

**A: DIVISION / BATTALION / PROGRAM PLANS**

**NEVADA-YUBA-PLACER UNIT (NEU)  
IGNITION MANAGEMENT PLAN**

**FIRE PREVENTION**

NEU's fire prevention program accomplishes Unit fire management goals through implementation of four primary components. These fire prevention components are information/education, engineering, law enforcement, and volunteerism. Information and education occurs through direct contact with the public, partnerships with local boards and councils, communication with professional organizations and employee involvement in the local community. Engineering occurs through local building department functions where Cal Fire personnel are assigned to assist in developing fire safe projects and planning. Law enforcement includes enforcement of California's Forestry and Fire Laws in the industrial forestry arena to reduce fuel loading and prevent fires as well as the fire investigative arena once structure or wildland fires have occurred and the cause determination is necessary. Volunteerism occurs through support of the Volunteers in Prevention (VIP) program, which uses local volunteers to appear at public events, meet with residents, and correspond with the public with Cal Fire goals in mind. The balance of each of these components allows the prevention program to address statewide, regional and local fire issues.

NEU has found that the most effective method of spreading fire prevention information to educate the public is to make personal "one-on one" contact with the public. It is the Unit's view that the single most effective method to protect personal and real property from wildland fires is for each individual landowner or resident to meet the mandates of Public Resources Code 4291 (defensible space standards). NEU encourages the public to extend hazardous fuel reduction beyond the PRC 4291 mandated defensible zone into the adjacent "Defensible Landscape" zone (area beyond the required 100'). This is the area where landowners can apply stewardship ethic, improve forest health and add to the protection of the property.

**Ignition management**

In order to better address ignition management for the Unit, a more detailed analysis of the fires in each major cause classification was conducted.

**1) Control Burning (debris burning)** - The number one cause of escaped control burns was lack of clearance followed by wind, and old control burns re-igniting (coming back to life). Unattended control burns also contributed to the totals.

**2) Vehicles** - 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 Interstate 80, hwy 49 and hwy 20. Brake fires, catalytic converter failure and other maintenance issues remains to be the leading cause of fires caused by vehicles. With the current economic conditions there appears to be less maintenance done on vehicles.

**3) Electrical power** - Most electrical fires resulted from trees, branches or birds into the power lines. Bird Causes are on the increase.

**4) Equipment** - Historically, this classification has been one of the top causes of wildfire starts in the Unit. Through continuing displays and education programs (handouts and the 4291 Program), we hope to continue a downward trend. The main cause of equipment fires continues to be mower fires. These fires were due to mower blades striking rocks and friction belts igniting chaff collected around the belt. Ironically, most of the mower caused fires occurred as a result of residents trying to clear their property for fire safety but they were clearing during the hottest part of the day, usually between the hours of 10:00 AM and 6:00 PM.

**5) Miscellaneous causes** - This classification includes causes such as spontaneous combustion, fireplace ashes deposited in the wildland, barbequing, cooking fires, and fireworks.

**6) Playing with Fire** - Several juveniles were caught and went through either a Juvenile Fire Setter Class and others were sent to the Juvenile Justice System and sentenced to probation.

**7) Undetermined** - Continued hard work and dedication of the Unit's Fire Prevention Staff and the company officers who conduct thorough origin and cause investigations aid in the declining number in this cause class. Thorough origin and cause investigations also assist in determining fire patterns which may be reduced by public education and or enforcement.

**8) Arson** - The continued working relationships between all fire and law enforcement agencies is high priority for the Unit.

**9) Lightning** - Not much can be done to prevent or alter this category.

**10) Smoking** - The majority of these fires were carelessly discarded cigarettes along our roadways. However, several bark and planter box fires were directly attributed to smoking.

**11) Illegal campfires and campfire escapes** - Public education and campfire permit requirements help to keep the number of fires from the category low.

**12) Railroad** - The Unit has a major east/west rail line operated by Union Pacific railroad, yearly fire prevention meeting's along with work site inspection, work to reduce the fires started by the railroad.

# *Ignition Management Plan*

## *Battalion 10*

### **Battalion Description**

The Dry Creek Battalion covers an area of approximately 423,000 acres with a population of approximately 7000 residents. The Battalion is located almost entirely in the LRA but has significant wildland fire potential. Fuel types range from grassland typical of an oak savannah with denser drainages to a dense live oak component containing brush. The land is primarily flat with some rolling hills. The area is populated with rural residential properties varying in size from 5-100 acres with some larger ownerships remaining. Located amongst these rural residential parcels are pockets of densely populated subdivisions where parcel size and spacing between homes is more indicative of rural development. The make up of development and fuel types creates a true WUI problem. The Battalion lies adjacent to multiple cities and population centers. Elements from these populated areas have caused some ignition problems related to burning abandoned vehicles, fireworks discharge, and carelessness.

Agency cooperators include South Placer Fire District, Dry Creek Fire Advisory Committee, Placer County Fire Alliance, Western Placer Municipal Advisory Committee, Roseville City Fire, Rocklin Fire, Sac Metro Fire Department, Dry Creek Fire Protection District.

### **Battalion Fire History and Occurrence**

A vast majority (near 90%) of fires in the Battalion occur as roadside starts. These fires are classified as arson, equipment, vehicle, smoking, or are undetermined as to specific ignition source. A majority of these fires are contained at less than 20 acres. Large costly and damaging fires are not a regular occurrence in the Battalion, although structure damage does occur. In order to mitigate the hazard from roadside starts, a fence line disc program is managed by Battalion staff to provide a first line of defense.

Arson fires account for approximately 40% of the fires in the Battalion. These fires are intentionally set fires with a determined cause. Arson fires are the most difficult to reduce due to their nefarious nature. The Unit's Prevention Bureau Chief is charged with investigation and pursuit of arson as felonious activity. The Unit Prevention Bureau assists Battalion staff with cause determination if a trending fire problem is observed. The result is, over time, a reduction in arson fires due to arrest and conviction. In order to address the arson problem, the Battalion will continue a high profile prevention program.

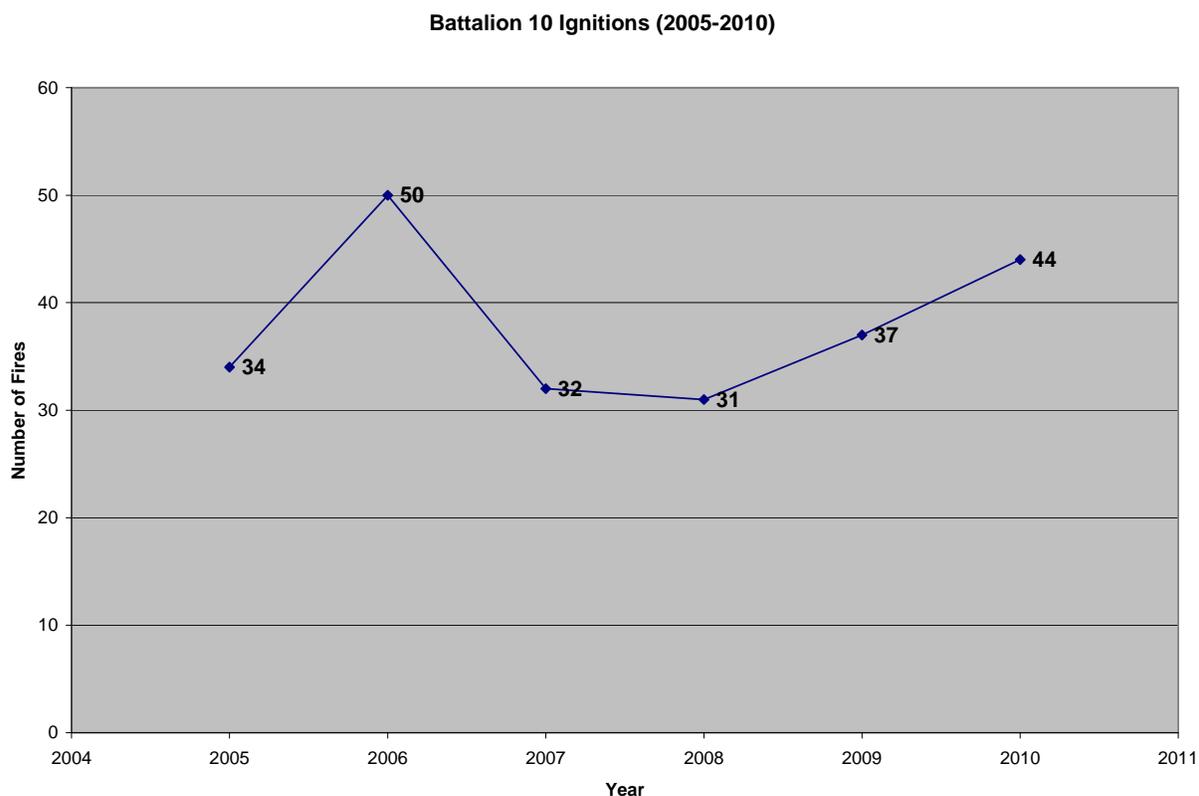
Fires with an undetermined cause account for 16% of fires in the Battalion. These fires are the most difficult to reduce due to their difficulty in assessing the cause. The Unit Prevention Bureau assists Battalion staff with cause determination if a fire problem persists with no apparent cause. Over time, causes are determined and the appropriate mitigations are applied.

Equipment caused fires account for 14% of fires in the Battalion. Much of the weed abatement occurring in the Battalion, including mowing and disking, involves the use of equipment. Also, construction and other land management activities often require the use of equipment. This equipment use takes place in the wildland areas where vegetative fuels are available and susceptible to burning.

