steep slopes and within or at the top of both large and small drainages. Drainages act as chimneys and funnel heat and energy from wildfires. Homes within these drainages are subjected to a lot more heat and embers during a wildfire increasing the structures chance of igniting. Many times, firefighters are unable to defend structures within these drainages from an oncoming wildfire because of the amount of heat. Unfortunately, new construction continues to occur within these areas increasing the number of structures with a high susceptibility to igniting during a wildfire. AEU's Fire Prevention Bureau works with county planning and building departments to locate new construction in areas that minimize a building's exposure to wildfire.

Construction: How a structure is constructed and the type of material it is constructed out of is just as important as where a structure is located. The California Department of Forestry and Fire Protection/Office of the State Fire Marshal have developed wildland-urban interface building standards for new construction. The objective of the Wildland-Urban Interface Fire Area Building Standards is to establish minimum standards for materials and material assemblies and 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 design to resist the intrusion of flame or hot embers projected by a vegetation fire (wildfire exposure) will prove to be the most prudent effort California has made to try and mitigate the losses resulting from our repeating cycle of interface fire disasters. The new 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 new standards address such things as roofing, attic ventilation, ignition resistant siding, decking, windows, and wall vents. The new standards will help to reduce the number of hot embers that enter a building and ignite fires. Hot ember intrusion is the main reason homes are destroyed in wildland-urban interface fires.

Fire Hazard Severity Zone Maps

In 2007-2008 CAL FIRE updated the existing Fire Hazard Severity Zone maps to coincide with the adoption of the new wildland-urban interface building standards. The updated maps have incorporated improved wildland fire behavior science, data sets, and understanding of structure ignition mechanisms during conflagrations. These fire hazard severity zones will be used by building officials to determine appropriate construction materials for new buildings in the wildland-urban interface. The updated zones will also be used by property owners to comply with natural hazards disclosure requirements at the time of property sale. It is likely that the fire hazard severity zones will be used by local government as they update the safety element of general plans. The Fire Hazard Severity Zone maps and new building standards for each county can be obtained from the CAL FIRE website at CALFIRE website.

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

Under the Vegetation Management Program (VMP), the Unit has treated approximately 7155 acres since 2015 and has treated an average of 1430 acres annually. Many of the projects undertaken in the Unit have been within the wild land-urban interface (WUI). Due to the existing land use patterns within the Unit and the increasing population densities in Amador and El Dorado Counties, it is anticipated that the emphasis of the Vegetation Management Program will continue to focus on projects within the wild land-urban interface areas. The emphasis for future projects will be on densely populated and high asset at risk areas.

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 GRGF

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 V: 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 lookout.

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 2nd 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 consists of two CAL FIRE stations, a Conservation Camp, and one staffed lookout. Garden Valley Station and Pilot Hill Station are each two engine stations, with Growlersburg Conservation Camp, located outside of Georgetown, providing five hand crews. Growlersburg Camp provides most of the labor for pre-fire treatment programs in El Dorado County, as well as an invaluable resource on initial attack.

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 a Resident Firefighter 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 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 cooperator personnel / equipment. Other supplies, vendors, private resources, and call when needed support or tactical equipment (i.e.; dozers, helicopters, water tenders, etc.), information. CICC is also capable of handling incidents that may require extended attack operations into multiple days. The CICC Expanded ECC is used for large or complex incidents that outgrow initial attack (IA), so the IA floor of the ECC can continue mitigating new 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

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, Can function as Air Attack Platform if needed

Multiple Aircraft 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 through the capability of air tankers and helicopters to place retardants and personnel at the fire scene before ground forces and to support these forces.

Aircraft initial response criteria have been established to deliver retardants 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 Ione Fire Department, and Lockwood Fire Protection District.

The Amador County terrain consists of low lying grasslands to the west and productive timber lands on the eastern boundary. In the center of Amador County 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 includess 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 in an effert 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 EI 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.

There are two CAL FIRE stations within the Battalion. 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. Pine lodge Station, in River Pines, staffs one Type III engine during fire season. There are no CAL FIRE stations in Sacramento or San Joaquin counties.

Cooperating Fire Agencies

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

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

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

The Amador Fire Safe Council (FSC) is also a cooperating agency within Amador county

Battalion 7 – Buena Vista Rancheria Fire Department (Cooperative agreement)

Located in the foothills of the Sierra Nevada mountain range, the Buena Vista Rancheria Fire Department sits in the unincorporated community of Buena Vista. Station 181 covers 62 acres of the Buena Vista band of ME-WUK Indians Rancheria located in Amador County. On the Rancheria is the Harrah's

Northern Casino, which is the main response area of Station 181. The surrounding area consists of mixed grass and brush presenting a WUI issue. Station 181 is covered with one type one Advanced Life Support (ALS) fire engine, traditionally staffed in the winter and increases staffing with a type three ALS engine in the summer.

Through mutual aid agreements with surrounding districts, Station 181 also assists in providing service to the surrounding communities of Buena Vista and Comanche Village. They also service three area recreational lakes- Lake Comanche, Lake Pardee, and Lake Amador. Battalion 7 assists the Amador County Sheriff's Department in the summer months by providing ALS care on boat patrol and providing ALS care for the SWAT team.

The area has a large influx of visitors in the summer season with multiple recreational opportunities. Through this cooperative agreement with CAL FIRE, the Buena Vista Rancheria Fire Department provides fire prevention education programs to the community, in conjunction with East Bay MUD who manages the surrounding campgrounds. We provide a Smokey Bear education program multiple times a year reaching an audience from all over the state.

Staffing at the Buena Vista Rancheria Fire Department consists of 17 employees: 1 Battalion Chief Operations, 1 Battalion Chief Administration, 3 Fire Captain/Paramedics, 6 Fire Engineer/Paramedics and 6 Firefighter II/Paramedics. Battalion 7 is two years old and has made great strides in providing service to the community. It is the first and only traditionally staffed fire engine in Amador County and the first and only ALS engine in Amador County.

The local Fire Agencies that immediately surround Battalion 7 are:

- Jackson Valley Fire District
- Ione Fire Department
- Amador County Fire Protection District
- Clements Rural Fire Protection District

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 temporary 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, Calfire 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, <u>CAL FIRE has the potential to be well positioned to support these on-going initiatives through development of adequate infrastructure.</u> 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 5-7 years:

1) Complete remaining Wildland Urban Interface Treatments – Carnelian, Incline, and South Shore Hazardous Fuels Reduction (Forest Service)

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.

