

**2016 Unit Strategic Fire Plan
Amador-El Dorado Unit**



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SIGNATURE PAGE

Unit Strategic Fire Plan developed for Amador-El Dorado Unit:

This Plan:

- Was collaboratively developed. Interested parties, Federal, State, City, and County agencies within the Unit have been consulted and are listed in the plan.
- Identifies and prioritizes pre fire and post fire management strategies and tactics meant to reduce the loss of values at risk within the Unit.
- Is intended for 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.

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EXECUTIVE SUMMARY

The goal of the Amador – El Dorado Unit 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 who have different complexities as it relates to project implementation and priorities regarding the threat of a wildland fire. The purpose of this Strategic Fire Plan is to provide adequate 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 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 projects at critical operational locations.
4. Assist County government and local cooperators with coordinating emergency protective actions and monitor on-going conditions to address the growing tree mortality problem due to 4 years of successive drought.
5. Continue to support the implementation of fire safe clearance around structures.
6. Support implementation of the new 2008 WUI Building standards through cooperation with local government planning departments.
7. Conduct incident analysis to evaluate Unit success in achieving the 95% threshold of keeping fires less than 10 acres in size.
8. Educate the community on their role in the wildlands and support Fire Safe Council activities.
9. Utilize prevention operations to reduce ignitions within the Unit.
10. Nurture and build relationships with local public and private industries to develop cooperative project plans.
11. 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 fuels, 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.

The majority of CAL FIRE's DPA contains high to very high hazard fuels (brush and timber). These areas contain steep, rugged river canyons making access difficult, and fighting fires with bulldozers is 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.

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 was the Rancheria Creek Fire in 1961(34,104 acres). However, 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.

With the exception of 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. However, the King fire 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 most variable component is weather and the most stable of the three is topography. These components of the fire environment cannot be altered by humans to affect the potential outcome of wildland fire occurrence, however the contribution to fire behavior by both require significant analysis to meet the objective of mitigating wildland fire activity on State Responsibility Lands.

Fire Weather

Fire weather for AEU is typically dominated by three general weather phenomenon; 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, however 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 however is the strong winds that typically accompany these patterns. These winds are generally capable of overriding any benefit that may come from marine air. There is, however, an upside. This type of wind will typically subside after sundown causing fire behavior to drop off dramatically.

The other critical wind patterns for AEU are very difficult to predict, are relatively rare, and often times 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 of 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 located 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, Bureau of Land Management, and Bureau of Reclamation 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 close 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.

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 the majority 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 production, construction, service oriented businesses and to a lesser extent, light industry. All of 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

County	Population²
Alpine	1,175
Amador	38,091
El Dorado	181,058
Sacramento	1,418,788
San Joaquin	685,306
Unit Total	2,324,418

estimated \$150,000 in revenue per day would be lost by west slope communities due to a closure of Highway 50 from the west county line to Echo summit.

² 2010 Census Data

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 in 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. A coordinated effort involving, Engine Companies, Law Enforcement, and local Fire Safe Councils educate the public and enforce PRC-4291 defensible space requirements. In addition, the public is educated and given 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 and in particular 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 ultimate goal of reducing damage from wildfire.

The key to effective fire planning is the CAL FIRE Battalion Chiefs acting as community wildfire leaders. Consequently, 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 back 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, weakened trees predisposed to attack is a normal occurrence. Individual or small pockets of dead trees are typically seen across a landscape.

However 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. As original bark beetle activity and tree mortality pockets grew in size 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 beetles 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 in size 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 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.

Based on the epidemic's progression north, and the little relief this winter has afforded AEU from the current drought gripping most of California. It is anticipated that the Unit will continue to experience an expansion of affected acres in the thousands of acres and tree mortality in the tens of thousands.

AEU has engaged the Boards of Supervisors in both Amador El Dorado and Alpine Counties informing and advising them of the anticipated problem. This has resulted in both counties passing resolutions declaring local states of emergency, forming core task forces of local stakeholders and drafting tree mortality response plans to address the issue(s). In addition, AEU personnel have met with local Fire Safe Councils to encourage them to prepare for the next SRA Fire Prevention grant cycle when it is anticipated SRA fee monies will be available to local government type entities, 501(c) (3) organization to help address dead tree removal from ingress and egress and evacuation corridors, critical community infrastructure and general public health and safety.

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
Sierra Pacific Industries	Forester (209) 223-7170
Pacific Gas and Electric	Vegetation Program Manager (800) 743-5000
Amador County Fire Safe Council	Executive Director (209) 295-6200
El Dorado County Fire Council	Chairperson (530) 647-1700
Folsom Fire Safe Council	President (916) 988-0585
Alpine Fire Council	President (619) 244-6093
United States Forest Service	Lake Tahoe Basin Management Unit (530) 543-2600
United States Forest Service	District Ranger, Eldorado National Forest Placerville Ranger District (530) 622-5061
United States Forest Service	Forest Supervisor, Humbolt-Toiyabe (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	Mother Load Field Office (916) 941-3101
Resource Conservation District	District Manager (530) 295-5633

SECTION III: VALUES

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

B: COMMUNITIES

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

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

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

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

- **Ranking Fuel Hazards** = ranking vegetation types by their potential fire behavior during a wildfire.
- **Assessing the Probability of Fire** = the annual likelihood that a large damaging wildfire would occur in a particular 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 in the vicinity of fire threats.

The **Communities at Risk List** includes a total of 1,289 communities. Of those, 843 are adjacent to federal lands (USDA Forest Service, Bureau of Land Management, Department of Defense, etc.) and are indicated as such with a checkmark in the Federal Threat column.

Amador El Dorado Unit Communities At Risk		
Communities	COUNTY NAME	FEDERAL THREAT
Bear Valley	ALPINE	F
Kirkwood	ALPINE	F
Markleeville	ALPINE	F
Paynesville	ALPINE	F
Woodfords	ALPINE	F
Woodfords Community (Indian Reservation)	ALPINE	F
Amador City	AMADOR	F
Fiddletown	AMADOR	F
Ione	AMADOR	
Jackson	AMADOR	F
Pine Grove	AMADOR	F
Pioneer	AMADOR	F
Plymouth	AMADOR	F
River Pines	AMADOR	
Sutter Creek	AMADOR	F
Volcano	AMADOR	F
Cameron Park	EL DORADO	F
Coloma	EL DORADO	F
Cool	EL DORADO	F
Diamond Springs	EL DORADO	F
El Dorado Hills	EL DORADO	F
Georgetown	EL DORADO	F
Grizzly Flat	EL DORADO	F
Kelsey	EL DORADO	F
Latrobe	EL DORADO	F
Omo Ranch	EL DORADO	F
Outingdale	EL DORADO	F
Placerville	EL DORADO	F
Pleasant Valley	EL DORADO	F
Pollock Pines	EL DORADO	F
Shingle Springs	EL DORADO	F
South Lake Tahoe	EL DORADO	F
Rancho Murrieta	SACRAMENTO	
Folsom	SACRAMENTO	F
Galt	SACRAMENTO	
Sacramento	SACRAMENTO	

SECTION 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 Engineering components are law enforcement, engineering, information / education, and cooperation.

AEU's 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. This year the program will expand to include coordinating a Media Safety Training for local media outlets.

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 firesetters
- Assess the juvenile firesetters needs
- Provide life skill training and education
- Provide referrals to family counseling
- Evaluate firesetters and program progress

ENGINEERING & STRUCTURE IGNITABILITY

The following section will discuss structure ignitability within the Amador-EI 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-EI 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 in regards to 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 burning 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 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 burning embers that enter a building and ignite fires. Burning 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, www.fire.ca.gov.

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 21,200 acres since 1982 and has treated an average of 623 acres annually over the past decade with 280 acres treated in 2015 alone. 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.

SRA FPF Fire Prevention Fee Program

The purpose of the SRAFPF Grant Program Projects is to undertake fuel hazard reduction to reduce the risk and potential impact of wildfire to habitable structures in SRA as worsened by drought conditions. 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.

SRA FPF Grants fund VMP projects that are undertaken by CAL FIRE using hand crews. Projects can also 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 SRAFPF grants visit: http://calfire.ca.gov/fire_prevention/fire_prevention_fund_grants

Greenhouse Gas Reduction Fund (GGRF)

CAL FIRE has received 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 to public agencies, non-profit organizations, Native American Tribes, and landowners for projects on forestlands. All projects will need to show a GHG benefit in order to be eligible for funding. For more information about GGRF grants visit: http://calfire.ca.gov/resource_mgt/GGRF

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

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 Fire Department, Lone Fire Department, Lockwood Fire and Pioneer Fire.

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 encompasses portions of El Dorado and Amador counties. Amador County communities within the Battalion include Pioneer, Pine Grove, Volcano, and Lockwood. El Dorado County community within the Battalion includes Omo Ranch. The fuel types in the Battalion range from 45% timber, 48% brush, to 7% grass/oak woodland.

Like many areas in the Sierra Nevada, there exists a significant wildland-urban interface (WUI) problem within Battalion 3. 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, Amador Fire Safe Council, and our Federal and Local cooperators to reduce these risks.

Battalion 3 consists of two CAL FIRE Stations, a Conservation Camp, one un-staffed lookout, and Mount Zion Demonstration State Forest (164 acres). Pine Grove Station, in Pine Grove, has two Type III engines, while Dew Drop Station, east of Pioneer, and has one Type III engine. Our eastern most station, Dew Drop / Station 10, located along Highway 88 is staffed with an engine and crew during the fire season. Dew Drop station is also staffed with an engine and crew by the Eldorado National Forest during the fire season. Pine Grove Conservation Camp provides four hand crews. Pine Grove Camp provides most of the labor for pre-fire treatment programs in Amador County, as well as an invaluable resource on initial attack.

The Local Fire Agencies that lie, at least partially, within Battalion 3 boundary lines are:

- Pioneer Fire Protection District
- El Dorado County Protection District
- Lockwood Fire Protection District
- Amador Fire Protection District in Amador County

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. River Pines 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
- Lone City Fire
- Jackson City Fire
- Jackson Rancheria Casino Fire
- Jackson Valley Fire Protection District
- Lockwood Fire Protection District
- Mule Creek State Prison Fire
- Plymouth City Fire
- Sutter Creek Fire Protection District
- Clements Fire District
- Liberty Rural Fire Protection District
- Herald Fire Protection District
- Wilton Fire Protection District
- Sacramento Metropolitan Fire District
- Pioneer Fire Protection District

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

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 8 (See Figure B for Battalion Boundaries Map) Similar to Amador County, 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 residence 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) problem 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 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 in regards to 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 one unstaffed fire lookout.

Camino Fire Station 20 and Amador El Dorado Unit Headquarters

Camino Fire Station 20 houses one frontline Type III Fire Engine and one reserve Type III fire engine. In addition, it houses the Battalion utility vehicle. 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 fires 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 of 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
- Patterson Ranch FSC
- Royal Equestrian 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 un-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 FSC

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 is able to provide paramedic services 24 hours per day. In addition, one paramedic ambulance 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.

Today, the Cameron Park Fire Department in cooperative agreement with CAL FIRE strive to provide the citizens, business members, and visitors of Cameron Park with fire and emergency services that meet and exceed their needs. 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

East Division

CAL FIRE Battalion 8 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 8 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 8.

The Lake Tahoe Basin is highly complex with fire service jurisdiction split between two states, five counties, seven local fire districts, two CAL FIRE Units, Nevada Division of Forestry, and U.S. Forest Service 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 8. All wildland fire protection on State Responsibility Area lands within Alpine County is by agreement (CFMA) with the U.S.F.S. 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.

Lake Tahoe Fire Station 5

CAL FIRE staffs one Type III fire engine at a temporary facility collocated with 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 being located in Carnelian Bay on the North Shore of Lake Tahoe. Currently plans are being developed for the construction of State owned fire station and office facilities in Meyers.

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 also 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 the firefighter academy, teaching classes and assisting in training drills.

Development of Fire Adapted Communities

The Fire Adapted Community (FAC) program encourages communities to be aware of local wildfire hazards, take action 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.

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.

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 Protection 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

Battalion 9 - Camino Emergency Command Center

The Camino Interagency Emergency Command Center (CICC) provides the Command and Control for all State Responsibility Area (SRA), Local Responsibility Area (LRA), and Federal Responsibility Area (FRA). Those areas include Amador, El Dorado, Alpine, 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 Command Center at Camino Headquarters. The Interagency Command Center allows each agency to assist the other during times of high incident activity; the opportunity to share resources assures coordination of local, state, and federal fire fighting forces during wildland fires, structure fires, and medical emergencies.

CICC monitors fire weather conditions within the Unit to help augment staffing prior to weather events that could affect fire behavior. CICC maintains 4 Remote Weather Stations (RAWS), and monitors these stations on a daily basis 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 wildfire, or other type fire which is threatening the wildland.