The statistics show that escaped debris burns account for 9% of wildfires in the Battalion. The residents realize that the fuel treatments near their residences must be done and often delay

burning until the final weeks prior to burn bans being instituted. The result is a greater number of burn piles being burned later in the season, when control of the fires is more difficult due to weather and fuel conditions. Public education at the time of burn permit issuance is used to reduce the number of escapes.

The balance of the fires is split between various factors which are considered normal accidental fires. Powerline fires account for 5% and vehicle related causes account for 5%. State and Federal law requires the treatment of fuels within certain distances of regulated power distribution infrastructure.



## Mitigation Strategies

### 1. Public Education:

Public education continues to be a priority within Battalion 10 to reduce the number of fire starts. The action plan for public contact and education is as follows:

#### A. Burn Permit Administration

Approximately 9% of the total fire incidents in the battalion are identified as escape debris burns. This indicates there is a need to educate the public on proper debris burning techniques. One effect may be that residents are new to the community and are unaware of the proper methods and timing for debris burning.

LE-62s (Residential Burn Permit – Burn Pile) will be issued at CAL FIRE /Placer County Fire Station 100. The local pollution control district determines burn hours. Pre-inspections will be provided on a requested or as needed basis. A copy of the permit will be filed at Station 100. With each permit written, a Placer County Air

Pollution Control District's Residential Open Burning informational sheet will be included.

LE-5 (California Inter-Agency Burning Permit) and LE-7 (Project Type Burning Permit) are issued on SRA lands after an inspection by an authorized employee of CAL FIRE. These project burn permits are typically used to dispose of larger piles of material and typically require an inspection by CAL FIRE prior to authorization to burn.

## **B. Public Education Forums**

Battalion staff remains involved in numerous public education programs. Many programs are cooperative efforts with other fire agencies. The Placer County Fair is an example of agency cooperation that provides information and education to the public. This venue provides a receptive and captive audience.

On going events through out the year:

- Business Fire Safety programs / Fire Extinguisher Training
- School Programs
- Fire Prevention Signage
- Station 100 Message Board
- Placer County Fair
- Parades
- Community Barbeques and Pancake Breakfasts

## **C. Fire Prevention:**

News Releases - CAL FIRE will continue to utilize a local radio station, the local news paper, as well as local Homeowner's Associations and Fire Safe Councils to educate the public on fire safe issues.

2. Equipment Use Information - In addition CAL FIRE will work with local equipment rental yards and dealers with prevention material and to ensure compliance with spark arrestor laws. The focus will be trying to mitigate the rising occurrence of equipment caused ignitions.

3. Fire Safe Programs - The Placer County Fire Planner will continue to provide building plan fire and life safety reviews for PRC 4290 and uniform fire code regulations.

## **D. PRC 4291 inspection:**

PRC 4291 inspections serve a dual purpose. One is as a vegetation management motivator. The other is as a public education tool. The Battalion 10 goal will be to target areas within the Battalion that have a significant wildland fire threat and inspect 100 homes using the PRC 4291 program, although all areas within the Battalion are LRA. Station 100 personnel will concentrate on the Central Ave., Vineyard Rd. PFE Rd. and Walerga Rd. South Brewer Road from West Sunset to Baseline. A five-year cycle through the significant wildland fire threat area will provide education and prevention information to the affected homeowners. Inspection of power lines will occur during the PRC 4291 inspections. Staff will advise the battalion chief of a violation, the battalion chief will coordinate an inspection by the Unit Prevention Bureau.

**2. Vegetation Management:** The vegetation management programs are directed at reducing the potential of a large fire and reducing the damage from a large fire.

**A. Hazard Reduction Programs:**

Battalion personnel manage a fence line disc project to provide a first line defense if an ignition occurs and to prevent roadside ignitions. The program is a voluntary effort by residents with their own equipment to assist in protecting their properties. Battalion staff endeavor to educate residents on the value of discing along fence lines and encourage their participation.

**B. Doyle Ranch Fuels Reduction**

The Doyle Ranch Subdivision is located in Western Placer County south of Baseline Road and West of Walegra Road. The subdivision is bordered by wildland on three sides. The project area is approximately 15 acres and consists of mature oak trees of various species, standing dead snag trees and various saplings. The predominant carrier of fire within the area is grass, downed woody material ladder fuels.

Beyond the project area are wildlands consisting of grass and oak woodlands, bordered by major roads. These road systems are associated with some of the highest rates of wildfire in the county. This project involves using controlled fire to reduce the downed woody fuels and reduce the ladder fuels resulting in a grass only fuel type.

**High Priority Target Areas**

- Areas near Baseline, Dyer, Watt and Palladay.
- Central Ave.
- Vineyard Rd.
- PFE Rd.
- Walerga Rd.
- South Brewer Road from West Sunset to Baseline
- Areas of medium to light density housing where backyards have little clearances

**Table 3 – Battalion 10 Fuel Modification Projects, Community Outreach and Educational Programs**

Project Name	Status	Estimated Completion Year	Project Type	Net Acres
Battalion Disc Line Project	O	Continuous	Fuel reduction, Weed abatement	varies
Doyle Ranch Fuels Reduction	P	TBD	Fuel reduction	15

**Status Guide:** A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance.

## **Success Stories**

4<sup>th</sup> of July flier - 2007 was the busiest year for fireworks violations. In 2008 the area was flooded with 4<sup>th</sup> of July “no fireworks” fliers. The 4<sup>th</sup> of July, 2008 resulted in no fireworks calls in the Battalion.

Disc Line program- Given 90% of Battalion 10 ignitions are along the roadside, parcels 5 acres + were sent letters requesting they disc an 8-10 ft band along the road. This program has dramatically decreased the number of ignitions.

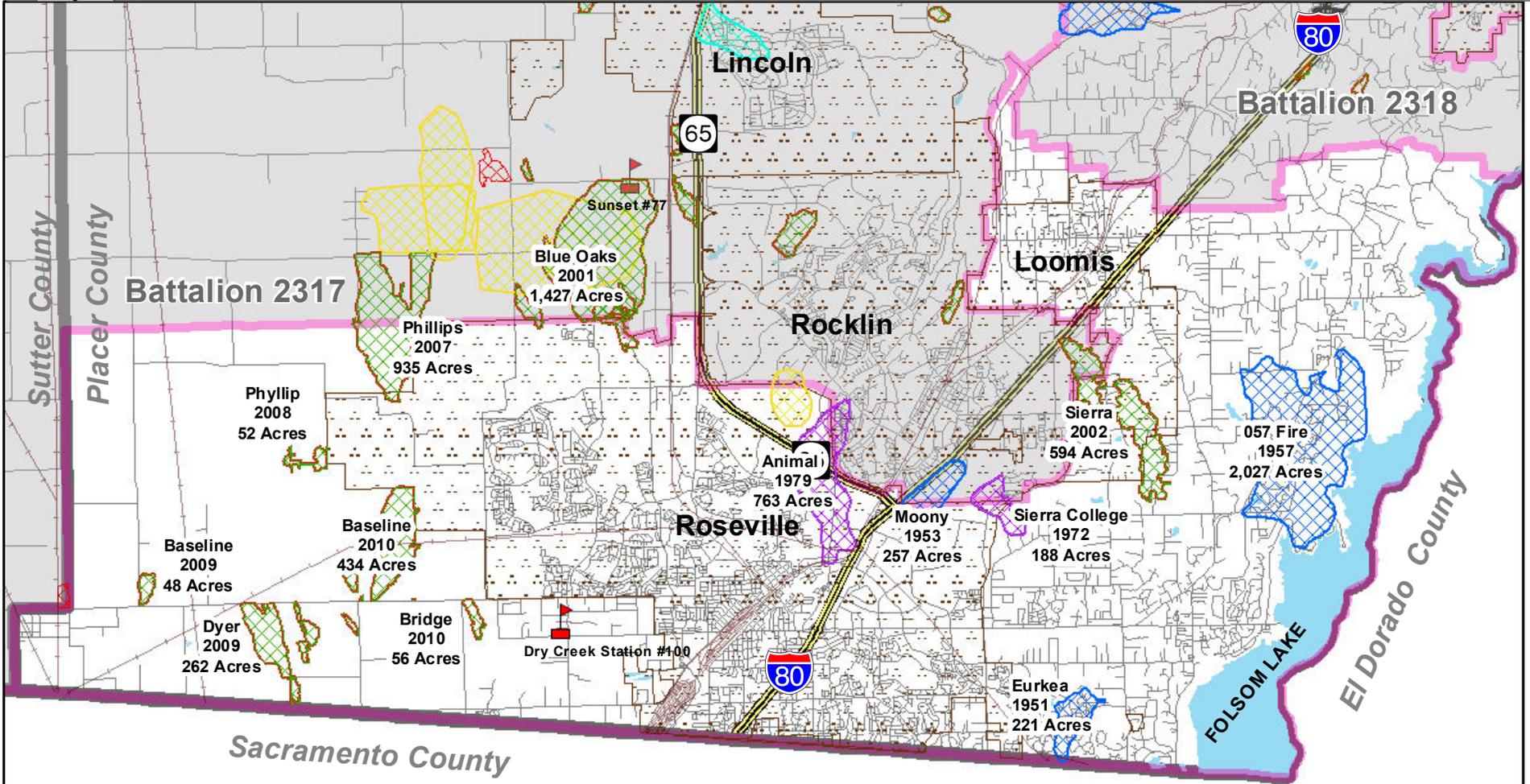
## **Action Plan:**

- Continue promoting the disc program with more press releases and public education
- Work with public information to educate beekeepers from Sacramento County on safe practices.
- Continue to focus on prevention surveillance and reduce the number of arson events.
- Investigate discing around towers to reduce the number of bird strike caused fires along power lines.
- Continue to focus on compiling and developing structural / commercial pre-plans.
- Work to improve database of historical fire perimeters.