2) Tahoe Network of Fire Adapted Communities (Tahoe Resource Conservation District)

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.

 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.

4) 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.

Defensible Space Rebate Program- The Tahoe Fire and Fuels Team will explore the possibility of implementing a defensible space rebate program within the fire districts and managed by the Tahoe Resource Conservation District. Defensible space rebates are incentive payments designed to encourage property owners to implement complete defensible space treatments. These rebates have proven useful in bringing more homeowners into compliance with defensible space guidelines. The rebate program directly serves the built environment as it incentivizes homeowners to complete and maintain defensible space at their property. Partnering effective defensible space with fuels reduction treatments just outside of many Lake Tahoe Basin neighborhoods is critical in reducing or eliminating catastrophic wildfire and its devastating effects. Homes with complete defensible space treatments also serve as showcase properties so that more homeowners may understand the importance of defensible space and how to bring their property into compliance. CAL FIRE is partnering with the TFFT on using the ESRI Collector App for all inspections in the Basin regardless of jurisdiction.

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 8 (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

TYPE	PROJECT_NAME PR	OJECT_STATUS	TREATED ACRES
VMP	2017 Sly Park VMP	Active	1204
Fire Plan	2020 Forestry Challenge	Active	
Fire Plan	AFSC Mitchell Mine FB	Active	326
Fire Plan	Amador County Collaborative Ingress, I	Egress Active	
Fire Plan	Amador County SRA Roads	Active	235
VMP	Amoruso VMP	Active	484
VMP	Arroyo Seco VMP	Active	1029
VMP	Auburn Lake Trails VMP	Active	19
Forest Health	California State Parks Forest Health	Active	
Fire Plan	California Tahoe Conservancy	Active	48
Fire Plan	Cameron Park Hazardous Fuel Reduction	n and Active	189
	Fire Prevention Education Projects		
CFIP	Claire Van Dam Living Trust CFIP 2017	7 Planned	
VMP	Doaks Ridge VMP 2016	Active	95
Fire Plan	Eastern Alpine Communities Fuel Redu	ction & Active	4
	Curbside Chipping		
Fire Plan	El Dorado County Integrated Western S		
	Fire Plan and Vegitation Management S	trategy	
Fire Plan	El Dorado County Western Slope Chipp	ing Active	
	and Green Waste Disposal Program		
FirePlan	El Dorado Resource Conservation Distri	ict Planned	
Forest Health	Fire Adapted 50 Phase IB-Wildland Fire	e Active	
	Protection Program		
FirePlan	Fire Adapted 50 PhII-El Dorado Cooper	ative Active	721
	Wildland Fire Prevention Strategy		
VMP	Georgetown Divide VMP 2015	Active	1869
FirePlan	Georgetown Divide RCD	Active	
Forest Health	Jackson Creek Forest and Watershed	Active	
	Health Project		
CFIP	Ken & Karen Pimlott CFIP 2019	Active	131
VMP	Ladies Valley 2014 VMP	Active	25
FirePlan	Logtown East Side Fuel Break (LT-10)	Planned	
	LTCC Forest Health & Job Placement	Active	
FirePlan	Patterson Ranch Fuel Reduction	Active	156
VMP	Pine Acres VMP	Active	367
FirePlan	Pine Hill BLM	Active	48
Fire Plan	PPCFSC Weber Creek Fuels Reduction	Active	296
VMP	Sacramento Valley Conservancy 2020 V		255
VMP	Shake Omo VMP 2019	Active	39
VMP	Shake/Fiddle 2017	Active	265
FirePlan	Sly Park Vegetation Management Project		120
Fire Plan	State Parks Alpine FR	Active	20
FirePlan	State Parks Gold Fields	Active	151
FirePlan	State Parks Tahoe Basin Fuel Reduction		297
FirePlan	Texas Hill FLRP	Active	1375
VMP	Van Vleck/Shooting Center 2016	Active	5173

Totals 9605 Acres

Project Number: Cal MAPPER ID Project Name: Project Name as in Cal MAPPER

Project Type: VMP, CFIP, FPL = Fire Plan, PREV = Prevention, and FI = Forest Improvement, CAG=Community Assistance Grant, Other = identify at the bottom of the table.

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.

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.

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

Good Neighbor Authority (GNA) Fuels Reduction project:

AEU and USFS – El Dorado National Forest (ENF) entered into a Good Neighbor Authority (GNA) agreement in July of 2016. The agreement is in alignment with the Forest Service's National Cohesive Strategy and South Fork of the American River project (SOFAR). AEU has agreed to conduct 400 acres of fuels reduction on federal land on the north side of Highway 50 from Icehouse road east towards Echo summit and 100 acres of fuels reduction on federal and private land between Slab Creek and Pollock Pines. AEU Growlersburg crews completed the fuels reduction work. CAL FIRE had a contract in place with the Georgetown Divide Resource Conservation District for the environmental analysis NEPA and CEQA for all of phase II of FA50 under the GNA. Approximately 1600 acres of both federal and private land will received fuels treatment. The good Neighbor Authority agreement sunseted on June 15, 2021.

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 land owners 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.

El 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.

El Dorado County CWPP Revision (SRA Fee Funded - El Dorado County FSC Fiscal Sponsor)
The proposed project will create an Integrated El 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 noted below
- 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 2190 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 2526 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 Mitchel 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

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 blacked off. This backing fire will be the control line and the first training evolution of the firing class. These black lines will be the basis of the grid for the training exercise. 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 with in 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 8:

PROJECT ID	NEW OR CONTINUED FROM 2014	METHOD	SIZE	FUNDING SOURCE	AGENCY	OWNERSHIP
Airport Barbara	С	Mechanical Thin	30	SNPLMA	LVFPD	CSLT
Lake Valley Defensible Space Inspections	С	Defensible Space Inspections	250 Parcels	FEMA Roof	LVFPD	Private
CSLT Defensible Space Inspections	С	Defensible Space Inspections	40 Parcels	Private	LVFPD	Private
Lake Tahoe Community Chipping	С	Chipping	300 Parcels	CAL FIRE SRA	TRCD/LVFPD	Private
CTC Sunset Aspen	N	Hand Thin	8	TRPA	CTC/CCC	СТС
CTC Sunset	N	Pile Burn	30	Various	CTC/Various	CTC
CTC Angora Highlands	С	Hand Thin	4	CTC Direct	CTC/TRCD	СТС
CTC Angora Highlands	С	Chip	4	CTC Direct	CTC/TRCD	СТС
CTC Golden Bear	N	Hand Thin	6	CTC Direct	CTC/TRCD CCC	СТС
CTC Golden Bear	N	Chip	6	CTC Direct	CTC/TRCD CCC	СТС
CTC Barbara Lodi Handcrew	N	Hand Thin	6	CTC Direct	CTC/TRCD CCC	СТС
CTC Barbara Lodi	N	Mechanical Thin	51	SNPLMA	CTC/CTL Enterprises	СТС
CTC Angora Burn Area	С	Pile Burn	28	CTC Direct	CTC/CCC	СТС

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	С	Mechanical Thin	363	SNPLMA	USFS	USFS
South Shore Fuels Reduction-Spider Pig Whole Tree Stewardship Contract	С	Mechanical Thin	275	SNPLMA	USFS	USFS
Echo 107	N	Hand Thin	24	SNPLMA	USFS	USFS
Echo 108	N	Hand Thin	27	SNPLMA	USFS	USFS
Echo 33	N	Hand Thin	16	SNPLMA	USFS	USFS
Echo 107	N	Hand Thin	12	SNPLMA	USFS	USFS
Yeti 19	N	Mechanical Thin	32	SNPLMA	USFS	USFS
Yeti 117	N	Mechanical Thin	47	SNPLMA	USFS	USFS
CV05	N	Pile Burn	11	SNPLMA	USFS	USFS
CV06	N	Pile Burn	16	SNPLMA	USFS	USFS
PT21	N	Pile Burn	20	SNPLMA	USFS	USFS
Highland 1	С	Pile Burn	123	USFS	USFS	USFS
Viking 3	С	Pile Burn	73	USFS	USFS	USFS
South Shore ULM	С	Pile Burn	231	SNPLMA	USFS	USFS
Panther 42	С	Pile Burn	4	SNPLMA	USFS	USFS
Panther 46	С	Pile Burn	59	SNPLMA	USFS	USFS
Panther 159	С	Pile Burn	62	SNPLMA	USFS	USFS
Panther 161	С	Pile Burn	78	SNPLMA	USFS	USFS

Panther 162	С	Pile Burn	101	SNPLMA	USFS	USFS
Toads 94	С	Pile Burn	12	SNPLMA	USFS	USFS
Toads 168	С	Pile Burn	10	SNPLMA	USFS	USFS
Twin Peaks 49	С	Pile Burn	79	SNPLMA	USFS	USFS
Twin Peaks 50	С	Pile Burn	73	SNPLMA	USFS	USFS
Twin Peaks 98	С	Pile Burn	24	SNPLMA	USFS	USFS
Twin Peaks 59	С	Pile Burn	30	SNPLMA	USFS	USFS
Twin Peaks 185	С	Pile Burn	12	SNPLMA	USFS	USFS
Twin Peaks 203	С	Pile Burn	93	SNPLMA	USFS	USFS
Twin Peaks 1091	С	Pile Burn	37	SNPLMA	USFS	USFS
Twin Peaks 90	С	Pile Burn	108	SNPLMA	USFS	USFS
Twin Peaks 204	С	Pile Burn	125	SNPLMA	USFS	USFS
Twin Peaks 163	С	Pile Burn	73	SNPLMA	USFS	USFS
Meeks Bay DSI	С	DSI	250 Parcels	MBFPD	MBFPD	Private
Meeks Bay Pine Needle Pickup	С	Pine Needle Pickup	150 Parcels	CAL FIRE SRA/MBFPD Alpine Springs	MBFPD	Private
Boat Camp 1	N	Pile Burn	3	CAL PARKS	CAL PARKS	CAL PARKS
Vikingsholm 1	N	Pile Burn	5	CAL PARKS	CAL PARKS	CAL PARKS
Bliss Gateway 1	N	Hand Thin	14	Prop. 40/Prop.84	CAL PARKS/CCC	CAL PARKS
Bliss Gateway 1	N	Pile Burn	23	CAL PARKS	CAL PARKS	CAL PARKS
DL Bliss Campground Fuels Reduction	N	Hand Thin	33	USFS	CAL PARKS	CAL PARKS
DL Bliss Lighthouse 1	N	Pile Burn	15	CAL PARKS	CAL PARKS	CAL PARKS
Sugarpine South	С	Hand Thin	71	USFS/ MBFPD	CAL PARKS	CAL PARKS
Sugarpine SNPLMA 14	N	Hand Thin	20	SNPLMA	CAL PAKS/ MBFPD	CAL PARKS
Sugarpine SNPLMA 14	N	Pile Burn	11	SNPLMA	CAL PARKS	CAL PARKS
Sugarpine SNPLMA 14	N	Chipping	9	SNPLMA	MBFPD	CAL PARKS

CAL FIRE Alpine	С	DSI	250	CAL FIRE	CAL FIRE	CAL FIRE
County Defensible Space Inspections			Parcels	AEU	AEU	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 AEUs 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

The purpose of this Defensible Space Inspection Plan is to give Unit Prevention, Battalion personnel and Forestry Aide Defensible Space Inspectors clear objectives, goals and direction regarding PRC 4291/LE 100 Defensible Space Inspections.

Prevention activities are one of the top priorities of the California public and elected officials, now more than ever with the advent of the SRA Fire Prevention Fee. It is our duty to meet these expectations with the same spirit we meet our response and suppression priorities with each day. Fire Prevention is a team effort from our Administration, Battalion Chiefs, Engine Companies, Hand Crews, Vegetation Management Program, Fire Plan Staff, Resource Management Staff and of course our Fire Prevention Bureau.

In 2006, Public Resource Code 4137 was enacted by the legislature to ensure high levels of fire prevention activities are maintained. It states the following:

It is the intent of the Legislature that the year-round staffing and the extension of the workweek that has been provided to the department pursuant to memorandums of understanding with the state will result in significant increases in the department's current level of fire prevention activities.