CICC utilizes the Resource Ordering and Status System (ROSS) and Hired Equipment Management System (HEMS) to move resources which allows personnel to support any incident locally, statewide or nationally. ROSS and HEMS contains information, such as, the Incident Command System (ICS) qualifications for AEU, ENF, and TMU personnel, supplies, vendors, private resources available for hire, call when needed support or tactical equipment (i.e.; dozers, helicopters, water tenders, etc.), and Local Government Cooperator information. CICC is also set up to handle 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 command center can continue mitigating new 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 CICC Expanded is up and running, all ordering for the given incident takes place within Expanded and staffing levels are adjusted based on the size or complexity of the incident. The incident is assigned a separate Command Frequency which allows the CICC IA floor to return to normal operations. As the incident continues to grow, additional resources are assigned from AEU, ENF, or TMU, or orders are placed to other areas of the state or nation for additional resources. The properly staffed Expanded ECC allows for timely ordering, cancellation, or reassignment of resources, overhead, and equipment while taking the load off of the IA floor.

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 is dedicated to providing 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 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 is also responsible for 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 primary goal of the Unit's training plan is 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. The Department utilizes five basic levels of responsibility for its training program: Department, Program, Region, Unit and Employee.

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

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). The majority 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

<u>PROJECT_NAME</u>	<u>PROJECT_STATUS</u>	<u>TYPE</u>	<u>ACRES</u>
07-AED-AMA-1095	Complete	CFIP	43.54
ARC Wakamatsu Farm	Active	VMP	0.00
Academy HFEO Training 2012 VMP	Complete	VMP	263.22
Amador County Roads SRA	Active	FirePlan	319.41
American River Canyon SRA	Active	FirePlan	0.00
Antelope	Complete	FirePlan	1,021.73
Antelope 08	Complete	FirePlan	88.35
Auburn Lake Trails CAG	Complete	FirePlan	35.37
Auburn Lake Trails CFIP	Complete	CFIP	180.28
Auburn Lake Trails VMP	Active	VMP	12.38
Bacchi Ranch 2012 VMP	Complete	VMP	89.25
Black Rock Ranch CFIP	Complete	CFIP	26.97
Buchholz	Complete	CFIP	123.73
Case CFIP	Complete	CFIP	22.66
Chance	Complete	VMP	823.53
Chawse' State Park	Complete	FirePlan	5.24
Chrome Ridge SRA	Active	FirePlan	0.00
Desin Prop 40 CFIP	Complete	CFIP	19.07
Doaks 2010 VMP	Complete	VMP	199.24
Doaks Ridge 2013	Active	VMP	57.52
Edmonson & Dunn Prop 40 CFIP	Complete	CFIP	15.06
El Dorado CWPP SRA	Active	FirePlan	0.00
El Dorado County SRA Roads	Active	FirePlan	166.94
Finnon	Complete	VMP	10.54
Forrest Lea CFIP	Complete	CFIP	25.10
Gallion School Prop 40 CFIP	Complete	CFIP	155.29
Genovesio CFIP	Complete	CFIP	3.58
Georgetown Divide Complex 2015 VMP	Active	VMP	280.94
Gold Bug Park	Complete	FirePlan	36.15
Gold Hill 2	Complete	FirePlan	23.71
Gold Hill Ranch VMP	Complete	VMP	128.91
Grizzly Flats	Active	FirePlan	608.08
High Meadows Ranch CFIP	Complete	CFIP	59.80
James	Complete	CFIP	13.78
Jones	Complete	CFIP	61.37
Kirkley	Complete	CFIP	11.00
LT Chipping Project	Active	FirePlan	0.00
LT Wildfire Awareness	Active	FirePlan	0.00
Ladies Valley 2014 VMP	Active	VMP	0.00
Lake Valley	Complete	FirePlan	33.47
Leoni Meadows CFIP	Complete	CFIP	102.48
Lewis Ranch VMP	Complete	VMP	5.24

<u>PROJECT NAME</u>	<u>PROJECT STATUS</u>	<u>TYPE</u>	<u>ACRES</u>
Logtown	Complete	FirePlan	30.29
Lory CFIP	Complete	CFIP	81.68
Marz Management Plan CFIP	Complete	CFIP	31.04
Matagrano CFIP	Complete	CFIP	47.38
McCamant CFIP	Complete	CFIP	19.61
Morning Canyon SRA	Active	FirePlan	0.00
Nutting	Complete	CFIP	38.24
Pine Hill	Complete	FirePlan	11.22
Pollock Pines	Complete	CFIP	89.21
Prairie City OHV State Park VMP	Active	VMP	175.61
Proctor Prop 40 Project	Complete	CFIP	71.04
Raught	Complete	CFIP	137.19
River Pines SRA	Active	FirePlan	0.00
SRA Fire Prevention Fee Pre-Plans	Active	FirePlan	0.00
Shake Fiddletown 2011 VMP	Complete	VMP	241.95
Shake Omo VMP	Complete	VMP	195.06
Shake/Fiddletown 2014	Active	VMP	6.69
Sherwood	Complete	FirePlan	62.21
Sly Park 2001 VMP	Complete	VMP	288.04
Sly Park 2011 VMP	Complete	VMP	56.82
Sly Park 2014 Amendment #1	Active	VMP	0.00
Sly Park 2014 VMP	Active	VMP	49.71
Smith	Complete	CFIP	220.82
Smith Prop 40 CFIP	Complete	CFIP	128.40
Standeven Prop 40 CFIP	Complete	CFIP	38.07
Stewart	Complete	CFIP	79.10
Stone Jug	Complete	FirePlan	34.12
Tahoma Defense Zone	Complete	FirePlan	27.28
Tleimat-Allen Prop 40 CFIP	Complete	CFIP	20.69
Van Diepen	Complete	CFIP	37.56
Van Vleck	Complete	VMP	112.83
Van Vleck Ranch 2012 VMP	Complete	VMP	33.25
Volcano CFIP	Complete	CFIP	115.85
Volcanoville	Complete	FirePlan	63.39
Weber Creek SRA	Active	FirePlan	0.00

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.

South Division

Current Battalion 3 Projects:

Doaks VMP (SRA Fee Funded-Partially)

Develop a 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 (SRA Fee Funded-Partially)

Develop and maintain a fuel break along the 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.

Rabb Park Pre-Attack Plan / Evacuation Routes (SRA Fee Funded – CAL FIRE)

The Rabb Park subdivision is located south of highway 88 east of the community of Pioneer. It is on the rim of the Mokelumne River drainage, and is surrounded by Sierra Pacific Industries and United States Forest Service timber lands. The subdivision is has a mix of narrow paved county roads, and poorly maintained private roads. This area has long been identified as a WUI area at high risk for wildfires in the Amador CWPP and the AEU Fire Plan. There have been many fuels reduction projects including two VMP projects completed in the area.

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
- Sutter Creek Volcano Road
- Lupe Road
- Clinton Road
- Pioneer Creek Road
- Tiger Creek Road

Buckhorn Ridge Project

The Buckhorn Ridge Project will consist of several different projects in the community of Pioneer. The first phase of the project is a cooperative effort between BLM and CAL FIRE. Crews from Pine Grove Camp are doing fuels treatment on BLM property along Buckhorn Ridge Road. The second phase of the project will be fuels treatments on Amador County Recreational Agency (ACRA) lands around Molley Joyce Park and South of Highway 88. This work will be funded by ACRA and the Amador County Board of Supervisors, and be completed by crews from Pine Grove Camp. The final phase of this project will be road clearing along Pioneer Creek Road. This will be funded by SRA Fee money. Defensible Space inspections will also be performed along Buckhorn Ridge Road and Pioneer Cree Road.

Pine Acres VMP (SRA Fee Funded-Partially)

This project will be multi-year, multi-agency project. The first phase that will begin in early 2016 will be the 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. It will be designed to

protect the community of Pine Acres. The first phase will be funded by grants received by the Amador Fire Safe council, and the work will be completed by crews from Pine Grove Camp. Additional phases of this project are planned for upcoming years. 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:

Tiger Creek Fuel Break

Develop 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.

Current 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:

Heavy Forestry Equipment Operations VMP and Training:

Through the efforts of the AEU personnel, landowners who control strategically significant lands are placed under VMP contract to allow the HFEO class to train/practice their dozer operator skills. The land placed under contract is primarily that which is owned by cattle ranchers desiring to convert their brush covered lands to grazing lands and eradicate non-native invasive weed species. To enhance the effectiveness of this project CAL FIRE burns the resulting piles and the ranchers seed the treated land each fall. In this fashion there is mutual benefit to the rancher, in the form of additional/improved grazing land, and to the Department, in the form of trained and tested operators. A benefit to CAL FIRE is significant fuels reduction within the training areas which are located primarily in Amador County.

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 500 and 700 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. Also, 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:

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

Sutter Highlands:

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

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 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.

Current 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 Sly Park Reservoir with the utilization of broadcast burning as well as hand treatment by CAL FIRE Growlersburg crews. This project provides a fuel break for the surrounding communities and natural resources around Sly Park Reservoir. 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 Medusahead 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.

Ladies Valley VMP

The project area is located in South Central El Dorado County near the intersection of Pleasant Valley Road and Oak Hill Road. This project is a range improvement and live fire training exercise over upland grass lands. CAL FIRE will utilize broadcast prescribed fire to treat rangelands that are significantly damaged by the invasion of Medusahead and Yellow Star Thistle. This project will also consist of fuels reduction work that will utilize fire crew brush cutting and hand pile burning both to prepare grass Units and to reduce wildfire hazard through the construction of strategically placed shaded fuel breaks. Burning of hand piles will be completed in the fall and winter when weather conditions permit.

Fire Adapted 50 – Sly Park – Phase 1 (CAL FIRE and El Dorado County Resource Conservation District)

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

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

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

Weber Creek Fuel Reduction Project (SRA Fee Funded - EI Dorado County FSC Fiscal Sponsor)

Weber Creek PP-1 Fuelbreak Project consists of a nearly 1.5 mile long fuel reduction zone in a mixed conifer forest. The selected project site is identified in the 2011 HWY 50 CWPP, and listed as project PP-1.

Morning Canyon (SRA Fee Funded - Cosumnes River Community Services District / Sandridge FSC Fiscal Sponsor)

The Morning Canyon Fuels Reduction and Evacuation Project is an extension of 10 years' worth of volunteer community work days, USFS grants through the California Fire Safe Council Clearinghouse, individual property owner CFIP, Prop 40 projects, and a recent PG&E fuels reduction and chemical treatment grant covering the Sandridge Plateau from Highway 49 to Bucks Bar Road between the Middle Fork and North Fork of the Cosumnes River canyons. Roadside clearing of 30' on both sides of Morning Canyon, Freedom Road, Gregory Lane, Mary Ann Lane and Cutaway will accomplish ingress and egress concerns.

EI Dorado County Road Clearance (SRA Fee 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 along:

- Volcanoville Road
- Rattlesnake Bar Road

Chrome Ridge Wildfire Protection Project (SRA Fee Funded - EI Dorado County Resource Conservation District Fiscal Sponsor)

The Chrome Ridge Wildfire Protection Project (Project) is located in EI Dorado County along the ridge top that divides the American and Cosumnes River Watersheds. The project is a fuel reduction project, creating a 100-400' strategically placed perimeter shaded fuel break consisting of approximately 75 acres. The Project site is at 2,600' elevation and characterized as montane hardwood conifer vegetation.

Logtown Fuel Break (SRA Fee Funded - EI Dorado County FSC Fiscal Sponsor)

CCC Crews will treat approximately 18 acres to create a shaded fuel break along a .75 mile long by 200-300 feet wide stretch of land between HWY 49 and the rural residential community along Crystal Blvd. on Logtown Ridge.

Grizzly Flats Fuel Reduction (SRA Fee Funded – Grizzly Flat FSC Fiscal Sponsor)

CCC Crews will perform fuel reduction work that will remove all under story brush and trees along roads and vacant lots within the community of Grizzly Flats.

Placerville Transportation Corridor Fuel Reduction (SRA Fee Funded – El Dorado County)

CCC crews will perform fuel load reduction activities for the County of El Dorado along Placerville's Transportation Corridor beginning at Missouri Flat Road heading west and ending at the intersection of Oriental Street, for a distance of approx. 1.8 miles.

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

Current 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.

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

CAL FIRE and El 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 along:

- Starkes Grade Road
- Sandridge Road

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.

Mosquito Pre-Attack Plan / Evacuation Routes (SRA Fee Funded – CAL FIRE)

CAL FIRE is in the process of developing a Pre-Attack Plan for the community of Mosquito that includes informational material, and an evacuation map. Mosquito is unique due to the combination of its remoteness and limited roads suitable for fire apparatus ingress to the community. The community has been identified in the Unit Fire Plan as a community at risk. It has experienced two catastrophic fires; the Chili Bar Fire and the most recent King Fire. In recent years a fuels reduction project took place as well as focused defensible space inspections every year for the past 4 years.

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.

Marshall Gold Fuel Reduction (SRA Fee Funded – CA Dept. of Parks and Rec. Fiscal Sponsor)

CCC crews will treat up to 6 acres of land within Marshal Gold Discovery State Historic Park that is surrounded by small communities along the South Fork of the American River in El Dorado County.