# NEVADA - YUBA - PLACER UNIT (NEU)

## Battalion 10 - Fire History



	Railroad		County	<b>Fire History</b>	
	Incorporated Cities		Highways		1950 - 1959
	Battalion		County Roads		1960 - 1969
	Fire Station		Rivers		1970 - 1979
					1980 - 1989
					1990 - 1999
					2000 - 2009
					2010 - 2011

1 in = 2 miles

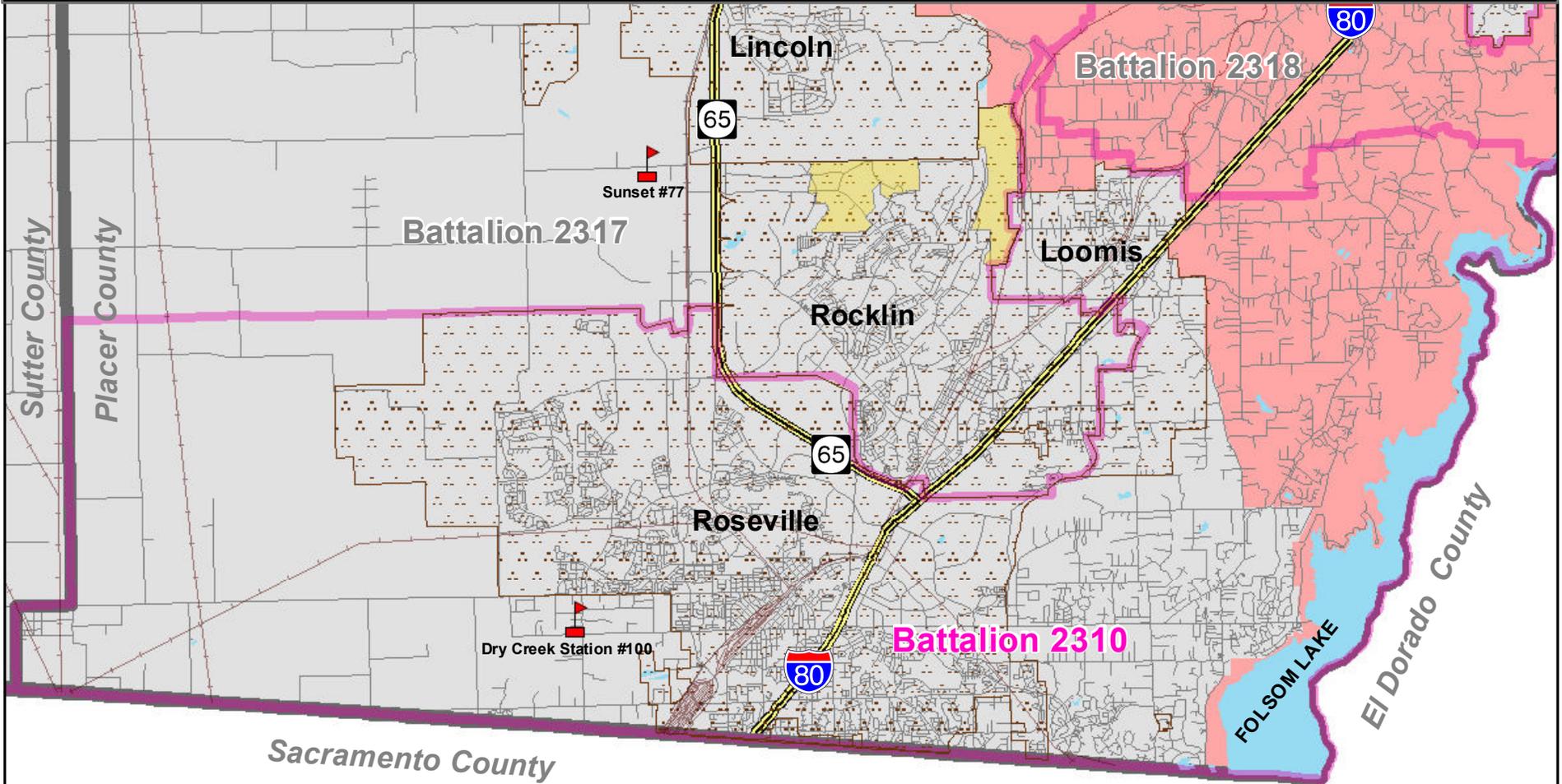
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Pre-Fire June 2012



# NEVADA - YUBA - PLACER UNIT (NEU)

## Battalion 10 - Administrative Boundaries



	Railroad		County	<b>DPA PROVIDER</b>	
	Incorporated Cities		Highways		CAL FIRE
	Battalion		County Roads		Local Wildland Contract
	Fire Station		Rivers		Local Government

1 in = 2 miles



# ***Ignition Management Plan***

## ***Battalion 11***

### **Battalion Description**

The Foresthill and Auburn Battalion cover an area 345,581 acres in size within Placer County along Foresthill Divide Road and Interstate 80. The area is densely populated and interlaced with an extensive road system. The elevation ranges from 510 feet in the drainage of the American River Canyon to 3,800 feet around Foresthill. The North Fork American River and Middle Fork American River form two distinct drainage systems with steep inner gorges and often dense heavy fuels. The fuels within the Battalion vary as widely as the elevations, spanning an area that contains blue oak woodland where annual grasses and oaks are mixed with brush and landscape plantings to the prime timber bearing soils of the Foresthill Divide which are covered with large pine and fir timber typical of the Sierra Nevada mixed conifer zone. In between these fuel types is a range of chaparral, conifer / oak forest, and grass meadows, all containing light flashy fuels and mixed with residential development.

The population centers are Auburn and Foresthill, surrounded by a densely scattered urban interface where parcels range from a half to 20 acres in size, much of which is developed with commercial, residential, and heavy industrial infrastructure. This mix creates a true WUI problem where even the smallest fires with the most prompt emergency response can have a catastrophic result and result in burned structures.

Cooperators include Auburn Fire, Bureau of Reclamation, CA State Parks, Placer Hills Fire District, CAL TRANS, Foresthill Fire Department, Placer Fire Alliance, Placer County RCD, Placer County Land Trust, and USFS.

### **Battalion Fire History and Occurrence**

Historically, large fires are known to occur within and adjacent to the Battalion. Notable in terms of size are the Volcano Fire (1960 – 44,386 acres), Roadside #51 (1964 – 3,545 acres), Ralston Fire (2006 – 8,300 acres), and American River Complex (2008 - 19,580 acres). Each of these fires consumed significant SRA acreage within the Federal DPA. Other significant fires include the Auburn Fire (1961 – 672 acres) and Mammoth Fire (2009 - 643 acres).

Equipment and vehicle caused fires are combined in this discussion and rank as the highest cause (44%) of wildfire in the Battalion. Much of the fuel work which occurs in the Battalion involves the use of equipment. Construction and land management activities often require the use of equipment. This equipment use takes place in the wildland areas where vegetative fuels are available and susceptible to burning. Portions of Interstate 80 within the Battalion lie in an area where commercial vehicle traffic often encounters problems as a result of the long downhill run off of Donner Summit. During fire season, as temperatures and vehicle traffic increases on Interstate 80, vehicles with overheating brakes can become an ignition source for roadside vegetation. Conversely, overheating and friction can affect vehicles climbing grades within the Battalion causing vehicles to ignite. Exclusive of Interstate 80, many of the roads in the Battalion are rural roads with vegetation growing very close to the road edge, or on the road surface. The exposure of these fuels to hot exhaust, exhaust discharge, or flame impingement from fires originating within the vehicle is a problem typical of the rural community.

Arson and undetermined fires are considered equally and account for 30% of the fires in the Battalion. These fires are intentionally set fire or fires which the ignition could not be determined due to various factors. These fires are the most difficult to reduce due to their nefarious nature

and difficulty in assessing. The Unit's prevention program is charged with investigation and pursuit of arson as felonious activity. The Unit prevention also assists Battalion staff with cause determination if a fire problem persists with no apparent cause. The result is, over time, a reduction in arson fires and determination of cause on undetermined fires allowing fire prevention education to address the actual cause. The balance of the fires is split between various causes which are considered normal accidental fires.

Fire occurrence overall in the Unit has dropped from its high of 740 in 2006 to 472 fires in 2010 with a low of 371 during the year 2007. After 2007, the Battalion fire occurrence has followed the Units fire occurrence pattern. Analysis of fire causes from 2005-2010 reveal that the fire occurrence is following normal patterns and that the primary cause has shifted between equipment use, vehicle use and debris burning over that time period. One possible explanation is that prior to 2006, Battalion 11 was reduced in acreage during the creation of Battalion 18 concurrent with the incorporation of Placer County Fire personnel into Cal Fire.