EXHIBITS: MAPS

Figure A: Unit Map

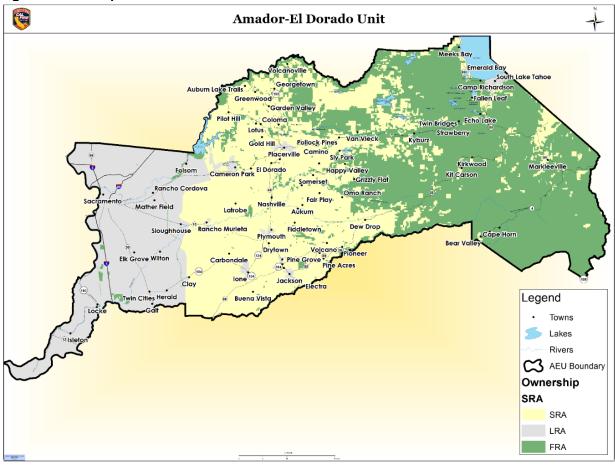
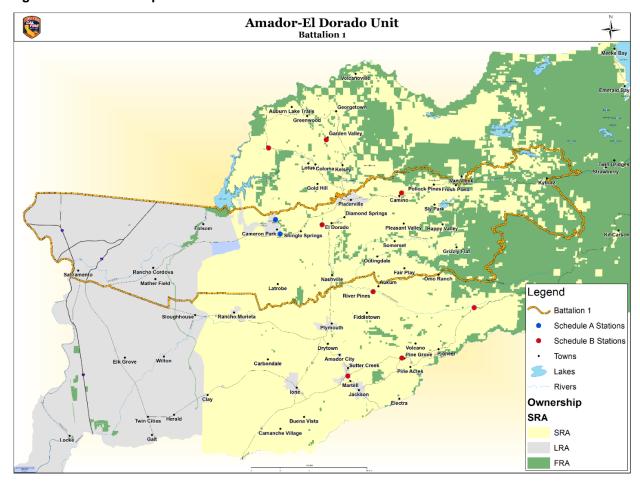
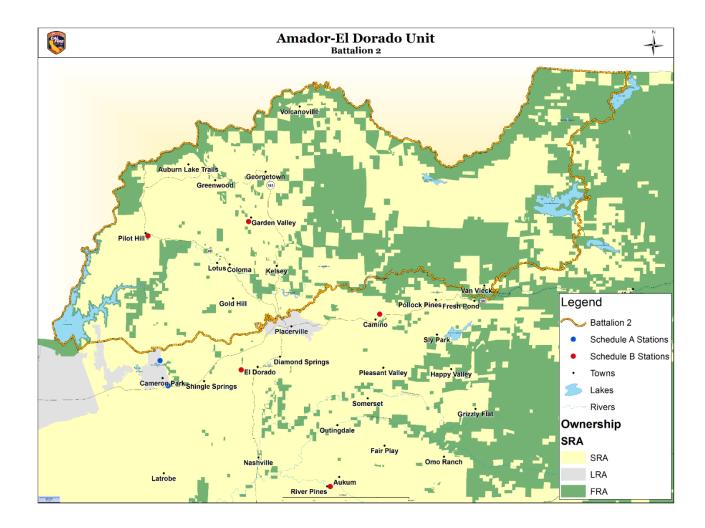
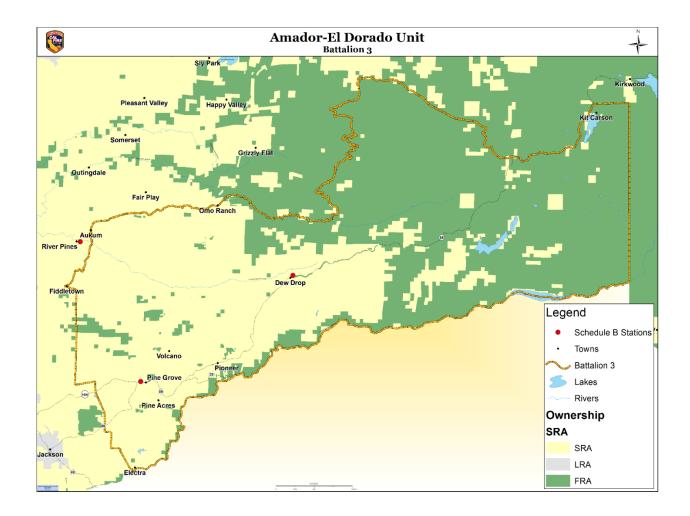
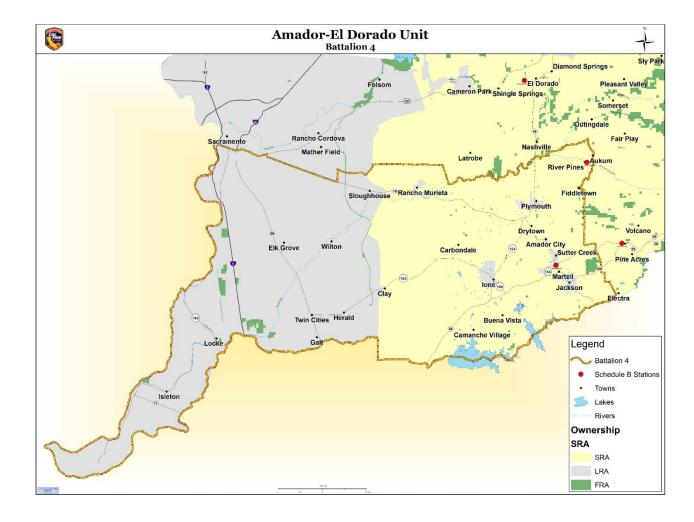