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)

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
- Marshal Grade Road

Current East Division Projects:

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	COMPLETION DATE	AGENCY	OWNERSHIP
Airport Barbara	C	Mechanical Thin	30	SNPLMA	3/2016	LVFPD	CSLT
Lake Valley Defensible Space Inspections	C	Defensible Space Inspections	250 Parcels	FEMA Roof	10/2015	LVFPD	Private
CSLT Defensible Space Inspections	C	Defensible Space Inspections	40 Parcels	Private	10/2015	LVFPD	Private
Lake Tahoe Community Chipping	C	Chipping	300 Parcels	CAL FIRE SRA	10/2015	TRCD/LVFPD	Private
CTC Sunset Aspen	N	Hand Thin	8	TRPA	10/2016	CTC/CCC	CTC
CTC Sunset	N	Pile Burn	30	Various	10/2015	CTC/Various	CTC
CTC Angora Highlands	C	Hand Thin	4	CTC Direct	10/2015	CTC/TRCD	CTC
CTC Angora Highlands	C	Chip	4	CTC Direct	10/2015	CTC/TRCD	CTC
CTC Golden Bear	N	Hand Thin	6	CTC Direct	10/2015	CTC/TRCD CCC	CTC
CTC Golden Bear	N	Chip	6	CTC Direct	10/2015	CTC/TRCD CCC	CTC
CTC Barbara Lodi Handcrew	N	Hand Thin	6	CTC Direct	10/2015	CTC/TRCD CCC	CTC
CTC Barbara Lodi	N	Mechanical Thin	51	SNPLMA	10/2015	CTC/CTL Enterprises	CTC
CTC Angora Burn Area	C	Pile Burn	28	CTC Direct	10/2015	CTC/CCC	CTC

Eagle Point 1	N	Pile Burn	26	CAL PARKS	4/2016	CAL PARKS	CAL PARKS
CAL FIRE Defensible Space Inspections-Area 1	N	DSI	1,079 Parcels	CAL FIRE SRA Fee	10/2015	CAL FIRE AEU	Private
CAL FIRE Defensible Space Inspections-Area 2	N	DSI	1,380 Parcels	CAL FIRE SRA Fee	10/2016	CAL FIRE AEU	Private
CAL FIRE Defensible Space Inspections-Area 3	N	DSI	483 Parcels	CAL FIRE SRA Fee	10/2017	CAL FIRE AEU	Private
CAL FIRE Powerline Inspections Target Hazard Area 1	N	Powerline Inspections	12 Miles	CAL FIRE SRA Fee	10/2015	CAL FIRE AEU	Private
CAL FIRE Powerline Inspections Target Hazard Area 2	N	Powerline Inspections	13 Miles	CAL FIRE SRA Fee	10/2015	CAL FIRE AEU	Private
CAL FIRE Powerline Inspections Target Hazard Area 3	N	Powerline Inspections	4 Miles	CAL FIRE SRA Fee	10/2015	CAL FIRE AEU	Private
Urban Forest Fuels Reduction-ULEA-Heavenly Area D-Space	N	Hand Thin	90	SNPLMA	12/2015	USFS/CCC GBI	USFS
Urban Forest Fuels Reduction-ULEA-Heavenly Area D-Space	N	Pile Burn or Chip	90	SNPLMA	12/2015	USFS/CCC GBI	USFS
Urban Forest Fuels Reduction-SSEIS-Sawmill Road	N	Hand Thin	10	SNPLMA	6/2015	USFS/CCC	USFS
South Shore Fuels Reduction-Homer J. CTL Stewardship	C	Mechanical Thin	363	SNPLMA	9/2017	USFS	USFS
South Shore Fuels Reduction-Spider Pig Whole Tree Stewardship Contract	C	Mechanical Thin	275	SNPLMA	10/2018	USFS	USFS
Echo 107	N	Hand Thin	24	SNPLMA	10/2015	USFS	USFS
Echo 108	N	Hand Thin	27	SNPLMA	10/2015	USFS	USFS
Echo 33	N	Hand Thin	16	SNPLMA	10/2015	USFS	USFS
Echo 107	N	Hand Thin	12	SNPLMA	10/2015	USFS	USFS
Yeti 19	N	Mechanical Thin	32	SNPLMA	10/2015	USFS	USFS
Yeti 117	N	Mechanical Thin	47	SNPLMA	10/2015	USFS	USFS
CV05	N	Pile Burn	11	SNPLMA	12/2015	USFS	USFS
CV06	N	Pile Burn	16	SNPLMA	12/2015	USFS	USFS
PT21	N	Pile Burn	20	SNPLMA	3/2016	USFS	USFS
Highland 1	C	Pile Burn	123	USFS	4/2016	USFS	USFS
Viking 3	C	Pile Burn	73	USFS	4/2016	USFS	USFS
South Shore ULM	C	Pile Burn	231	SNPLMA	5/2017	USFS	USFS
Panther 42	C	Pile Burn	4	SNPLMA	12/2015	USFS	USFS
Panther 46	C	Pile Burn	59	SNPLMA	3/2016	USFS	USFS
Panther 159	C	Pile Burn	62	SNPLMA	3/2016	USFS	USFS
Panther 161	C	Pile Burn	78	SNPLMA	4/2016	USFS	USFS
Panther 162	C	Pile Burn	101	SNPLMA	4/2016	USFS	USFS

Toads 94	C	Pile Burn	12	SNPLMA	3/2016	USFS	USFS
Toads 168	C	Pile Burn	10	SNPLMA	3/2016	USFS	USFS
Twin Peaks 49	C	Pile Burn	79	SNPLMA	4/2016	USFS	USFS
Twin Peaks 50	C	Pile Burn	73	SNPLMA	4/2016	USFS	USFS
Twin Peaks 98	C	Pile Burn	24	SNPLMA	4/2016	USFS	USFS
Twin Peaks 59	C	Pile Burn	30	SNPLMA	4/2016	USFS	USFS
Twin Peaks 185	C	Pile Burn	12	SNPLMA	4/2016	USFS	USFS
Twin Peaks 203	C	Pile Burn	93	SNPLMA	4/2016	USFS	USFS
Twin Peaks 1091	C	Pile Burn	37	SNPLMA	4/2016	USFS	USFS
Twin Peaks 90	C	Pile Burn	108	SNPLMA	4/2016	USFS	USFS
Twin Peaks 204	C	Pile Burn	125	SNPLMA	4/2016	USFS	USFS
Twin Peaks 163	C	Pile Burn	73	SNPLMA	4/2016	USFS	USFS
Meeks Bay DSI	C	DSI	250 Parcels	MBFPD	10/2015	MBFPD	Private
Meeks Bay Pine Needle Pickup	C	Pine Needle Pickup	150 Parcels	CAL FIRE SRA/MBFPD Alpine Springs	10/2015	MBFPD	Private
Boat Camp 1	N	Pile Burn	3	CAL PARKS	4/2016	CAL PARKS	CAL PARKS
Vikingsholm 1	N	Pile Burn	5	CAL PARKS	4/2016	CAL PARKS	CAL PARKS
Bliss Gateway 1	N	Hand Thin	14	Prop. 40/Prop.84	6/2015	CAL PARKS/CCC	CAL PARKS
Bliss Gateway 1	N	Pile Burn	23	CAL PARKS	4/2016	CAL PARKS	CAL PARKS
DL Bliss Campground Fuels Reduction	N	Hand Thin	33	USFS	12/2018	CAL PARKS	CAL PARKS
DL Bliss Lighthouse 1	N	Pile Burn	15	CAL PARKS	4/2016	CAL PARKS	CAL PARKS
Sugarpine South	C	Hand Thin	71	USFS/ MBFPD	12/2015	CAL PARKS	CAL PARKS
Sugarpine SNPLMA 14	N	Hand Thin	20	SNPLMA	12/2016	CAL PAKS/ MBFPD	CAL PARKS
Sugarpine SNPLMA 14	N	Pile Burn	11	SNPLMA	4/2017	CAL PARKS	CAL PARKS
Sugarpine SNPLMA 14	N	Chipping	9	SNPLMA	12/2016	MBFPD	CAL PARKS
CAL FIRE Alpine County Defensible Space Inspections	C	DSI	250 Parcels	CAL FIRE AEU	12/2017	CAL FIRE AEU	CAL FIRE AEU

Community Wildfire Protection Plans (CWPP) in the Battalion:

- Lake Tahoe Basin CWPP
- Alpine County CWPP

APPENDIX B: UNIT GOALS AND OBJECTIVES

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

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

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

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

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

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

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

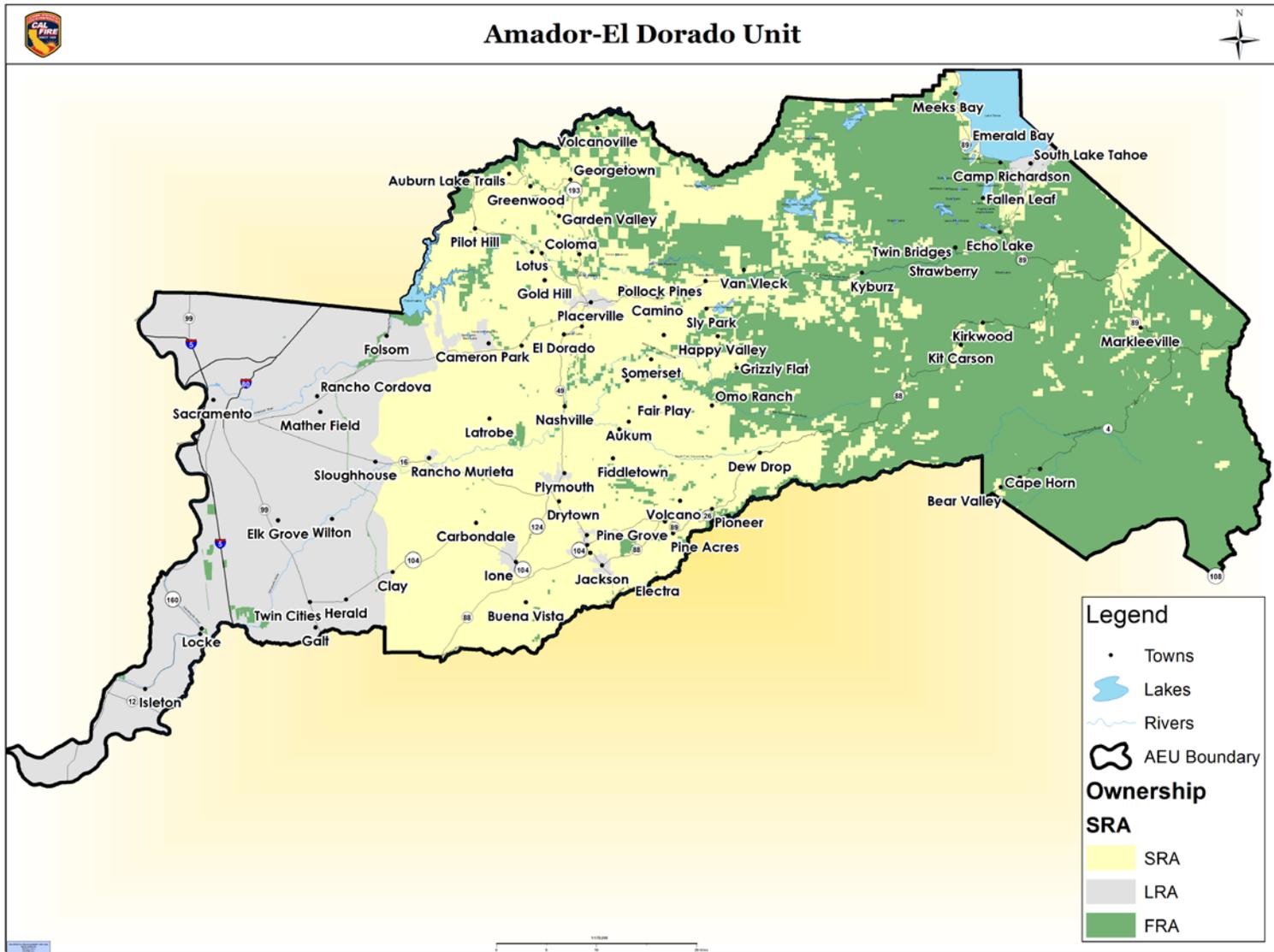
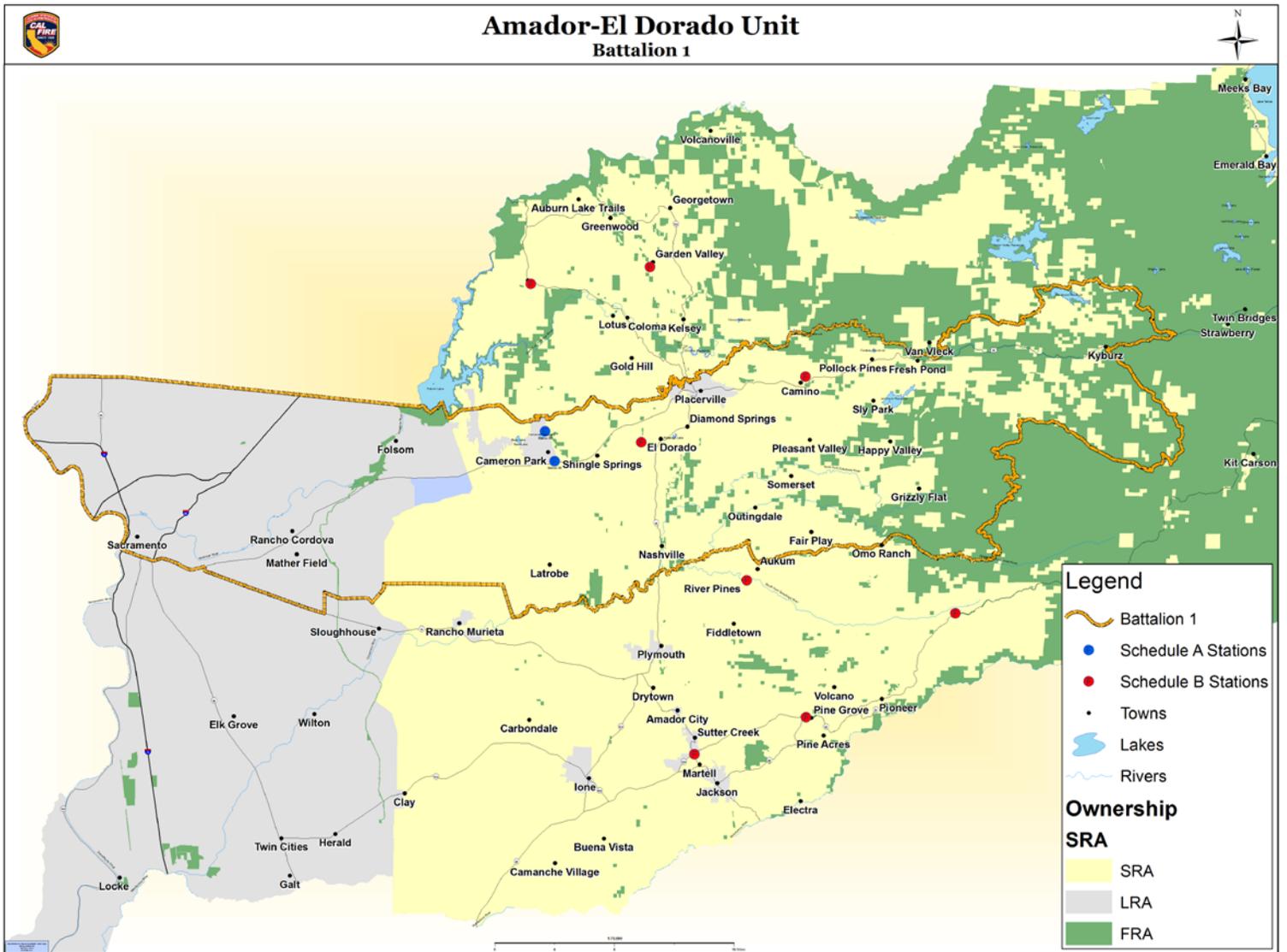