## **Mitigation Strategies**

### **1. Public Education:**

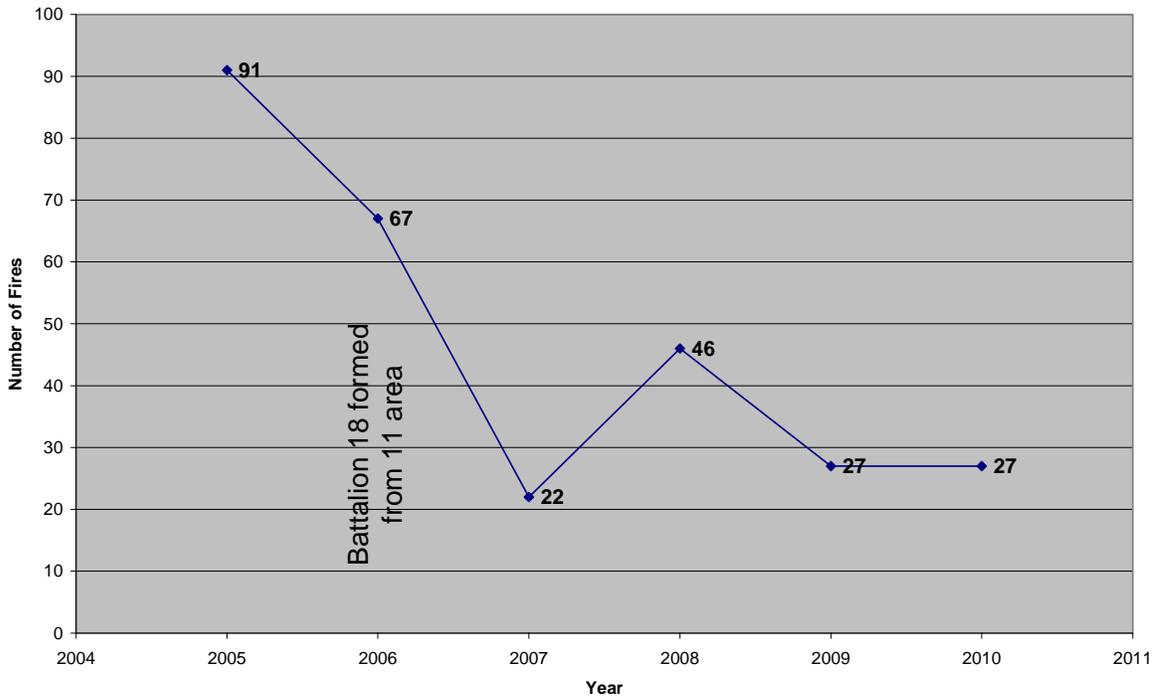
Battalion 11 will work to reduce fire ignitions damage by actively participating in public education programs, fuel reduction programs, and homeowner education programs. These efforts will center in the communities of Auburn, Foresthill, Newcastle, and Christian Valley. The components are as follows:

#### **A. Burn Permit Administration**

Only 7% of the total fire incidents in the battalion were identified as escape debris burns. Despite this success, there is always a need to educate the public on proper debris burning techniques. There is also a potential that new residents are unaware of the proper methods and timing for debris burning. Therefore, an effective program of issuing burn permits is critical to prevention of wildland fires.

LE-62s (Residential Burn Permit – Burn Pile) will be issued by authorized CAL FIRE personnel and cooperators. Headquarter staff, station staff, and VIP staff will administer dooryard burn permits to the public. Issuing points will be CAL FIRE Stations 10 and 11 and Placer County Fire Stations. The process will ensure that homeowners can easily acquire a permit. Burn hours will be determined by CAL FIRE outside the city limits and the individual cities within their boundaries. The emphasis will be a placed on the terms of the permit, the responsibilities of the permit holder, and alternative methods of vegetation disposal.

**Battalion 11 Ignitions (2005-2010)**



LE-5 (California Inter-Agency Burning Permit) and LE-7 (Project Type Burning Permit) are issued on SRA lands after an inspection by an authorized employee of CAL FIRE or USFS. These project burn permits are typically used to dispose of larger piles of material.

### **B. Public Education Forums**

CAL FIRE staff is involved in numerous public education programs. The target audience is quite large and has proven to be receptive to various programs. On going events through out the year include:

- Meadow Vista Pioneer Day Parade
- Foresthill Fourth of July Parade
- Auburn Fourth of July Parade
- Auburn Air fest: Attend and assist fire prevention staff with static display during the Air Fest.
- Gold Country Fair: Construct and staff the fair booth display.
- Fire Prevention week open house: Conduct open house tours of the CAL FIRE / Placer County Fire Facility, Auburn Headquarters.
- Fireworks Patrols: With use of engines, paid staff, and VIP's conduct high visibility neighborhood patrols.
- Battalion wide fuel reduction and VMP's

### **C. PRC 4291 inspection:**

PRC 4291 inspections serve a dual purpose. One is as a vegetation management motivator. The other is as a public education tool. Inspections will occur in the general vicinity of Auburn and Newcastle as well as the Christian Valley area.

Correspondence with landowners will include information on reducing equipment use and debris fire ignitions.

**2. Vegetation Management:** The vegetation management programs are directed at reducing the potential of a large fire and reducing the damage from a large fire.

**A. Chipper Program / Residential Fuel Treatment**

The Battalion receives great benefit from working with the Placer County Chipping program. The program provides chipping services to landowners to abate hazardous vegetation with reduced costs to the landowner and fewer opportunities of an escaped control burn with the added benefit of reduced impacts to air quality. The Battalion encourages landowners to keep their properties free from flammable vegetation through support of the local Fire Safe and Resource Conservation District fuel reduction efforts.

**B. Installation and Maintenance of Roads and Fuel Breaks**

The Battalion will continue to support the acquisition of project funds and cooperators that will achieve the installation and maintenance of roads and fuel breaks within the Battalion. The following roads and fuel breaks are deemed critical to provide fire equipment access and reduce the potential of a large costly and damaging fire which may originate in the American River Canyon:

- 1) New Auburn Foresthill Road to Clipper Gap Fuel Break, North Fork American West Rim
- 2) New Drivers Flat to Long Point Fuel Break, North Fork American East Rim
- 3) Existing McKeon-Ponderosa Fuel Break Improvement and Maintenance
- 4) Existing Lower Lake Clementine Fuel Break, North Fork American, East Rim
- 5) Existing Auburn to Robie Point Fuel Break Maintenance, North Fork American, West Rim
- 6) Maintenance of Stagecoach Road below the City of Auburn
- 7) Maintenance of Lower Lake Clementine River Access Road

**C. VMP Projects**

The purpose of these projects is to eliminate the potential for a large and damaging wildfire by eliminating the fuel, with fire, in a controlled fashion. The current VMP schedule includes the Foresthill Bridge VMP which has traditionally been instituted under agreement with the US Bureau of Reclamation and Placer County for fire prevention purposes. The project involves burning of the site prior to July 4<sup>th</sup> each year to eliminate the risk of an intentionally set fire. In contrast, the current project involves the abatement of flammable vegetation below the Foresthill Bridge in preparation for a FEMA bridge retrofit project involving grinding and welding. The tertiary benefit of the project is the abatement of the flammable vegetation. The current Foresthill Bridge VMP is a 3 year project to expire Fall 2012.

## High Priority Target Areas

- Foresthill,
- Todd Valley
- Populated areas along canyon rim
- LRA areas during red flag warnings

**Table 4 – Battalion 11 Fuel Modification Projects, Community Outreach and Education Programs**

Project Name	Status	Estimated Completion Year	Project Type	Net Acres
Foresthill Bridge VMP	O	2012	Prescribed Fire	<b>60</b>
I-80 Highway Chipping	A	2012	Fuel Treatment	
Placer County Chipper	O	N/A	Fuel Treatment	
Shockley Trails	M	2011	Shaded Fuel Break	

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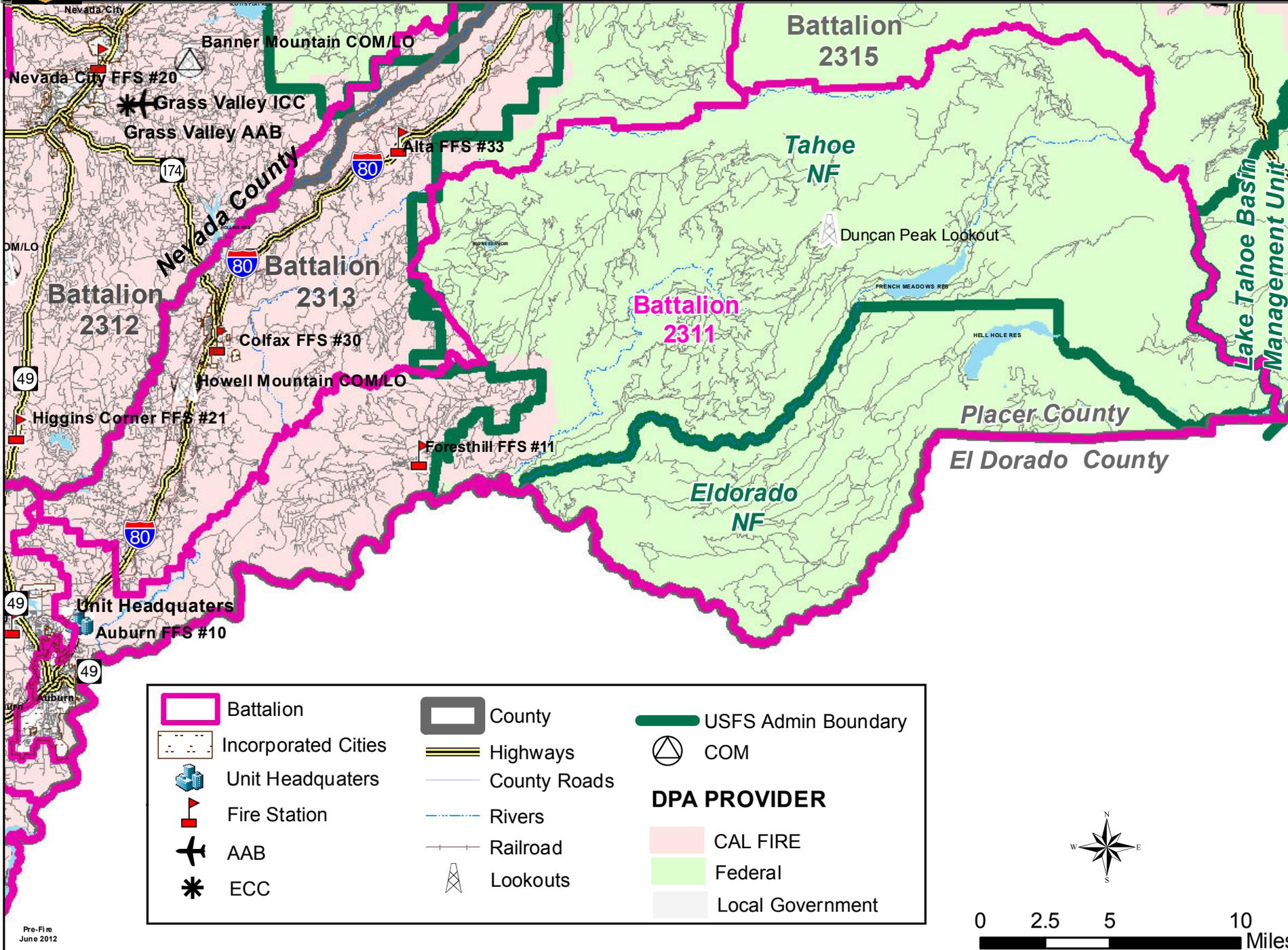
## 2011 Action Plan