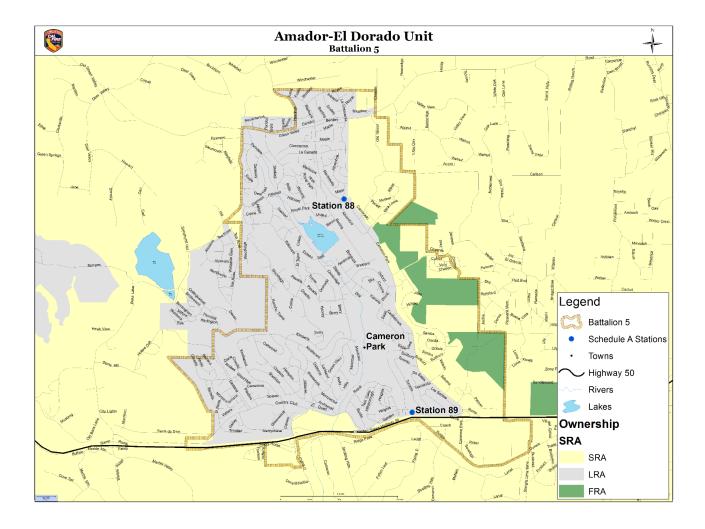
Figure B: Battalion Maps

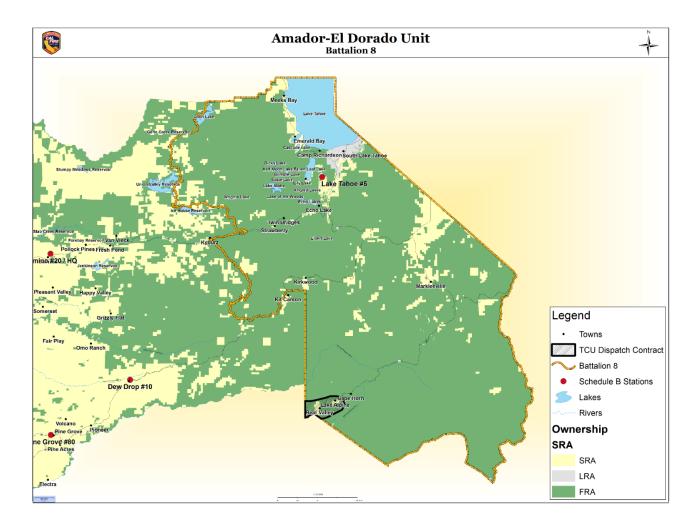












^{*}Battalion renumbered to Battalion 6

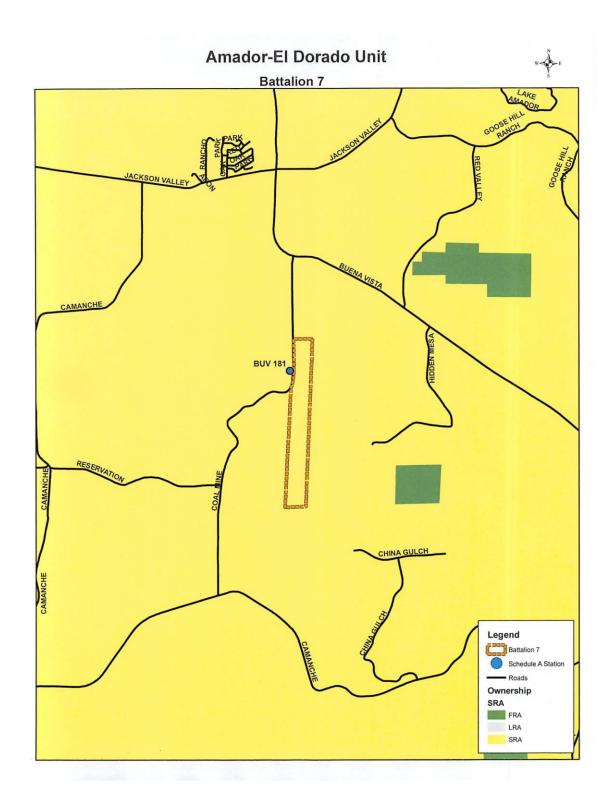
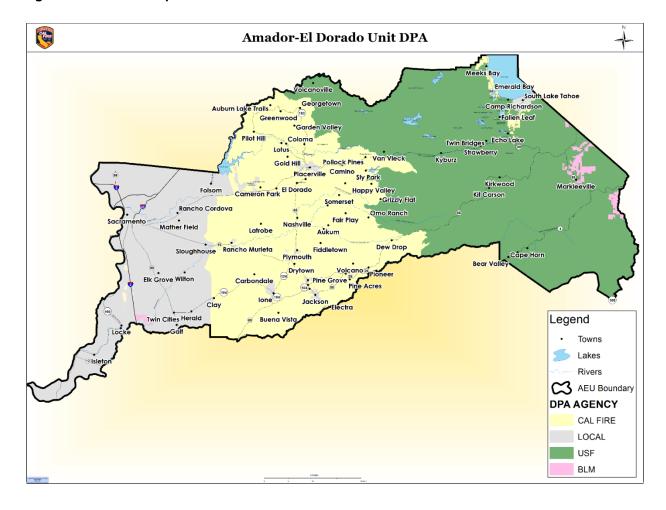


Figure C: Unit DPA Map



SUPPLEMENT:

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:

FIRE NAME:	YEAR:	ACREAGE:
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 2014, the King Fire burned 97,717 acres. Of that, 2,823 acres burned were within the Unit's DPA. In July 2014, the Sand Fire burned 4,240 acres within the SRA. In September 2015, the Butte Fire burned 70,868 acres on FRA and SRA. Of the 58,797 SRA acres burned, 3,626 acres burned were within AEU's DPA. Although the fire started in AEU, a vast majority of the damage caused by the Butte Fire was in TCU. In 2021, there were two large fires within AEU. The Tamarack Fire started on July 4th in Alpine county on Fed DPA and burned 68,637 acres. Of that, 9,373 acres were SRA. On August 14 the Caldor Fire started on Fed DPA. This fire burned 221,786 acres from Omo Ranch to South Lake Tahoe. Of the 221,786 acres, 40,066 acres were SRA within AEU. The fire destroyed 1003 structures and damaged 81. Over the past twenty years, population growth and development in the wildland-urban interface (WUI) have

placed additional homes, businesses and public 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.

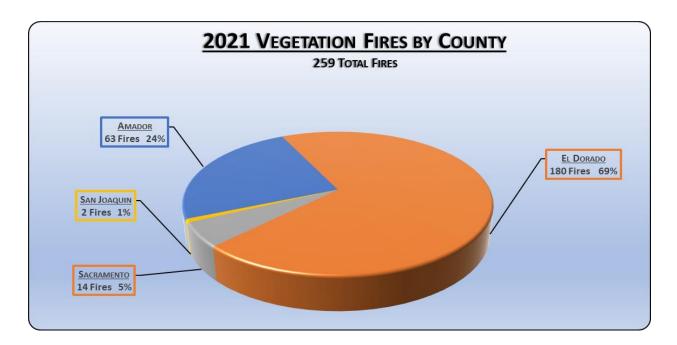
Current statewide and Unit policy requires that a CALFIRS Fire Report (new reporting program as of 2019) be completed for every wildland fire. A wildland fire is defined as any uncontrolled vegetation fire which threatens to destroy life, property or resources and is either unattended or attended by 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 2021.