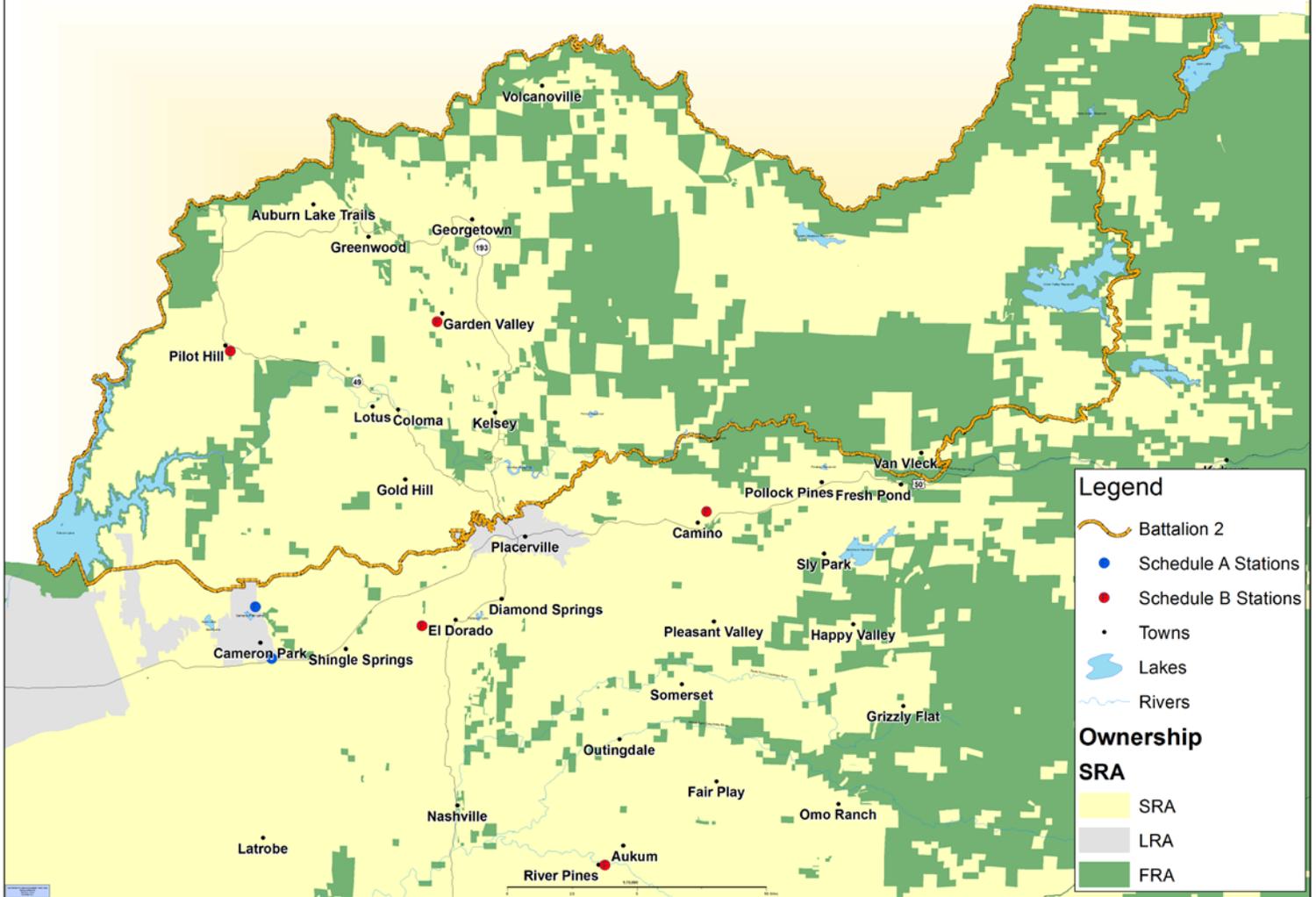
Figure B: Battalion Maps

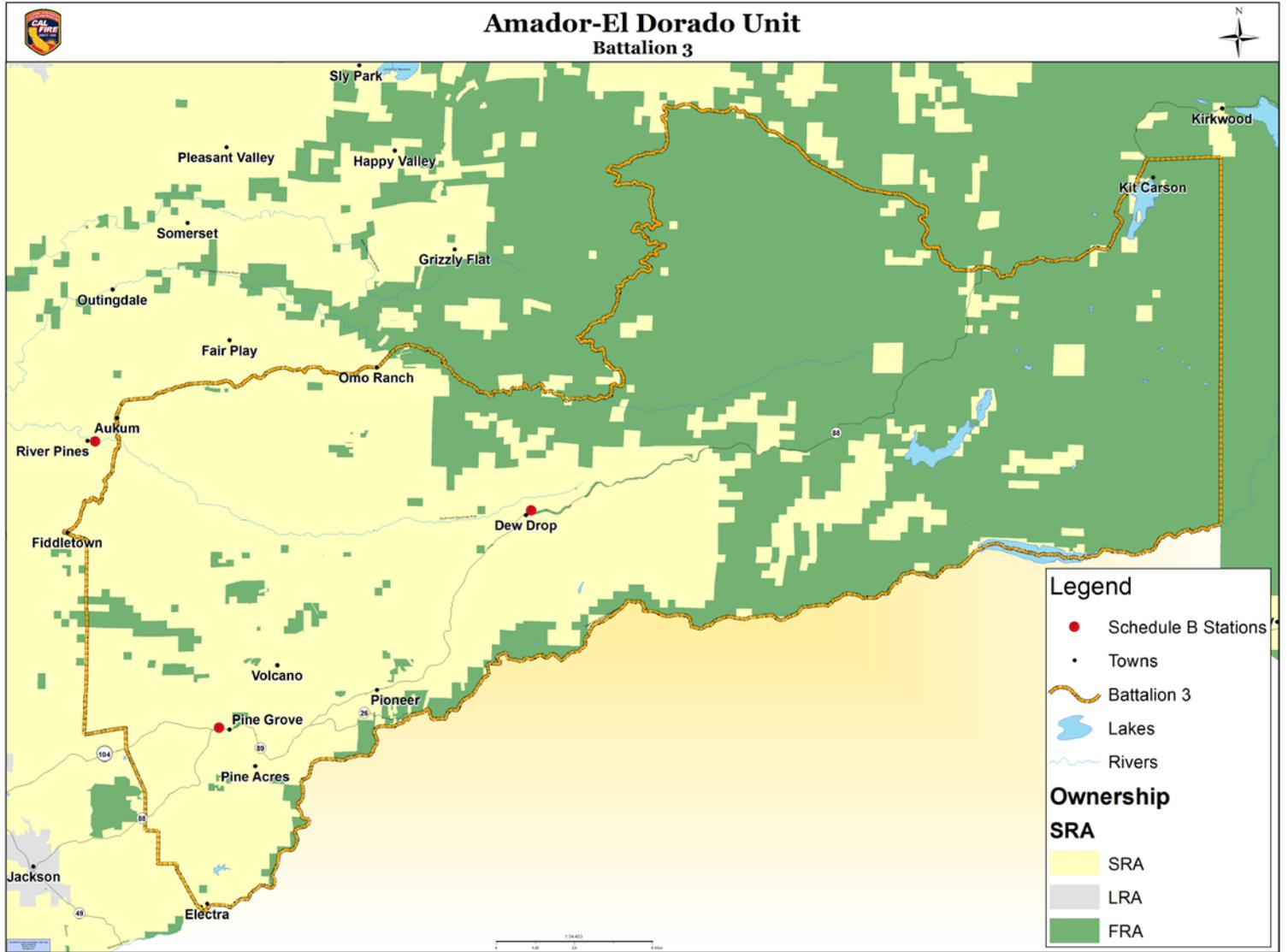


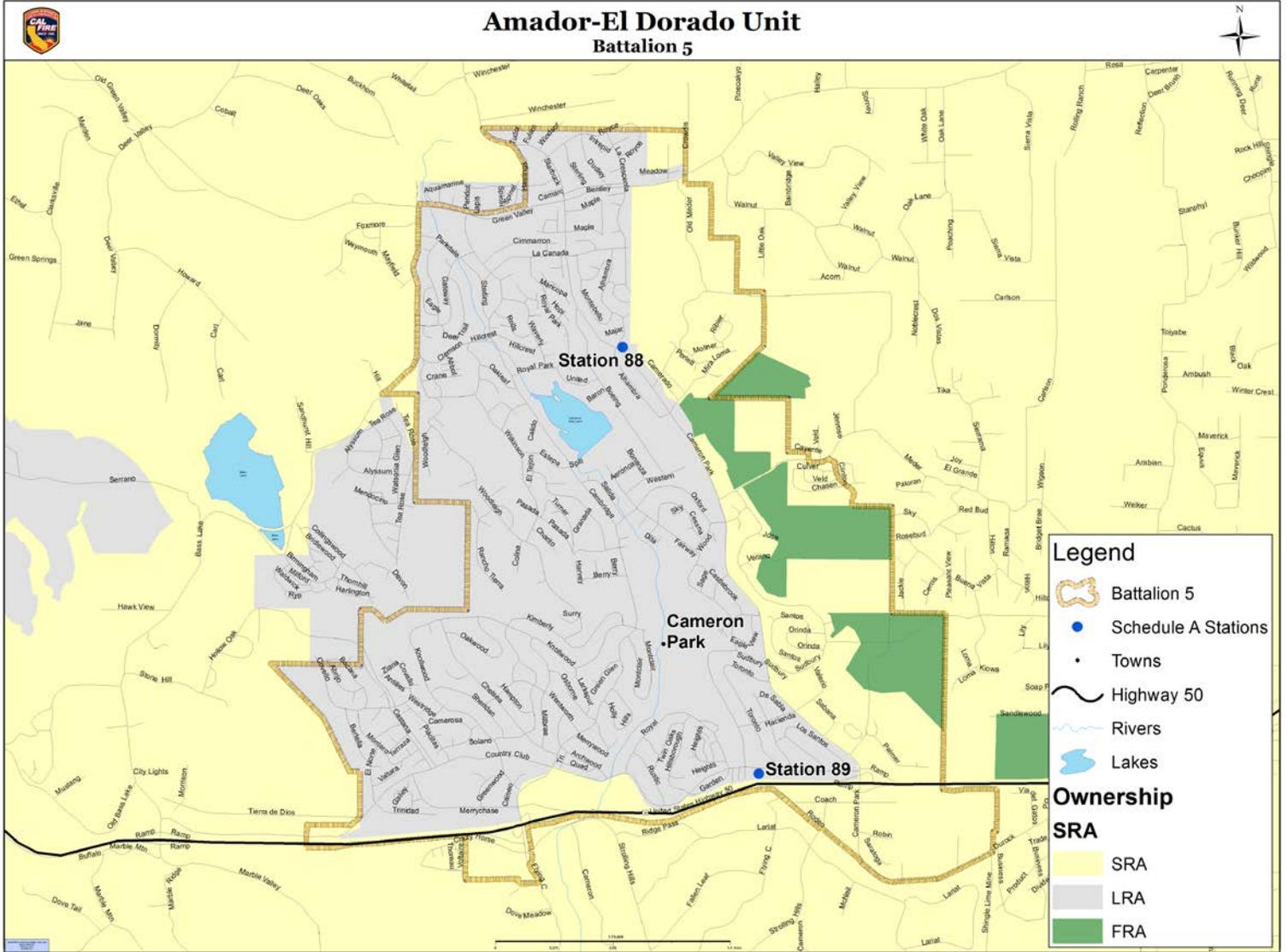


Amador-El Dorado Unit

Battalion 2









Amador-El Dorado Unit

Battalion 8

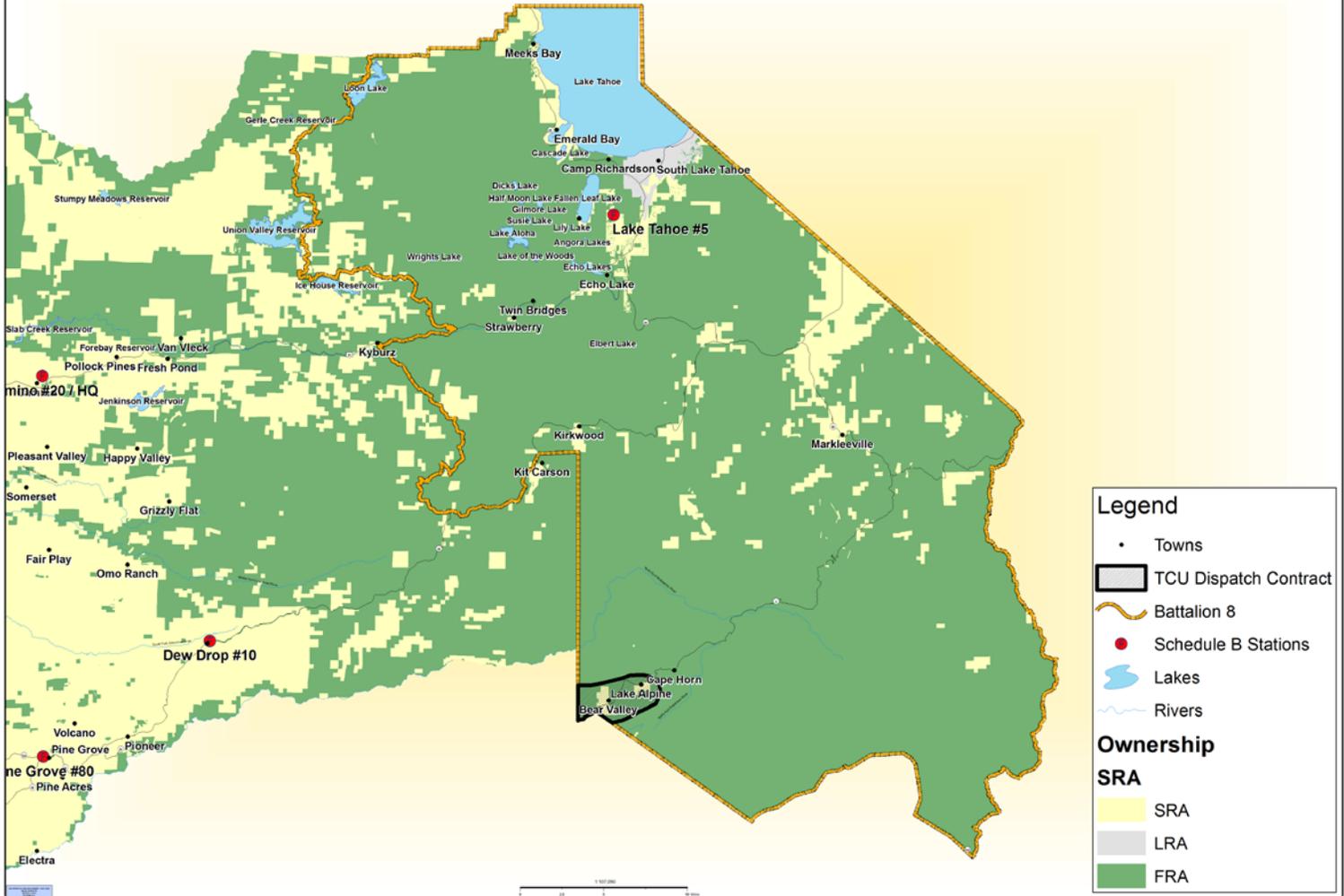
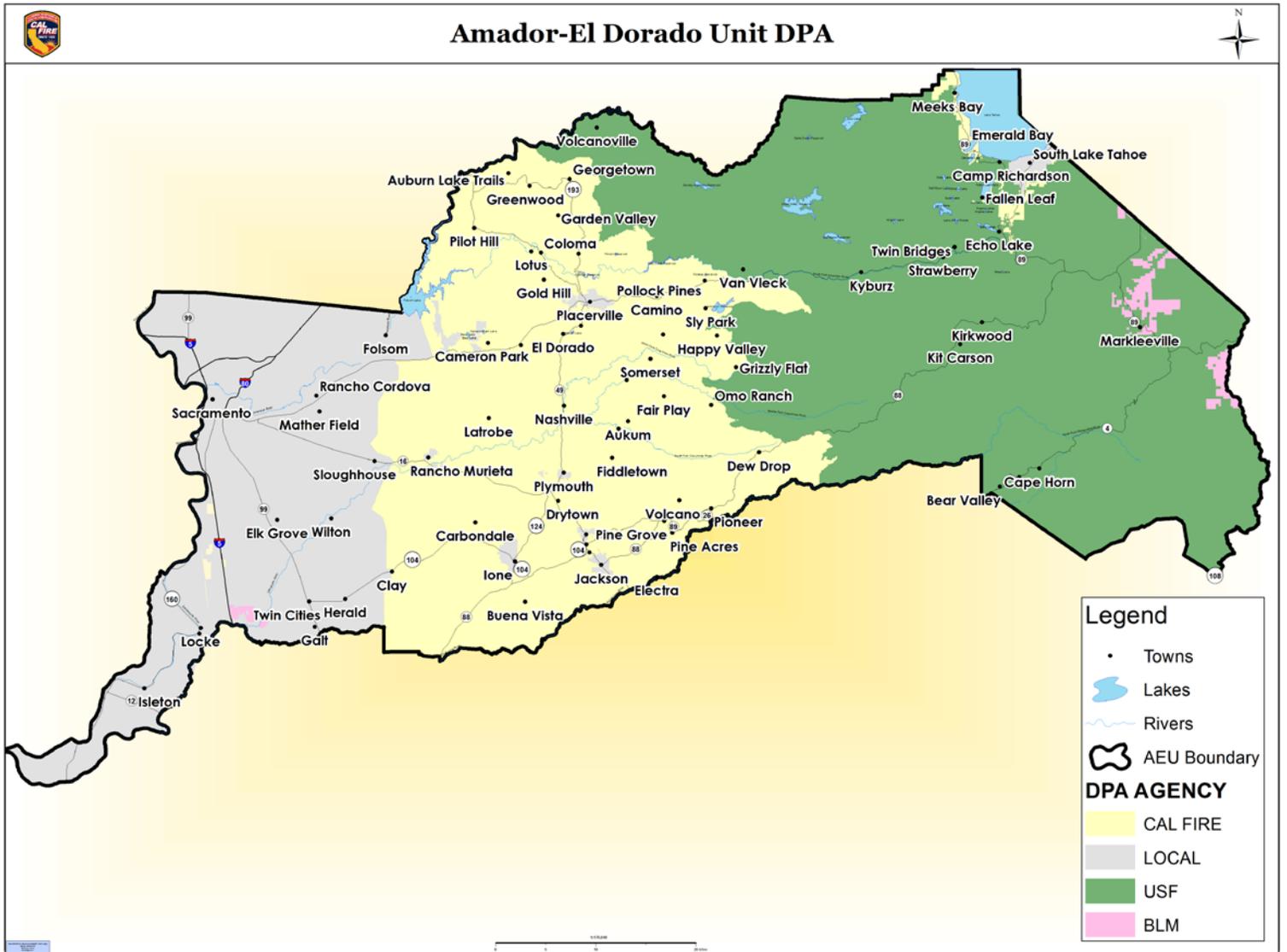


Figure C: Unit DPA Map



Annual Accomplishments Reporting (2012)

1. Continue to support the implementation of fire safe clearance around structures (LE 100 Inspections).

AEU personnel conducted a total of 1,994 4291 inspections in 2012. Field Battalions 1, 2, 3, 4 & 5 conducted a total of 1,217 inspections in pre-identified target hazard areas established by their respective Battalion Chiefs. In addition four seasonal Forestry Aides were hired specifically to conducted inspections in the Tahoe Basin and Alpine County. The four aides conducted a total of 777 in 2012. Their efforts combined with Battalion personnel resulted in a total of 542 violations being issued. Our ultimate goal is homeowner compliance with PRC 4291. AEU gives most homeowners ample time to mitigate the fuel hazard problem before we re-inspect which results in almost 100% compliance. AEU had no citations issued in 2012.

2. Support project work and planning efforts that encourage the development of safe ingress and egress routes for emergency incidents.

AEU throughout 2012 continued to support project work and the planning efforts in both Amador and El Dorado Counties through comments provided during the initial consultation phase of the environmental review process as it related to proposed subdivision development and land conversion. Comments provided concentrated on PRC 4290 and Title 14 Fire Safe Regulations related to safe ingress and egress for emergency incidents.

3. Support implementation of the new 2008 WUI Building standards through cooperation with local government planning departments.

CAL FIRE, in conjunction with local fire departments and County Fire Prevention Officer's associations, continue to work closely with Building Departments to ensure new construction complies with the WUI Building Standards as found in Chapter 7A of the California Building Code (CBC). It is standard for all new subdivision development to comply with the new WUI guidelines. This