- The Battalion will continue to implement the public education forums identified in the plan.
- The Battalion will work with Caltrans to reduce ignitions while mowing.
- The Battalion will encourage and support vegetation management programs within the Unit, plus roadside chipping and community chipping programs provided by agency cooperators.
- The Battalion will continue to implement a defensible space enforcement program in conjunction with the Unit Prevention Bureau and encourage landowners to remove hazardous vegetation adjacent to their structures.
- The Battalion will continue to maintain an excellent working relationship with various community fire agencies, public service groups, and Fire Safe Councils. This will ensure a rapid and effective response in order to protect the members of the community the Battalion serves.



# NEVADA - YUBA - PLACER UNIT (NEU)

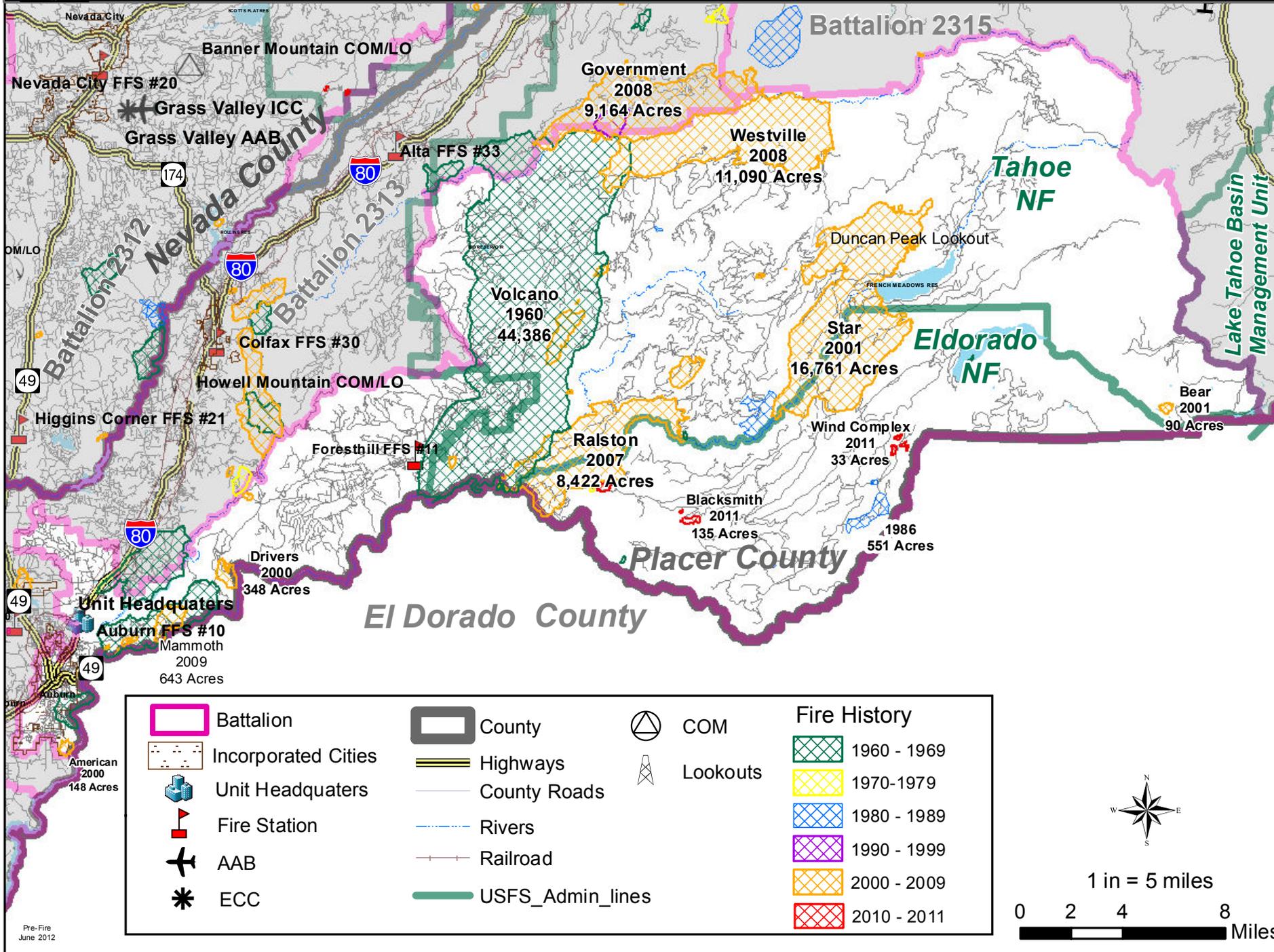
## Battalion 11 - Administrative Boundaries





# NEVADA - YUBA - PLACER UNIT (NEU)

## Battalion 11 - Fire History



# ***Ignition Management Plan***

## ***Battalion 12***

### **Battalion Description**

Battalion 12 covers approximately 209,657 acres of Nevada County. It is occupied by an estimated 71,000 people living in roughly 24,000 residential structures. Fuel types range from oak woodland to timber, and the topography ranges from rolling hills to mountains. The battalion has a significant wildland urban interface (WUI) problem.

Because of the significant urban interface problem, much of the fire prevention effort has been spent on reducing the potential for large damaging fires. This has been accomplished through the efforts of a seasonal fire prevention inspector who last year conducted PRC 4291 inspections on 2,772 residents within the battalion, along with a schedule 'A' Fire Protection Planner whose focus has been placed on land use review, concentrating on fuel modification, adequate access and egress and water storage for fire protection. Cal Fire is also involved with the Nevada County Fire Safe Council which oversees the Nevada County chipping program.

### **Battalion Fire History and Occurrence**

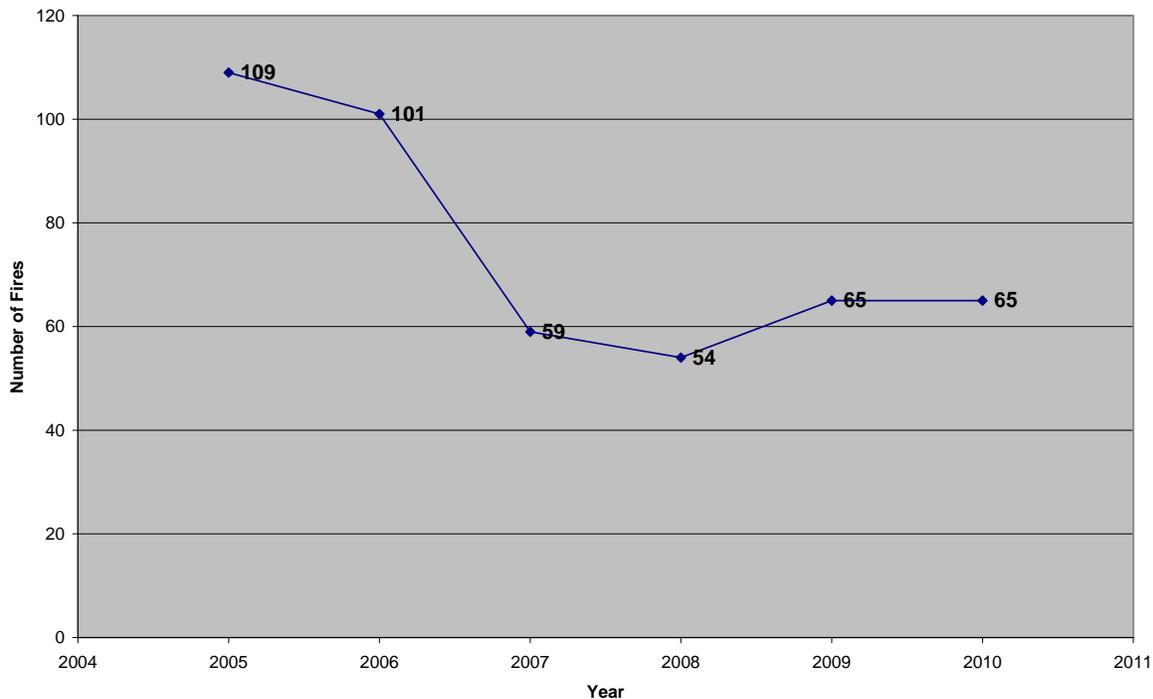
The statistics show that escaped debris burns are the primary cause (25%) of wildfire in the Battalion. The residents realize that the fuel treatments near their residences must be done and often delay burning until the final weeks prior to burn bans being instituted. The result is a greater number of burn piles being burned later in the season, when control of the fires is more difficult due to weather and fuel conditions. Public education at the time of burn permit issuance is used to reduce the number of escapes.