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.

2021 Fire Season Ignition Statistics

Wildland fire ignition statistics were tracked for the entire year of 2021. The Unit experienced 259 wildland fires within its Direct Protection Area (SRA-DPA). There was a decrease of 47 ignitions from 2021 (306 fires). The 259 fires are 6 fires higher than the 10-year average of 252 fires. Wildland fire statistics are tracked based on information from each Fire Report submitted to the Fire Prevention Bureau.

COUNTY	IGNITIONS WITHIN AEU DPA		
Amador	63		
El Dorado	180		
Sacramento	14		
San Joaquin	2		
Alpine	0		

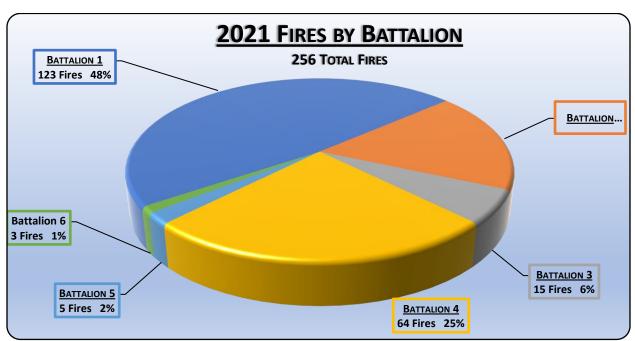


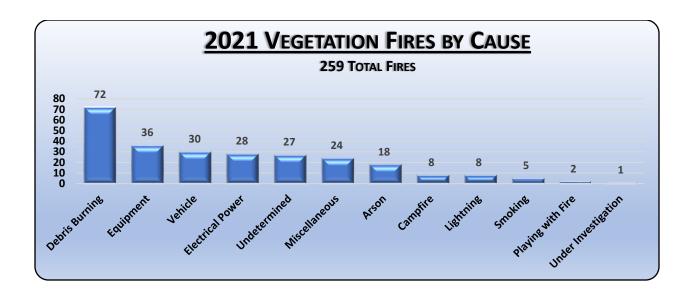
2021 Five Largest Fires in AEU:

1) Caldor Fire, burned 40,066 acres in El Dorado County from Omo Ranch to South Lake Tahoe. Two individuals have been arrested for the cause of this fire. Due to current litigation, the cause of this fire is Under Investigation.

- 2) Goose Fire, burned approximately 66 acres in Amador County. The cause of the Goose fire was mowing on a hot dry day.
- 3) <u>Lawrance Fire</u>, burned 46 acres in Amador County. The cause of the fire was undetermined.
- 4) <u>Settlers Fire</u>, burned a little over 45 acres in El Dorado County. The cause of the fire was a tractor moving rocks on a dry day which sparked the grass.
- 5) <u>Blackstone Fire</u>, burned approximately 35 acres in El Dorado County. The cause of the fire was faulty electrical equipment.

Calculating all the fires that started within the Unit's DPA in 2021, approximately 487 acres burned. In 2020, approximately 6,820 acres burned, with a 10-year average of 2,657 acres. In 2021, AEU experienced approximately an 82% percent decrease of acres burned over the ten-year average. The Caldor Fire which started on USFS DPA on August 14, 2021, burned 221,786 acres. 40,066 of those acres were SRA. Although a majority of the structures damaged or destroyed was on SRA within AEU, this acreage is not reflected in AEU's statistics.

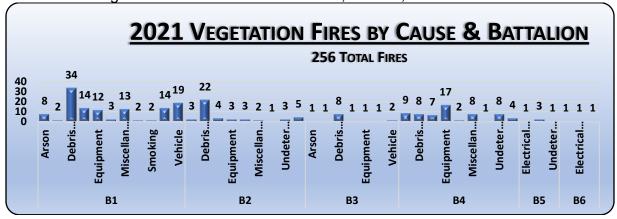




While reviewing fire causes during 2021, it was found that the five leading causes of wildland fires in AEU were:

1)	Debris Burning	(72 fires – 28%)
2)	Equipment	(36 fires - 14%)
3)	Vehicle	(30 fires - 12%)
4)	Electrical Power	(28 fires - 11%)
5)	Undetermined	(27 fires – 10%)

The five leading causes accounted for 193 fires, or 76%, of all 2021 fires that occurred.

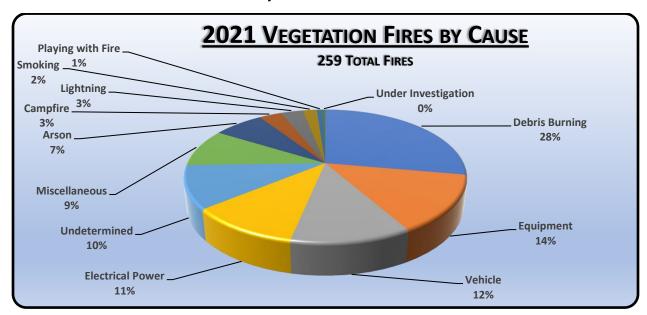


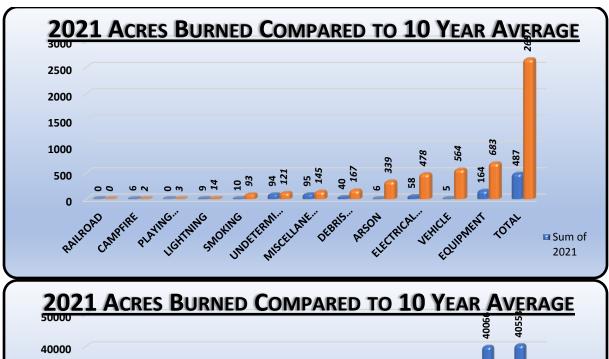
The remaining causes of fires in 2021 within AEU were:

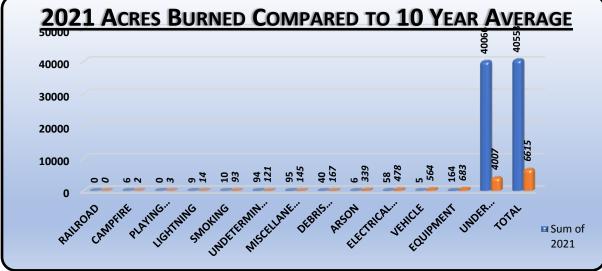
6)	Miscellaneous	(24 fires - 9%)
7)	Arson	(18 fires – 7%)
8)	Campfire	(8 fires - 3%)
9)	Lightning	(8 fires – 3%)
10)	Smoking	(5 fires – 2%)
11)	Playing with Fire	(2 fires – 1%)

12) Railroad (0 fires-0%)

Although the number of ignitions was down 47 from 2020, 2021 showed an increase in all Wildland Cause categories over the 10-year average except Playing with Fire and Undetermined. The high number of Playing with Fire ignitions (7 fires) in 2020 may be attributed to the lockdown from the COVID Pandemic. The number of Undetermined fires dropped from 47 in 2020 to 27 in 2021. 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.