also applies to non-discretionary permits where individual parcels are improved or a structure is remodeled. The Building Department is responsible for inspection and compliance of these regulations since the regulations are codified in the CBC. However, CAL FIRE and the local fire district having jurisdiction will condition all new parcel maps and subdivisions to comply with the requirements found in Chapter 7A.

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

The primary responsibility of the AEU Training Bureau is to provide training and 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 is also responsible for 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 primary goal of the Unit's training plan is 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. The Department utilizes four basic levels of responsibility for its training program: Department, Program, Region and 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*

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

In 2012 AEU was very active with vegetation management programs and fuel reduction programs involving communities, agencies, and fire safe councils as stated in Section II of this document.

6. Utilize prevention operations to reduce ignitions within the Unit.

Wildland fire ignition statistics were tracked for the entire year of 2012. The Unit experienced 201 fires within its Direct Protection Area. This number represents a 4% increase from 2011 (194 fires), and a 26% decrease from the 10-year average (266 fires). Wildland fire statistics are tracked based on information from each LE-66 Fire Report submitted to the Fire Prevention Bureau.

Every year the Unit completes an Ignition Management Plan (IMP). The IMP identifies causes for every ignition within the Unit as well as other pertinent, actionable information that can be used by each Field Battalion to reduce unwanted wildland fires. For instance, in 2011 Cameron Park Fire/CAL FIRE Battalion Chief Mike Webb used historical vehicle caused fire data to enlist El Dorado County's assistance in clearing vegetation along Cameron Park Drive. Cameron Park Drive has seen numerous fires caused by failed catalytic converters in the past several years. In 2012, no vehicle caused fires occurred along Cameron Park Drive.