Equipment and vehicle caused fires are the second highest cause (24%) of wildfire in the Battalion. Much of the fuel work which occurs in the Battalion involves the use of equipment. Construction and land management activities often require the use of equipment. This equipment use takes place in the wildland areas where vegetative fuels are available and susceptible to burning. Many of the roads in the Battalion are rural roads with vegetation growing very close to the road edge, or on the road surface. The exposure of these fuels to hot exhaust, exhaust discharge, or flame impingement from fires originating within the vehicle is a problem typical of any rural community.

Arson and undetermined fires are considered equally and account for 24% of the fires in the Battalion. These fires are intentionally set fire or fires which the ignition could not be determined due to various factors. These fires are the most difficult to reduce due to their nefarious nature and difficulty in assessing. The Unit's prevention program is charged with investigation and pursuit of arson as felonious activity. The Unit prevention also assists Battalion staff with cause determination if a fire problem persists with no apparent cause. The result is, over time, a reduction in arson fires and determination of cause on undetermined fires allowing fire prevention education to address the actual cause.

The balance of the fires is split between various causes which are considered normal accidental fires.

**Battalion 12 Ignitions (2005-2010)**



## Mitigation Strategies

### 1. Public Education:

Public education continues to be a priority within Battalion 12 to reduce the number of fire starts. The action plan for public contact and education is as follows:

#### A. Burn Permit Administration

25% of the total fire incidents in the battalion were identified as escape debris burns. This indicates there is an increasing need to educate the public on proper debris burning technique. One effect may be that residents are new to the community and are unaware of the proper methods and timing for debris burning.

LE-62s (Residential Burn Permit – Burn Pile) will be issued by authorized CAL FIRE personnel and cooperators. Issuing points will be CAL FIRE Stations 20 and 21, Nevada County Consolidated FPD, Peardale/Chicago Park FPD Stations, Higgins FPD Stations and Ophir Hill FPD. Only those personnel trained and authorized by the CAL FIRE Battalion Chief will be allowed to issue a LE-62. The emphasis will be placed on the terms of the permit, the responsibilities of the permit holder, and alternative methods of vegetation disposal.

LE-5 (California Inter-Agency Burning Permit) and LE-7 (Project Type Burning Permit) are issued on SRA lands after an inspection by an authorized employee of CAL FIRE. These project burn permits are typically used to dispose of larger piles of material and typically require an inspection by CAL FIRE prior to authorization to burn.

## **B. Public Education Forums**

Battalion personnel remain involved in numerous public education programs. Many programs are cooperative efforts with other fire agencies. The Nevada County Fair is an example of agency cooperation that provides information and education to the public. This venue provides a receptive and captive audience.

On going events through out the year:

- Fire Safe Council & Community Groups
- School Programs
- Career Days (Bear River & Nevada Union High Schools)
- Home & Garden Shows
- Fire Safe Work Shops / Fire Prevention Week
- Lake Vera Camp Grounds
- Nevada County Air Fest
- Nevada County Fair
- Higgins FPD Open House

## **C. Fire Prevention/News Releases:**

CAL FIRE will continue to utilize a local radio station, the local news paper, as well as the Lake of the Pines & Alta Sierra monthly publications and the Nevada County Fire Safe Council's newsletter to educate the public on fire safe issues.

In addition CAL FIRE will work with local equipment rental yards and dealers with prevention material and to ensure compliance with spark arrestor laws. The focus will be trying to mitigate the rising occurrence of equipment caused ignitions.

A Schedule 'A' Fire Protection Planner works with developers and the Planning Department on land use and PRC 4290 issues, ensuring that adequate access/egress, fuel modification and other fire protection standards are met.

## **D. PRC 4291 inspection:**

PRC 4291 inspections serve a dual purpose. One is as a vegetation management motivator. The other is as a public education tool. Two seasonal fire prevention inspectors, CAL FIRE engine companies, or a local government fire prevention officer within the battalion will conduct the 4291 inspections, dependent on funding availability. The focus of the inspections is defensible space compliance and public education.

**2. Vegetation Management:** The vegetation management programs are directed at reducing the potential of a large fire and reducing the damage from a large fire.

### **A. PRC 4291 inspections:**

PRC 4291 inspections are completed annually by Nevada County seasonal fire prevention inspectors, CAL FIRE engine crews and Nevada County Consolidated F.P.D. personnel.

## **B. Hazard Reduction Programs:**

CAL FIRE has worked in past years with the Nevada Firesafe Council to support a residential chipping program.

### **Nevada County Community Shaded Fuelbreak:**

This project began in 2004 and was completed in July of 2011 with assistance from private landowners, CAL FIRE and the USDA NRCS cost share incentive programs. The Shaded Fuel Break project area was developed to add protection to the community of Cascade Shores, the Scotts Flat Lake area, and the cities of Grass Valley and Nevada City.

The Nevada County Community Shaded Fuel break was developed out of a need to have a strategic plan to help protect cities and communities in the event of a catastrophic fire and to protect the forests from fires in the urban-wildland interface. The project area encompassed approximately fifteen miles; was up to one quarter mile in width and consisted of mostly large, privately owned parcels. Several meetings were held with Cascade Shores Homeowners Association, Lightning Tree Road Association, Nevada Irrigation District and the US Forest Service to coordinate land treatments and develop cooperation in order to complete the fuel break project.

Cooperating agencies provided education, awareness and cost-share funding information for private landowners. This program was voluntary and had flexible prescriptions for a shaded fuel break while educating landowners to Best Management Practices (BMP's) on their land including clearing brush, thinning and pruning. The project area had over 60 years of fuels accumulation and was in a high fire severity zone.

### **High Priority Target Areas**

- Nevada City (high structure loss potential)
- Grass Valley (historical value, high population)
- Banner Mountain Community
- Cascade Shores.

**Table 5 – Battalion 12 Fuel Modification Projects, Community Outreach and Education Programs**

Project Name	Status	Estimated Completion Year	Project Type	Net Acres
Ponderosa Fuel Break			Shaded Fuel Break/ Community Protection	
Deer Creek Fuel Break	A		Shaded Fuel Break / Community Protection	
Wolf Mtn CAL FIRE Lookout	O	N/A	Active Fire Lookout	N/A
Banner Mtn CAL FIRE Lookout	O	N/A	Active Fire Lookout	N/A
Truckee / I80 Fuel break				
FSCNC Chipping program	O	N/A	Fuel Reduction	

**Status Guide:** A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance.

### Success Stories

#### Fire Safe Council of Nevada County –

FSCNC earned the 2010 Firewise Leadership Award from the National Fire Protection Association for establishing five formal Firewise Communities in Nevada County.

### Action Plan

Debris Escapes – Battalion staff will work with local fire protection districts (Peardale, Chicago Park) and the FSCNC to provide educational materials on safe burning practices to local and visiting residents.

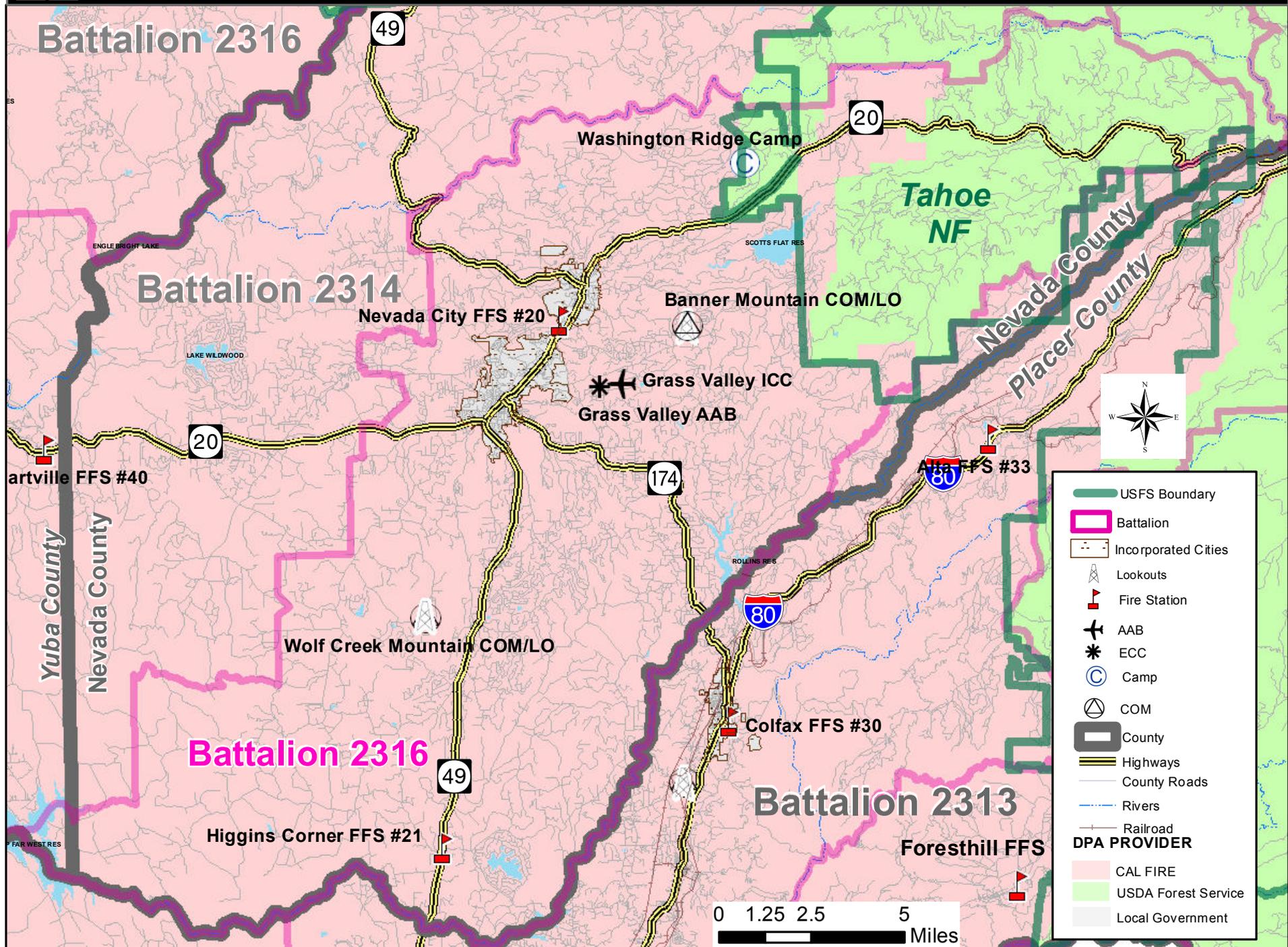
Powerline Fires – Powerline fires are a consistent problem within this Battalion and have the potential to increase due to the large quantity of snow and storm damaged vegetation present following the winter of 2010. Battalion staff will respond to citizen complaints regarding right of way clearance, coordinate LE-100 inspections and provide necessary tree review to PG&E when questions arise during powerline inspections.