2021, there were 258 ignitions, 47 less ignitions then in 2020, and 6 more than the 10-year average of 252 fires. To better address ignition management in the Unit, a more detailed analysis of the fires in each major cause classification was conducted.

1) Debris burning accounted for 72 fires, or 28% of the total fires in the Unit. Debris caused fires resulted in approximately 40 acres burned within the unit for 2021. The 10-year average for this category is 167 acres burned. There was a significant decrease in the number of ignitions from Debris Burning from 2020 (102 fires) to 2021. However, 72 ignitions in 2021 is still significantly higher than the 10-year average of 45 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 higher than normal 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. Fire Prevention Bureau personnel are also issuing citations when debris burn caused fires violate law or violate the terms of the burn permits issued.

In addition, Unit Fire Prevention 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 Unit Fire Prevention 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 January 2019, AEU has implemented an online burn permit program allowing homeowners to go online and watch a short instructional video about how to conduct a safe/legal debris burn. These online permits are only valid for one year as opposed to the in person/handwritten permit that is valid for three years. The Unit will continue to issue in-person/handwritten permits for members of the community when requested.

2) Equipment use accounted for 36 fires, or 14% of the total ignitions in the Unit. Equipment caused fires resulted in approximately 164 acres being burned within the Unit in 2021. This acreage is well below the 10-year average of 683 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 Fire Prevention Bureau will continue to conduct enforcement action when violations of law are identified as well.

- 3) Vehicles accounted for 30 fires, or 12% of the total ignitions in the Unit. Vehicle caused fires resulted in approximately 5 acres being burned within the Unit. The 10-year average of acres burned for vehicle caused fires is 564 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.
- 4) Electrical Power caused fires accounted for 28 fires, or 11% of the total ignitions in the Unit. Electrical power caused fires resulted in approximately 58 acres burned within the Unit. The 10-year average of acres burned for electrical caused fires is 478 acres. The Unit's Fire Prevention Staff continue to report PRC 4292 and PRC 4293 violations when they are observed to the appropriate utility company to mitigate the violation. Fire Prevention 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.
- 5) Undetermined Fires with an undetermined cause accounted for 27 fires, or 10% of the total ignitions in the Unit. Undetermined caused fires resulted in approximately 94 acres being burned in the Unit. The 10-year average of acres burned for this cause class is 121 acres. Fire Prevention 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 Fire Prevention 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.

6) Miscellaneous causes accounted for 24 fires, or 9% of the total ignitions in the Unit. Miscellaneous caused fires resulted in approximately 95 acres being burned within the unit. The 10-year average of acres burned for Miscellaneous caused fire is 145 acres. This classification includes causes such as structure fires, spontaneous combustion, fireplace ashes deposited in the wildland, barbequing, cooking fires, 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 Fire Prevention Bureau when violations of law are identified will help reduce the number of ignitions.

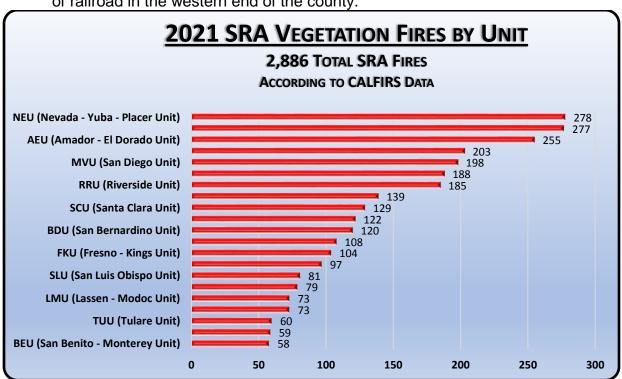
7) Arson accounted for 18 fires, or 7% of the total ignitions in the Unit. Arson caused fires burned approximately 6 acres in 2021. The 10-year average acres burned for arson caused fires is 339 acres. Arson caused fires are a good reason why investigating fires needs to be conducted quickly, thoroughly 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 Fire Prevention 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.

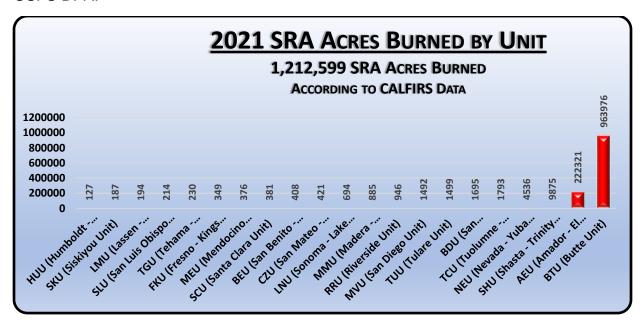
- 8) Campfires accounted for 8 fires or 3% of the total ignitions in the Unit. Campfire caused fires burned approximately 6 acres in 2021. The 10-year average of acres burned from campfire caused fires is 2 acres. Most of these campfires were located at transient camps. While fires in transient camps 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 Prevention Bureau and EDSO. 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. Fire Prevention Bureau officers and local law enforcement continues to patrol these encampments to reduce the number of illegal campfires.
- 9) Lightning accounted for 8 fires, or 3% of the total ignitions in the Unit. Lightning caused fires burned approximately 9 acres in 2021. The 10-year average of acres burned from lighting caused fires is 14 acres. Not much can be done to prevent or alter this category. In anticipation of predicted dry-lighting events, the Unit will activate its AEU Complex Incident Plan in order to reduce the number of acres burned due to lightning.