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

In 2012, the Unit experienced a total of 201 wildland fires. Only 7 of those wildland fires exceeded 10 acres in size. Therefore, the Unit kept 96.5% of all fires below 10 acres or less. The five largest fires in the Unit were:

- Salmon Fire at 108 acres. The cause was miscellaneous (spontaneous combustion) from piled organic material at an old illegal marijuana garden.
- Rock Fire at 45 acres. The cause was a tire falling off a trailer while being towed through a single lane construction site.
- Wilton Fire at 44 acres. The cause was a welding operation.
- Electra Fire at 27 acres. The cause was lightning (part of the AEU July Lightning Complex).
- Brown Fire at 21 acres. The cause was a burning stump that was burned out previously from a control burn.

8. Educate the community on their role in the wildlands and support Fire Safe Council activities.

In 2012 AEU accumulated approximately 1300 hours towards educating and informing the public (communities) on their role(s) in the wild lands they call home and recreate in. The Unit's Public Information Officer, the Fire Prevention Specialist provided Media releases and articles, conducted live interviews (TV and Radio), prepared and disseminated fire information/incident information, fact sheets, information on evacuations (in support of local law enforcement). By the end of 2012 there were a total of 58 media releases and 2 fact sheets generated by the Unit. This was the most media releases in the Unit's history. Unique topics included the dangers of oxygen therapy, heat related fires (including electrical fires, underground fires, vehicle exhaust fires, etc.), "buy it where you burn it" media releases and messages related to timber operations on private land, to name a few. In addition, Unit staff conducted three interviews on Amador County's local cable television station, TSPN. AEU personnel also had an opportunity to contact and educate the public during many of the 1,994 4291 inspection conducted in 2012. AEU continues to be a large supporter and in 2012 took an active role in attending Fire Safe Council meetings in both Amador and El Dorado counties on a monthly basis. Working with the

Fire Safe Councils in both counties AEU Division Chiefs and Battalion Chiefs also participated in the formulation and review of 5 new Community Wildfire Protection plans, (Pioneer/Volcano, Greater Pine Grove, Highway 50 Corridor, Highway 49 (Shingle Spring/Nashville), City of Folsom, and the updating of 2 others (Grizzly Flat and Volcanoville).

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

In 2012 AEU continued to nurture existing and build new relationships with our local public and private industries to develop cooperative project plans. This was in part accomplished through a series of annual spring cooperator meetings held with the U. S. Forest Service, with local fire protection districts personnel in El Dorado County, Sacramento County, and Amador County, and in accordance with the CAL FIRE/ CFA MOU AEU and TCU held a joint spring meeting with Sierra Pacific Industries three southern districts (Camino, Martell and Sonora). In addition AEU continued in 2012 to engage local cooperators (private ranch owners and landowners, Sierra Pacific Industries, PG&E, El Dorado Irrigation District, American River Conservancy, California State Parks and the Auburn Lake Trails HOA) to maintain/enhance our existing relationship through the cooperative cost share Vegetative Management Program (VMP). Fuels reduction work continued on 5 existing VMPs, a new VMP was developed with States Parks for their Prairie City OHV Park and a new VMP is being developed in Ladies Valley, an American River Conservancy property along the North Fork of the Cosumnes River. Also throughout 2012 AEU has been engage with our counterparts from Sacramento County in the development of a Type 3 Incident Management team.

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

Through our involvement with local cooperators to develop Community Wildfire Protection Plans (CWPPs), Vegetation Management Plans (VMPs), our review of timber harvest documents and Prop 40 CFIP and CAG projects AEU's reassessing of local fuels mitigation projects, as well as developing future projects, and the updating of this Fire plan is on-going.

ANNUAL ACCOMPLISHMENTS REPORTING (2013)

Investigations and Enforcement:

Fire activity for 2013 increased in the Unit by 92 fires as compared to 2012. This was an increase over the 10 year average of 257. Analyzing fire activity within the Unit, November was the busiest month for fire activity with 56 fires. The month of July was the second most active month with 48 fires. Of the documented 293 fires in the Unit, only 9 fires were larger than 10 acres. In order 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 94 fires or 32% of the total fires in the Unit. Escaped control burns resulted in 66 acres being burned. This cause saw an 80% increase from the 10-year average of 52. The increase can be explained by the dry conditions and lack of rain. During the month of June, 3 escaped debris burn piles burned a total of 1.7 acres. During the month of May, 16 escaped debris burn piles burned 4.5 acres. During November, 42 escaped debris burn piles burned 37.6 acres.

Public education and public awareness has substantially limited the number and severity of these fires. 9-1-1 calls occur quickly when smoke is seen resulting in fire equipment arriving sooner at scene of the fire. The number one cause of escaped debris burns was lack of clearance around the burn pile. Unattended debris burns also contributed to the totals. All fire departments in Amador and El Dorado Counties are assisting the Unit in handing out legal notices (LE-38's) on all control burn caused fires. These legal notices serve to educate the public and put them on notice that their next escape could result in a citation or recovery of fire suppression costs.

In addition, Unit Fire Prevention Bureau staff work closely with local Air Quality Management Districts in the event that a debris burn violates air district ordinances. Violations typically include landowners burning debris piles larger than four feet by 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-38 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 unwanted debris burn escapes and illegal debris burns. In addition, air district offices have enforcement options not available to CAL FIRE Officers. The fines assessed by air quality help prevent future debris burn escapes and also help to reduce the number of fire department responses to these types of fires.

2) Miscellaneous causes accounted for 42 fires or 14% of the total ignitions in the Unit. This cause class saw a 68% increase from the 10 year average of 25. Miscellaneous caused fires resulted in 14 acres burned, down from the 10 year average of 87 acres. This classification includes causes such as spontaneous combustion, fireplace ashes deposited in the wildland, barbequing, cooking fires, and fireworks. Ashes deposited in dry vegetation caused 17 of these fires. The second cause of these fires was from structure fires spreading into the wildland.

3) Equipment accounted for 36 fires or 12% of the total ignitions in the Unit. Equipment caused fires resulted in 203 acres being burned or 24% of the Unit's total. 36 equipment caused fires is equal to the 10 year average of 36 fires. The 203 acres burnt by equipment caused fires is a 28% increase from the 10 year average of 158 acres. Two equipment caused fires, Collier and French, burnt 128 acres, or 63%, of all acreage for this category. Historically, this classification has been one of the top causes of wildfire starts in the Unit.

The main cause of equipment fires continues to be due to mowers. These fires 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; however, the residents were clearing during the hottest part of the day- usually between the hours of 10:00 AM and 6:00 PM. Grinding and welding are the next leading cause of equipment fires.

4) Vehicles accounted for 30 fires or 10% of the total ignitions in the Unit. This represents a 43% decrease from the 10-year average of 43 fires. Vehicle caused fires resulted in 196 acres being burned or 11% of the Unit's total. This represents a 45% decrease in acres burned by vehicle from the 10 year average of 458 acres. This category has been one of the leading causes of fires in the Unit for the past several years. The majority of these fires occurred along the major traffic corridors of Highway 16, 49, 50, 88, 124 and Cameron Park Drive. Catalytic Converter failure is the leading cause of fires caused by vehicles.

5) Electrical power accounted for 24 fires or 8% of the total ignitions in the Unit. Electrical caused fires resulted in 148 acres burned or 17% of the Unit's total. Electrical caused fires decreased by 2 from the 10 year average of 26. Most of these fires resulted from trees, branches, or birds contacting power lines. One electrical caused fire from a bird into the power line burnt 96 acres and a second electrical caused fire burnt 36 acres and destroyed one residence and damaged several others.

6) Undetermined accounted for 22 fires or 8% of the total ignitions in the Unit. Undetermined caused fires resulted in 60 acres being burned or 7% of the Unit's total. This category saw a 22% increase of the 10 year average of 18.

Continued hard work and dedication of the Unit's Fire Prevention Staff and Company Officers who conduct thorough origin and cause investigations aided in the declining number in this cause class. Every year the Unit hosts a Fire Investigation FI-110 and FI-210 class to train state, local, and federal co- operators in wildland fire investigation techniques and awareness. Thorough origin and cause investigations also assist in determining fire patterns which may be reduced by public education and/or enforcement. It is through the dedication of fire personnel to correctly identify the cause of fires that prevention activities can take place to lower fire occurrences.

7) Arson accounted for 18 fires or 6% of the total ignitions in the Unit. Arson caused fires are down 33% from the 10-year average of 24. Arson caused fires resulted in 15 acres burned or 2% of the Unit's total. The 15 acres burned represents an 85% decrease from the 10 year average of 107 acres burned.

Arrests for arson included one female adult who ignited four fires totaling 10 acres; a male adult who started two fires in Amador County; a male adult who started a vegetation fire that also consumed a tent trailer; and two male adults who recklessly caused a fire. Two juveniles were also referred to County Probation for arson.

Past years arrests of serial arsonists and a proactive approach in seeking out and prosecuting arsonists, as well as public awareness, has caused the decrease in this cause category. In addition, the continued working relationships between all fire and law enforcement agencies within the Unit is definitely 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. A trained investigator can quickly identify arson, collect valuable evidence, and work with local law enforcement to solve this crime.

8) Playing with Fire accounted for 10 fires or 4% of the total ignitions in the Unit. This was a 23% decrease from the 10 year average of 13. Playing with Fire resulted in 3 acres burned or less than 1% of the Unit's total. In 2013 several juveniles were caught playing with fire by CAL FIRE Officers and went through a Juvenile Fire Setter Intervention Class.

It is important for Company Officers to understand that **they** make a difference when it comes to children playing with fire. Passing key information on to the Fire Prevention Bureau, as well as completing a thorough report, is critical for Fire Prevention Staff when it comes to following up with the juvenile and their parents related to these types of fires.

9) Smoking accounted for 6 fires or 2% of the total ignitions in the Unit. This was a decrease of two fires from the 10 year average of 8 fires. Smoking caused fires resulted in 118 acres burned or 14% of the Unit's total. One smoking caused fire (the Union Fire) burnt 117 acres and the responsible person came forward about his actions. That Union Fire destroyed one residence and damaged many other residences and vehicles.

10) Illegal campfires and campfire escapes caused 6 fires or 2% of the total ignitions in the Unit. A total of 2 acres were burned from campfire caused fires. Campfire caused fires passed the 10-year average of 5 fires by one. Most of the small fires were located at homeless camps.

11) Lightning accounted for 5 fires or 2% of the total ignitions in the Unit. Lightning caused fires decreased by 2 from the 10-year average of 7. Lightning caused fires burned 2 acres compared to the 10 year average of 18 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.

12) Railroad accounted for zero fires in 2013. Amador County has one active commercial railroad in the western portion of the county. A private historical train is beginning to operate in the Shingle Springs / Diamond Springs Area.

Wildland Fire Prevention Engineering:

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. 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.

In cooperation with El Dorado County Planning, Amador County Planning and Alpine 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.

The 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.

Civil Cost Recovery:

In 2013 Unit Fire Prevention Bureau staff initiated a total of eight civil cases. Due to a change in policy, all cases not already settled will be handled by the CNR Fire Prevention/Civil Cost Recovery Office for case management. In addition, reimbursements will be sent directly to Sacramento where payment status will be tracked. A number of cost recovery cases still remain open. These include court ordered restitution (generally paid in small sums throughout the year), and civil cases submitted to Region.

Fire Name	Incident No.	Start Date	Final ARC Amount	Settlement Amount	LOD Date Sent	Case Status Open/Closed
193	CAAEU009493	4/29/2013	\$1,870.18	\$1,870.00	6/6/2013	OPEN
Collier	CAAEU012796	6/3/2013	\$4,574.27		6/7/2013	OPEN
Happy	CAAEU001769	1/21/2013	\$10,660.22	\$10,660.22	8/16/2013	CLOSED
Border	CAAEU017118	7/31/2011	\$4,247.02		9/27/2011	OPEN
Warmby	CAAEU018204	9/19/2010	\$5,860.20	\$5,860.20	Court Ordered	OPEN
Cunha	CACNR000044		\$70,956.16	\$70,956.16	Court Ordered	OPEN
South	CAAEU019941	10/16/2010	\$1,851.70	\$1,851.70		OPEN
Quarry	CAAEU013312	6/8/2013	\$21,877.70			OPEN
Spur	CAAEU019771	8/13/2013	\$13,781.00	\$13,781.00	9/18/2013	CLOSED
Wilton	CAAEU013415	6/18/2012	\$21,774.71		Waiting Spanish LOD	OPEN
Pines	CAAEU019193	8/6/2013			No LOD until ARC	OPEN
Forni	CAAEU022252	9/21/2011	\$1,437.82	\$1,437.82	3/28/2011	CLOSED
Inspiration	CAAEU009388	5/3/2012	\$1,954.55	\$1,954.55	6/4/2012	CLOSED
Ryan	CAAEU019261	8/18/2012	\$3,051.31	\$3,051.31	8/18/2012	CLOSED
Sand 1	CAAEU019704	8/16/2012	Unknown			OPEN
Sand 2	CAAEU023133	10/2/2012	Unknown			OPEN
Rock	CAAEU021791	9/15/2012	Unknown			CLOSED
Empire	CAAEU020956	8/24/2013	Unknown			OPEN
El Dorado Complex	CAAEU028107	12/1/2011	Unknown			OPEN
Gold	CAAEU016913	7/15/2013	\$1,070.01		With DA Office	OPEN

Education and Information:

A. Public Information Program

- By the end of 2013 there were a total of 65 media releases (the most in the Unit's history) including several multi-agency media releases put out by the Unit. The cooperating agencies ranged from federal agencies like the United States Forest Service, state agencies such as State Parks and Department of Juvenile Justice, and local governmental agencies like El Dorado Irrigation District and the El Dorado County Sheriff's Office. Unique topics included grilling fire safety, manufactured/mobile home fire safety, timber operations on private land, heat related fires (including electrical fires, underground fires, vehicle exhaust fires, etc.), "How quickly can a wildfire move?", as well as cooperative media campaigns such as "One Less Spark, One Less Wildfire", "Buy it Where You Burn It" and "Living With Fire-Lake Tahoe Basin: Get Defensive, Reduce the Fuels, Reduce the Risk" media releases.