Equipment Fires - Battalion staff will work with the Unit PIO to locate equipment rental yards and equipment dealers. Battalion staff and PIO will provide educational materials to the vendors and the public regarding fire safe equipment use. Battalion staff will also provide, upon request of the public, inspections of equipment to ensure fire safe operation. Unit PIO will provide radio interviews regarding safe use of equipment in the area.



# NEVADA - YUBA - PLACER UNIT (NEU)

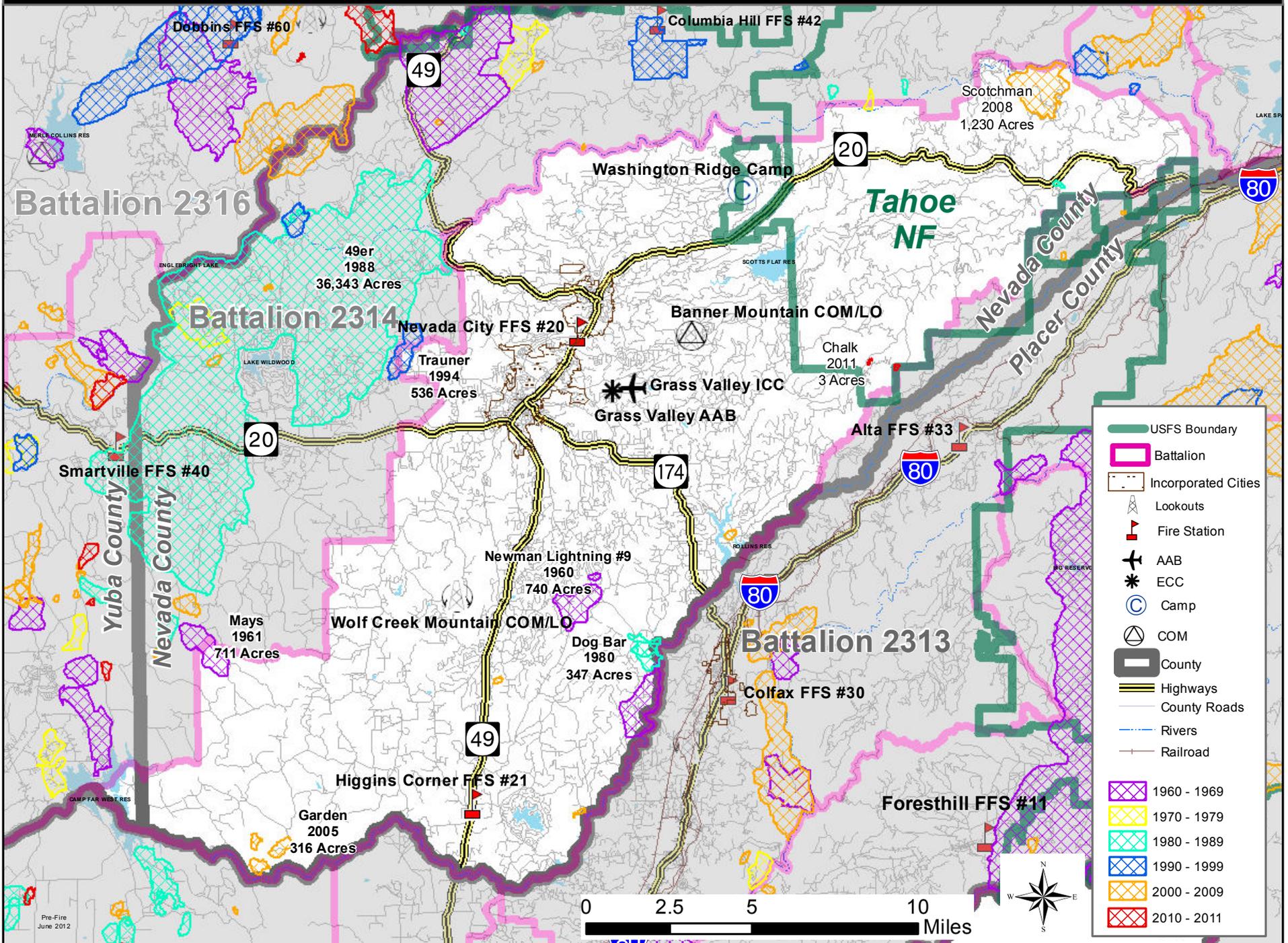
## Battalion 12 - Administrative Boundaries





# NEVADA - YUBA - PLACER UNIT (NEU)

## Battalion 12 - Fire History



# ***Ignition Management Plan***

## ***Battalion 13***

### **Battalion Description**

The Colfax and Alta Battalion cover an area 155,046 acres in size within Placer County along Interstate 80. The area is densely populated and interlaced with an extensive road system. The elevation ranges from 1600 feet in the drainage of the American River Canyon to 5300 feet around Emigrant Gap. The North Fork American River and Bear River form two distinct drainage systems with steep inner gorges and offers dense heavy fuels. The fuels within the Battalion vary as widely as the elevations, spanning an area that contains blue oak woodland where annual grasses and oaks are mixed with brush and landscape plantings to the prime timber bearing soils of the Sierra Nevada mixed conifer zone which are covered with large pine and fir timber. In between these fuel types is a range of chaparral, conifer / oak forest, and grass meadows, all containing light flashy fuels and mixed with residential development.

The population centers are Meadow Vista, Applegate, Weimar, Colfax and Alta/Dutch Flat which are surrounded by a scattered urban interface where parcels range from 2.5 to 20 acres in size, much of which contains residential and some light commercial development. This mix creates a true WUI problem where even the smallest fires with the most prompt emergency response could be catastrophic and result in burned structures. While the Colfax/Alta Battalion is not highly populated as compared to other portions of Placer County, the day to day traffic flow from the major East/West Freeway (Interstate 80) continues to be a fire problem. A majority of the ignitions in the Battalion originate from vehicles.

Cooperators include Placer Sierra Firesafe Council, Iowa Hill Firesafe Council, Auburn Firesafe Council, Foresthill Fire Department, Placer Hills Fire District, Colfax City Fire Department, Alta Fire Department, Iowa Hill Fire Company, Placer County Fire Department, Bureau of Land Management, and the United States Forest Service

### **Battalion Fire History and Occurrence**

Vehicle caused fires rank as the highest cause of wildfire in the Battalion. This statistic is a reflection of the numerous roads and highways bisecting the Battalion. This portion of Interstate 80 is an area where commercial vehicle traffic often encounters problems as a result of the long downhill run off of Donner Summit. During fire season, as temperatures and vehicle traffic increases on Interstate 80, vehicles with overheating brakes can become an ignition source for roadside vegetation. Conversely, overheating and friction can affect commercial or passenger vehicles climbing grades within the Battalion causing vehicles to ignite.

Exclusive of Interstate 80, many of the roads in the Battalion are rural roads with vegetation growing very close to the road edge, or on the road surface. The exposure of these fuels to hot exhaust, exhaust discharge, or flame impingement from fires originating within the vehicle becomes an ignition source for vegetation fires.