- 10)Smoking accounted for 5 fires, or 2% of the total ignitions in the Unit. Smoking caused fires burned approximately 10 acres in 2021. 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.
- 11)Playing with Fire accounted for 2 fires, or 1% of the ignitions in the Unit. Playing with fire caused fires burned approximately ¼ acre in 2021. 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.
- **12)Railroad** accounted for zero fires in 2021. 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.



The above graph shows AEU SRA Ignitions compared to all CAL FIRE Unit's SRA Ignitions. This data is collected from CALFIRS. Unlike previous years, illegal debris fires are not included in this total. With a total of 255 SRA ignitions for 2021, AEU had the third highest number of ignitions, behind NEU and LNU.

The below graph shows the Statewide SRA acres burned according to CALFIRS data. Due to the Caldor Fire, AEU had the second most acres burned in the state. Without the Caldor Fire, the number of acres burned in the Unit was 487 acres. The 10-year average is 2,657 acres. The Caldor Fire is not part of AEU ignition data because it started on USFS DPA.



<u>Information and Education Program</u>

Public Information Program

The Unit's Public Information Officer (PIO) prepares and disseminates fire and incident information, fact sheets, and information on evacuations (in support of local law enforcement) during incidents. The PIO also provides media releases and articles, conducts live interviews (TV and Radio), and coordinates public education events with Battalion personnel. Additional duties include responding as an Incident Information Officer (Field PIO, PIO Call Center Manager, PIO in a Joint Information Center, or PIO on unified command incidents) locally or statewide.

2021 Highlights:

The Caldor Fire was a significant event for the Public Information Program. CAL FIRE is a reliable resource for fire information. The Unit was inundated with inquiries from local, national, and international media outlets. Inquiries from the general public were also ongoing.

The Unit was heavily involved in promoting the Fire Adapted 50 (FA-50) program in El Dorado County. Work done on phase 1 of FA-50 proved successful in creating a fuel break for the community of Pollock Pines during the Caldor Fire. Several media stories were aired and disseminated from other outlets regarding the project.

Public Education and Awareness Program

The Public Education and Awareness Program is comprised of four components:

School Programs, Group Programs, Exhibits/Displays and Parades which are coordinated with Field Battalions.

School Programs are done throughout the Unit and reach children from preschool through 12th 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 are a variety of programs available to use depending on the request or needs of the school. The program for preschool through 6th grade includes "Smokey Bear/Captain CAL 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".

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 grew in 2021 despite the limited number of public activities due to the COVID-19 Pandemic. Volunteers staffed the Pilot Peak and Mt. Zion Lookouts and provided support for allowed public information events.

VIPs were also utilized to help support the Caldor fire.

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 2021, AEU conducted 4,768 total defensible space inspections. These numbers include inspections completed by Forestry Aide Defensible Space Inspectors, CAL FIRE engine companies, El Dorado County Vegetation Management Inspectors, El Dorado County Fire Safe Councils, and Local Government Fire Personnel. These numbers are less than the previous few years due to the Unit having two major fires 14 (Tamarack, and Caldor). The AEU defensible Space Inspectors were assigned to Damage Inspection (DINS), and as Public Information Officers (PIO) for extended periods of time during these incidents. In addition to the busy fire season, AEU Defensible Space Inspectors had the additional workload of conducting AB-38 inspections due to real estate transactions.

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,
- 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, the large majority of inspections were completed by Volunteers-In-Prevention (VIP's) and Fire Safe Councils. It was not until 2007 that CAL FIRE personnel began to actively conduct inspections on a consistent, Unit-wide basis.

	Defensible Space Inspection Numbers by Year							
	Amador-El Dorado Unit							
Year	Inspections	Completed By	Comments					
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 1st. 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					

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 takes into account 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

In 1986, the California Board of Forestry and Fire Protection, supported by CAL FIRE, introduced legislation (Senate Bill 1075, Rogers) to develop *minimum* statewide standards for defensible space in State Responsibility Areas. This legislation was motivated by local government's general lack of response to wildland fire prevention and protection problems over the previous 20 years. This comprehensive wildland fire safety legislation was passed by the Legislature and signed by the Governor in 1987. SB1075 required the California Board of Forestry and Fire Protection to establish minimum fire safety requirements that applied to SRA.

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 Amador-El Dorado Unit Fire Prevention Bureau oversees the application of PRC 4290 and Title 14 of the California Code of Regulations, Section 1270, on all private lands classified as SRA within the Unit and lands within the LRA identified as Very High Fire Hazard Severity Zones. These regulations are best known as the "SRA Fire Safe Regulations," and constitute the basic wildland fire protection standards of the California Board of Forestry and Fire Protection. CAL FIRE has been given the role of wildland fire protection expert and is provided the opportunity to review and comment on all proposed construction and development within the SRA. These regulations were amended in 2019 and the amended requirements went into effect on January 1, 2020. The Fire Prevention Bureau is actively engaged with all our cooperating county Planning Departments to ensure implementation of the In cooperation with El Dorado County Planning, Amador County Planning, Alpine County Planning, Sacramento County Planning and San Joaquin County Planning, CAL FIRE has oversight responsibility and reviews proposed tentative subdivision maps, tentative parcel maps and special use permits for compliance with PRC 4290. CAL FIRE forwards recommendations to the appropriate Planning Department specifying the minimum requirements necessary to meet State law.

Major factors considered in the review of any discretionary permit application are:

1) 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.

2) Addressing and Street 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.

3) 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.

4) 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.

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
Division Chief – Central Division – 1

Forester I, Forest Practice – 1
Fire Captain Specialist, Fire Prevention Bureau – 2
Fire Captain A – Station Captain - 1

The Unit will continue to utilize its Peace Officers for general Law Enforcement duties, 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 2020.

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.

2021 Fire Prevention Bureau Statistics:

- Fire Prevention Bureau officers responded to 200 incidents
 - o 5 Arrests were made within the Unit related to arson type fires
 - o 7 Citations were issued
 - o 72 LE 38's were issued

2021 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

<u>Administrative Investigations:</u>

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 2021, the Unit successfully engaged in all aspects of Fire Prevention including public education, engineering, law enforcement and volunteerism. In addition, the Prevention 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 Prevention 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) to educate the transient population on fire safety and at times enforce the law when appropriate.

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

It's the intent of the Amador-El Dorado Unit in 2022 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 ongoing 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.