- The Crew Readiness Exercise attracted both internal and external attention. The Unit's PIO set up a JIC. PIO's from within the Unit, Sacramento Communications, CAL FIRE NEU, CDCR and DJJ were in attendance. These PIO's assisted in escorting staffers and media throughout the two day event. Media representing AP Sacramento, KGO Radio in San Francisco, two Placer County papers, and Sacramento radio and television covered the training.

- Incidents which drew television and radio interest in the Unit were the Highway 50 Fire in Shingle Springs, the Kyburz Fire (Federal fire)* near Kyburz, the Highway 50 Fire in the El Dorado Hills/Folsom area and the Union Fire in Diamond Springs. The Unit received heavy television coverage as a result of these incidents.

The Kyburz Fire was a Unified Command Incident until a Federal Type III IMT assumed command of the fire. CAL FIRE's PIO Phone Center supported the Teams information effort throughout the incident.

- Unit staff conducted three interviews on Amador County's local cable television station, TSPN.

- On June 3rd, 2013, CAL FIRE assumed direct fire protection responsibility for 13,861 acres of SRA in the El Dorado County portion of the Lake Tahoe Basin which expanded the Unit's media market in the Basin, Alpine County and parts of Nevada. Overall, these media outlets have supported CAL FIRE's return and utilized the Unit's media releases in the printed press, online, on local radio stations and on cable stations in Tahoe and Reno.

- A major redesign of the Unit's PIO phone center within ECC's Expanded Dispatch Center began in the fall of 2013. Plans are to continue the project through 2014.

- The Unit PIO assisted a local Fire Safe Council with a marketing and fundraising plan for 2013. This is an ongoing project.

- A representative from the OSFM's Training Division contacted the Unit's PIO for input/assistance with a training track for a new state classification, Community Risk Officer. The cadre will meet in 2014.

B. Public Education and Awareness Program:

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

1) School Programs, 2) Group Programs, 3) Exhibits and Displays and 4) Parades which are coordinated with Field Battalions.

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 are a variety of programs available to use depending on the request or needs of a particular school. For Preschool through 6th grade 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 Farms Smoke Detectives, Bic's "Play Safe-Be Safe", Masters of Disasters, and Learn Not To Burn.

The Unit supported the 2013 Arbor Day Poster Contest and mailed out 41 postcard to every third, fourth and fifth grade teacher in the Unit announcing a poster contest. A few months later it was announced that the Unit had the statewide 4th grade poster contest winner (Maria Estrada) from Jackson Elementary School in Amador County!

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 Setter education program is presented in the following format: introduction; ice breaker; and an explanation of who, what, when, where and why juveniles set fires and the consequences of fire setting. A discussion follows on making good versus 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.

**Note: It has been an ongoing challenge to get support from local schools to allow fire and life safety programs into the classroom. With their required curriculums and testing policies, time in the classroom is at a premium. Too often they have turned down offers by fire departments. This will remain a challenge but annually the schools are approached and offered free programs.*

2) **Group Programs** are done on a request basis and can cover subjects across all fire and life safety issues, resource management themes, and who is CAL FIRE questions. Specific often requested programs are: Defensible Space, Disaster Preparedness for families, pets, livestock, seniors and the disabled, Preparing a "Go Kit", Senior Fire Safety, Fire Safety for the Disabled, Special Needs and Fire Safety, Smoke and CO alarms, etc. Group programs also support campaigns such as "One Less Spark, One Less Wildfire", "Buy it Where You Burn It" and " Living With Fire-Lake Tahoe Basin: Get Defensive, Reduce the Fuels, Reduce the Risk". We provide these presentations to the public, state agencies, county agencies, local businesses, service groups, clubs and organizations. Requests vary and presentations may be done in conjunction with another government agency such as a fire district or law enforcement agency.

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, career days, health and wellness fairs, Fire Fest, Ag and Farm days, homeowner association gatherings, National Night Out, the Capital Air Show, local non-profits, 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.

Vegetation Management:

In 2013 AEU had ten active VMP's totaling 624 acres. Fuel reduction VMP's in the Timber fuel type included Sly Park VMP which protects subdivisions surrounding the Jenkinson Lake Recreation Area., Doaks VMP which protects homes along the CA Hwy 88 corridor, and Shake Fiddletown VMP which protects communities along the ridge separating the Cosumnes and Mokelumne watersheds. Fuel Reduction work in the Chamise Chaparral fuel type included the Bacchi Ranch VMP where crew preparedness exercise occur annually, and the Auburn Lake Trails VMP where a perimeter shaded fuel

break is being constructed and maintained to protect a community of hundreds of homes along the rim of the middle fork of the American River. Progress on these five fuel reduction projects was greatly enhanced by hundreds of days of Pine Grove and Growlersburg camp crew labor funded out of the federal Disaster Supplemental Program. AEU also operated four VMPs in the grass fuel model to achieve AEU's spring firefighter training exercises. They are the Prairie City State OHV area VMP, The Lewis Ranch VMP, American River Conservancy's Gold Hill Ranch VMP, and the Van Vleck Ranch VMP. The CAL FIRE academy operates its HFEO VMP located in SRA lands of AEU in the Chamise Chaparral fuel type.

Other Fire Prevention Projects in SRA:

LE 100 Defensible Space Program

In 2013 the Unit completed a total of 4322 inspections. This is the second highest number of inspections since records were kept starting in 2004. Of the 4322 inspections, 2497 inspections were completed by Station personnel in Battalions 1,2,3,4 and 5; 1068 inspections were completed by four firefighters dedicated to 4291 inspections for two months starting in May; and 757 inspections were completed by Forestry Aides.

Amador and El Dorado County Fire Safe Councils completed a total of 1828 inspections while local fire districts within the Unit completed a total of 3,719 inspections.

The combined total of all defensible space inspections within the Unit was 9869.

The Unit recognizes the value of working with our local cooperators to increase the overall effectiveness of defensible space inspections. In addition, a multi-agency approach acts as a force multiplier to increase the number of inspections and directly benefits a fire safe council, local agency and CAL FIRE.

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

- Identify Target Hazard Area's within the Unit where inspections will occur
- Provide a margin of safety for firefighters and the public
- Educate resident's and developer's regarding their responsibility for defensible space
- Ensure structures have some basic level of self-protection
- Mitigate wildland fire losses and resource damage
- Increase the survivability of a home or development
- 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
- Work closely with Local Fire Districts and Fire Safe Council's to enhance work being done

ANNUAL ACCOMPLISHMENTS REPORTING (2014)

A. Public Information Program

The Unit's Public Information Officer provides media releases and articles, conducts live interviews (TV and Radio), prepares and disseminates fire and incident information, fact sheets, and information on evacuations (in support of local law enforcement). Duties include responding as an Incident Information Officer (Field PIO, PIO Center Manager, PIO in a JIC, or PIO on unified command incidents) locally or statewide.

- Both the Sand and King Fires created a significant demand for information from the public as well as local and national media outlets. The Unit's Pre-Fire Division coordinated the Units needs and was a liaison between the Unit and two CAL FIRE Type I Incident Management Teams, a Federal Type I Incident Management Team and a Type III Incident Management Team which were all activated during the course of both fires.

- The Crew Readiness Exercise attracted both internal and external attention. The Unit's PIO set up a JIC. PIO's from within the Unit, Sacramento Communications, CAL FIRE NEU, CDCR and DJJ were in attendance. These PIO's assisted in escorting staffers and media throughout the two day event. Media representing AP Sacramento, KGO Radio in San Francisco, two Placer County papers, and Sacramento radio and television covered the training.

B. Public Education and Awareness Program:

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

1) School Programs, 2) Group Programs, 3) Exhibits and Displays and 4) Parades which are coordinated with Field Battalions.

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 are a variety of programs available to use depending on the request or needs of a particular school. For Preschool through 6th grade 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 Farms 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 Setter education program is presented in the following format: introduction; ice breaker; and an explanation of who, what, when, where and why juveniles set fires and the consequences of fire setting. A discussion follows on making good versus 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.

**Note: It has been an ongoing challenge to get support from local schools to allow fire and life safety programs into the classroom. With their required curriculums and testing policies, time in the classroom is at a premium. Too often they have turned down offers by fire departments. This will remain a challenge but annually the schools are approached and offered free programs.*

2) Group Programs are done on a request basis and can cover subjects across all fire and life safety issues, resource management themes, and who is CAL FIRE questions. Frequently requested programs are: Defensible Space, Disaster Preparedness for families, pets, livestock, seniors and the disabled, Preparing a "Go Kit", Senior Fire Safety, Fire Safety for the Disabled, Special Needs and Fire Safety, Smoke and CO alarms, etc. Group programs also support campaigns such as "One Less Spark, One Less Wildfire", "Buy it Where You Burn It" and "Living With Fire-Lake Tahoe Basin: Get Defensive, Reduce the Fuels, Reduce the Risk". We provide these presentations to the public, state agencies, Fire Safe Councils, Homeowners Associations, county agencies, local businesses, service groups, clubs and

organizations. Requests vary and presentations may be done in conjunction with another government agency such as a fire district or law enforcement agency.

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, career days, health and wellness fairs, Fire Fest, Ag and Farm days, homeowner association gatherings, National Night Out, the Capital Air Show, local non-profits, 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.

In 2014 the Unit logged approximately 2500 hours of public education hours related to Fire Prevention.

Juvenile Fire Setter Intervention and Education Program (JFS)

Under the direction of the Fire Prevention Bureau Chief, the Fire Prevention Specialist is responsible for developing and maintaining the Unit's Juvenile Fire Setter Intervention and Education Program. The Fire Prevention Specialist manages JFS 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 JFS includes:

- Assessment of the juvenile for future fire setting.
- Educate the juvenile and family about fire setting and fire safety.
- Make recommendations to County Probation (Probation/District Attorney's Office), Social Services, Mental Health, Child Protective Services and private mental health providers. The Fire Prevention Specialist also assists local and federal agencies with their JFS programs on a request basis.

C. VIP Program

The Unit's VIP Program has been dormant since 2006 but, this is anticipated to change moving forward as the Unit revises its Strategic Plan in 2015. The following is a list of activities that VIP's may be recruited for and asked to provide support in:

- Incident Information Center Operators
- LE 100 Defensible Space Inspectors
- Fire and Life Safety Education Programs (Schools, Groups, Events)

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

D. LE 100 Defensible Space Program

In 2014 the Unit completed a total of 5,120 inspections. Of the total inspections, 2,739 inspections were completed by Station personnel in Battalions 1,2,3,4,5 and 8 and 2,381 inspections were completed by Forestry Aide Defensible Space Inspectors funded by the SRA Fire Prevention Fee.

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

- Identify Target Hazard Area's within the Unit where inspections will occur,
- Provide a margin of safety for firefighters and the public,
- Educate resident's and developer's regarding their responsibility for defensible space,
- Ensure structures have some basic level of self-protection,

- Mitigate wildland fire losses and resource damage,
- Increase the survivability of a home or development,
- Provide a point of attack for a wildland fire,
- Provide CAL FIRE personnel greater awareness of response areas within the Unit where inspections are occurring,
- 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 2004. It is important to note that in the years 2004-2006, 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	(1600 VIP, 500 CDF)	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

In 2008, the Unit increased staffing on each engine by one additional firefighter. As a result, inspection numbers increased by 30 percent from 2007. In 2010, the Unit received additional funding to hire five firefighters on April 1st to begin inspections. The five employees hired were senior firefighters who were able to immediately begin the process of conducting inspections on the Unit's west slope. In June 2010, once the snow melted in the Lake Tahoe Basin, the five firefighters shifted their efforts to South Lake Tahoe and Alpine County. The five additional early-hire firefighters dramatically increased overall inspection numbers in the Unit. Inspections increased by 37 percent as compared to 2009, and by 56 percent as compared to 2007. Based on this data, it is clear the early hiring of defensible space inspectors is critical to a successful defensible space inspection program.

In 2011, with the reduction in staffing on each engine back to three personnel, and an inability to hire back firefighters early as in the previous year, inspection numbers dropped dramatically. Overall inspection numbers dropped to 2007 levels when the Unit operated under similar staffing standards.

In 2012, 2013 and again in 2014, the Unit hired four additional Forestry Aides to assist with defensible space inspections. In 2014 the four Forestry Aides were committed to defensible space inspections on the west slope of Amador and El Dorado counties for the months of April through June. At this time two of the inspectors returned to seasonal firefighter positions. The remaining two Forestry Aides were committed to inspections in the Lake Tahoe Basin and Alpine County.

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 approaching wildfire, 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 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 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. 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.

In cooperation with El Dorado County Planning, Amador County Planning and Alpine 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.

The 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)) within the Unit. Two of these Peace Officers are also Field Training Officers (FTO). Current Peace Officer assignments are as follows:

Unit Chief
Division Chief
Battalion Chief, Fire Prevention Bureau (FTO)
Fire Captain Specialist, Fire Prevention Bureau (FTO)
Forester I, Forest Practice
Forester I, Forest Practice

The Unit will continue to utilize its Peace Officers for general Law Enforcement duties, Fire Prevention efforts, Forest Practice Enforcement, Civil Cost Recovery, 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 obviously 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 2014.

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.

In 2015 the Unit will be sending two candidates to the Regular Basic Course (POST) at the CAL FIRE Academy. In addition, the Unit will begin recruiting candidates for the 2017 Regular Basic Course.

2014 Enforcement Statistics:

- 5 Arrests were made within the Unit
- 14 Citations were issued
- 61 LE 38's were issued

2014 Civil Cost Recovery Statistics:

CAL FIRE recovered \$297,163.71 from previous years cases initiated within AEU.

2014 Cadres/Workgroups:

- Unit FI-210 cadre
- Fire Prevention Advisory Committee
- Fire Death Training
- Sacramento-Sierra Regional Arson Task Force Training
- Arson For Prosecutors
- Unit Peace Officers provided security at Board of Forestry and Fire Protection meetings in Sacramento.
- Regular Basic POST Academy

Administrative Investigations

Complex administrative investigations are typically handled by a Unit Peace Officer. However, less complex investigations should be done by the appropriate supervisor. In cases where the nature or complexity of the investigation is not clear, Unit Peace Officers can provide direction to the appropriate supervisor handling the case.

Vegetation Management:

In 2014 AEU had ten active VMP's totaling 318 treated acres. Fuel reduction VMP's in the Timber fuel type included Sly Park VMP which protects subdivisions surrounding the Jenkinson Lake Recreation Area., Doaks VMP which protects homes along the CA Hwy 88 corridor, and Shake Fiddletown VMP which protects communities along the ridge separating the Cosumnes and Mokelumne watersheds. Fuel Reduction work in the Chamise Chaparral fuel type included the Bacchi Ranch VMP where crew preparedness exercise occur annually, and the Auburn Lake Trails VMP where a perimeter shaded fuel break is being constructed and maintained to protect a community of hundreds of homes along the rim of the middle fork of the American River. Progress on these five fuel reduction projects was greatly enhanced by hundreds of days of Pine Grove and Growlersburg camp crew labor funded out of the federal Disaster Supplemental Program.

Conclusion

In 2014, the Unit successfully engaged in all aspects of Fire Prevention including public education, engineering, law enforcement and volunteerism. In addition, the Bureau was able to support numerous out-of-unit assignments while maintaining seven-day a week prevention coverage with the Unit.

It is the intent of the Amador-El Dorado Unit in 2015 to continue to actively seek ways to reduce unwanted fires, aggressively pursue criminal or civil action against violators of forest and fire laws, enhance the law enforcement skills of all of its Officers through on-going training, increase the visibility of CAL FIRE through media outlets, engage local jurisdictions in land use policy and planning decisions and continue to provide support to the Regions and Sacramento on out-of-unit assignments. The Unit plans to build on past successes while seeking ways to improve processes internal to the Unit.

ANNUAL ACCOMPLISHMENTS REPORTING (2015)

Vegetation Management:

In 2015 AEU had ten active VMP's. Complete treatments which included burning generated slash totaled 280 acres. Fuel reduction VMP's in the Timber fuel type included Sly Park VMP which protects subdivisions surrounding the Jenkinson Lake Recreation Area., Doaks VMP which protects homes along the CA Hwy 88 corridor, and Shake Fiddletown VMP which protects communities along the ridge separating the Cosumnes and Mokelumne watersheds. Fuel Reduction work in the Chamise Chaparral fuel type included the Georgetown Divide VMP where crew preparedness exercises occur annually and the CAL FIRE Academy held its 2015 HFE0 Dozer training. It also includes the Auburn Lake Trails VMP where a perimeter shaded fuel break is being constructed and maintained to protect a community of hundreds of homes along the rim of the middle fork of the American River. Progress on these five fuel reduction projects was greatly enhanced by hundreds of days of Pine Grove and Growlersburg camp crew labor funded out of the State Responsibility Area fee.

LE 100 Defensible Space Program

In 2015 the Unit completed a total of 3,817 inspections. Of the total inspections, 2,632 inspections were completed by Station personnel and 1,185 inspections were completed by Forestry Aide Defensible Space Inspectors funded by the SRA Fire Prevention Fee.

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

- Identify Target Hazard Areas within the Unit where inspections will occur,
- Provide a margin of safety for firefighters and the public,
- Educate residents and developers regarding their responsibility for defensible space,
- Ensure structures have some basic level of self-protection,
- Mitigate wildland fire losses and resource damage,
- Increase the survivability of a home or development,
- Provide a point of attack for a wildland fire,
- Provide CAL FIRE personnel greater awareness of response areas within the Unit where inspections are occurring,
- 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			
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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, 4 Forestry Aides hired in April

2015 Fire Prevention Bureau Statistics:

- Fire Prevention Bureau officers responded to 220 incidents
- 3 Arrests were made within the Unit
- 8 Citations were issued
- 77 LE 38's were issued

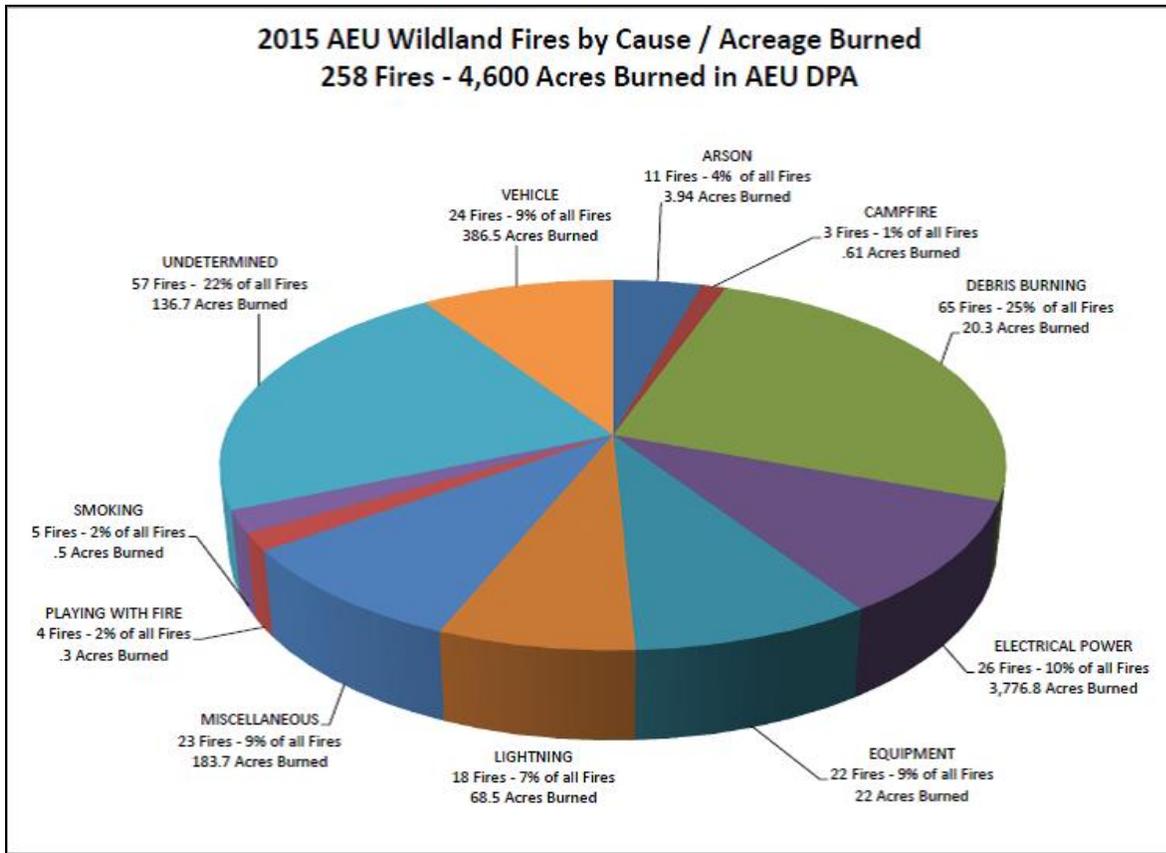
2015 Civil Cost Recovery Statistics:

CAL FIRE recovered \$142,530.00 from previous years cases initiated within AEU.

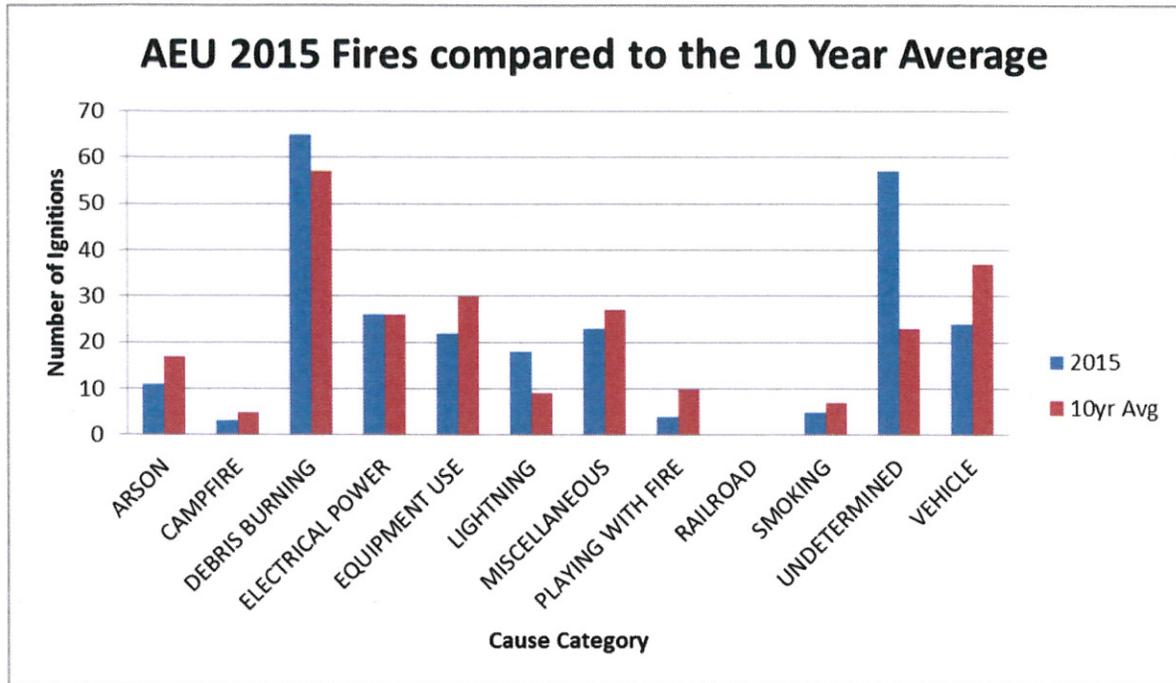
2015 Cadres/Workgroups:

- FI-210 cadre
- Fire Prevention Advisory Committee
- Sacramento-Sierra Regional Arson Task Force
- El Dorado Fire Investigation Unit
- Regular Basic POST Academy
- CAL FIRE Firearms cadre

In 2015, Debris Burning, Undetermined, and Lightning caused fires increased over the 10 year average. All other categories decreased or equaled the 10-year ignition average.



The following chart compares the 2015 primary causes compared to the 10-year average.



Conclusion:

In 2015, the Unit successfully engaged in all aspects of Fire Prevention including public education, engineering, law enforcement and volunteerism. In addition, the Bureau was able to support numerous out-of-unit assignments while maintaining seven-day a week prevention coverage within the Unit.

It is the intent of the Amador-El Dorado Unit in 2016 to continue to actively seek ways to reduce unwanted fires, aggressively pursue criminal or civil action against violators of forest and fire laws, enhance the law enforcement skills of all of its Officers through on-going training, increase the visibility of CAL FIRE through media outlets, engage local jurisdictions in land use policy and planning decisions and continue to provide support to the Regions and Sacramento on out-of-unit assignments. The Unit plans to build on past successes while seeking ways to improve processes internal to the Unit.

Michael L Kaslin

5-31-16

Unit Chief
Mike Kaslin

Date