Debris escapes account for the next highest cause of vegetation fires within the Battalion. Generally, the residents in the vicinity realize that the fuel treatments near their residences must be done, but often delay burning until the final weeks prior to burn bans being instituted. The result is that burn piles are burned later in the season, when control of the fires is more difficult

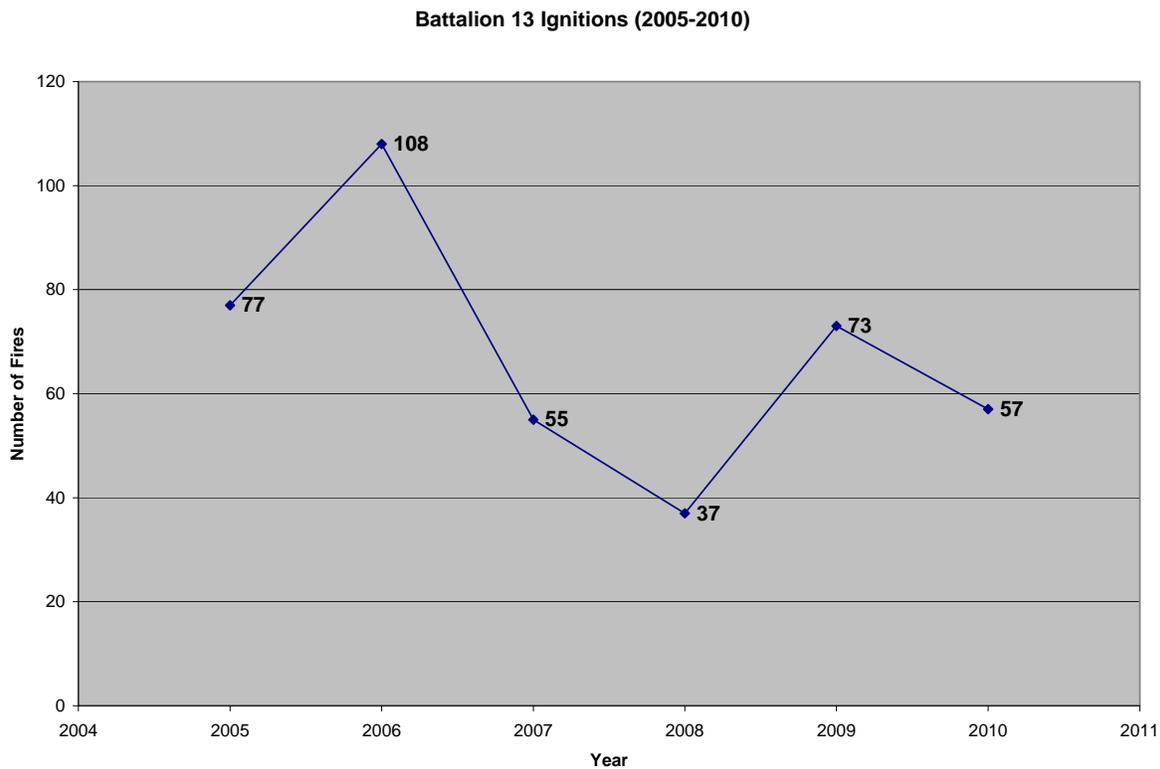
due to weather and fuel conditions. Public education at the time of burn permit issuance is used to reduce the number of escapes.

Equipment caused fires account for approximately 10% of ignitions in the Battalion. Much of the fuel work which occurs in the Battalion involves the use of equipment and construction or land management activities often require the use of equipment. This equipment use takes place in the wildland areas where vegetative fuels are available and susceptible to burning.

Fires with an undetermined cause also account for around 10% of the fires in the Battalion. These fires are those which the ignition could not be determined due to various factors. These fires are the most difficult to reduce due to their difficulty in assessing. The Unit's Prevention Bureau assists Battalion staff with cause determination if a fire problem persists with no apparent cause. The result is, over time, a reduction in undetermined fires allowing fire prevention education or enforcement to address the actual cause.

Arson fires account for 11% of the fires in the Battalion. These fires are intentionally set fires and difficult to reduce due to their nefarious nature. The Unit's Prevention Bureau is charged with investigation and pursuit of arson as felonious activity. Continued Law Enforcement in the Battalion will, over time, reduce arson fires.

The balance of the fires is split between various causes which are considered normal accidental fires.



## Mitigation Strategies

### 1. Public Education:

#### A. Burn Permit Administration

Debris escapes account for 12% of ignitions in the Battalion. This is a significant number considering the requirement to have a burn permit in place prior to

burning and the fact that restrictions and information are available on the permit to prevent escape. In order to reduce this number of escapes leading to vegetation fires, education at the time of permit issuance is critical so that residents know to review the restrictions and ensure that they are in compliance before lighting the match.

LE-62s (Residential Burn Permit – Burn Pile) are issued by authorized Cal Fire personnel at the Alta and Colfax Stations. Annually, Battalion personnel issue approximately 800-1000 permits. All employees cover the compliance issues with every permittee.

Battalion personnel will also be issuing permits for the City of Colfax. There will be open hours during the winter. Burn hours will be implemented around May 1 and total restriction will start around July 1 depending on weather. The burn ban will be lifted as per NEU policy in the fall at the end of declared fire season.

LE-5 (California Inter-Agency Burning Permit) and LE-7 (Project Type Burning Permit) are issued on SRA lands after an inspection by an authorized Cal Fire employee. These project burn permits are typically used to dispose of larger piles of material and typically require an inspection by agency personnel prior to authorization to burn.

All permittees are given material covering air pollution rules and information regarding the Placer County chipping program as an alternative to burning.

## **B. Public Education Forums**

Battalion personnel participate in numerous public education programs. The area is a well-known recreational area with campgrounds at the American River, Bear River, Rollins Lake and numerous hiking trails attracting day users throughout the Battalion. The target audience is quite large and has proven to be receptive to various programs as follows:

On going events through out the year include:

- Recreational areas are frequently visited by Cal Fire personnel to provide fire safe information and material.
- The local elementary schools are targeted for Smokey Bear programs.
- Battalion Staff participate in Fourth of July parades at both Colfax & Dutch Flat.
- Battalion Staff work with cooperating fire protection agencies in fire prevention programs in both private and public education forums
- Battalion engine companies are up-dating pre-fire plans, expanding on WUI pre-plan guidelines and maps, and conducting business inspections through-out the year as fiscal limitations and staff time allows.
- The local Battalion Chief works closely with the local Fire Safe Councils on various issues.
- This year Caltrans has agreed to allow NEU Washington Ridge crews to implement their fuel modification program from the Auburn Battalion to the Baxter area along Interstate 80.
- The BC attends the Colfax City Council meetings to provide input relative to Colfax City VFD activities.
- The BC attends Lions Club meetings once a year to provide information on fire prevention in the local area.

- The BC attends the Alpine Meadows Community meeting to provide fire safe information and advice the landowners.
- The BC Attends both the Meadow Vista Municipal Advisory Council and the Weimar/Applegate/Colfax Municipal Advisory Council to the Placer County Board of Supervisors

### **C. Fire Prevention**

NEU Fire Prevention planners are assigned to the Placer County Building Department. Planners review projects to ensure that PRC 4290 requirements are met or exceeded on all new construction. The BC participates in field inspections upon request and meets with landowners to provide input regarding necessary fire protection elements required for development in the WUI.

The BC is in direct contact with Union Pacific representatives on a bi-annual basis. During these meetings, the BC receives information regarding future track maintenance. In the spring of 2011, Union Pacific hired a contractor to install a fuel break through the Battalion within 30 feet either side of the track. The fuel reduction project is intended to mitigate ignition potential as rail traffic is increased. Rail traffic is currently around 15 trains per day. The traffic is expected to reach 45-50 trains per day over the next 2 years.

### **D. PRC 4291 Inspections**

Since 2007 Battalion staff inspected the most critical WUI areas to evaluate PRC 4291 compliance. In that timeframe, the Battalion personnel have inspected approximately 90% of residences. Of those residences inspected, approximately 85% of inspections were non-compliant. The result of the inspections is short term compliance being achieved in the season inspected, but subsequent years following inspection have resulted in no change in the long term compliance. One possible solution is to provide second inspections and provide citations for those residences not achieving compliance. To date, no citations have been provided within the Battalion for non-compliance with PRC 4291 requirements.

### **High Priority Target Areas**

- Colfax WUI
- Alta/Dutch Flat WUI
- Meadow Vista WUI
- Clipper Gap WUI
- Weimar WUI
- Applegate WUI
- American River Drainage (Recreation and Tourist Destinations)

**Table 6 – Battalion 13 Fuel Modification Projects, Community Outreach and Education Programs**

<b>Project Name</b>	<b>Status</b>	<b>Estimated Completion Year</b>	<b>Project Type</b>	<b>Net Acres</b>
I-80 Fuel Reduction Project	A	2012	Fuel Reduction	
Mt. Howell Maintenance	O	N/A	CAL FIRE Lookout	<b>42</b>
Colfax Area Strategic Plan – WUI Pre-Plan	A	Ongoing	Pre-Fire Planning	
Iowa Hill Temporary Refuge Area	A	2012	Fuel Reduction/Public Education	<b>20</b>
Rooster Ridge Fuel Break	C	2011	Fuel Reduction	<b>195</b>
Kings Hill Fuel Break	C	2009	Fuel Reduction	<b>200</b>
Long Point Fuel Break	A	2012	Fuel Reduction	<b>150</b>
Roach Hill	C	2011	Fuel Reduction	<b>100</b>
Succor Flat	A	2012	Fuel Reduction	<b>150</b>
Race Track Ridge	P	2014	Fuel Reduction	<b>200</b>

**Status Guide:** A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance.

## **Success Stories**

### Edwards' Tree Farm / Ponderosa Fire

Allen Edwards retired after many years in State Service. He had decided to spend his time working with his family on their timber property in Placer County. This property is located above the North Fork of the American River, a canyon known in the area for experiencing a number of major fires in the past. The combination of fuels, weather and topography all but guaranteed that history would eventually repeat itself and the American River Canyon would once again be under siege by a wildfire.

*Colfax, CA – In August 2001, a fire roared across Placer County, eating up 2,780 acres of forest. Two days after it started, the fire swept into a canyon along the edge of 520 acres owned by Nancy and Allen Edwards.*

*The flames rushed up the Edwards' side of the canyon and devoured 125 acres of their trees. But Allen Edwards had removed underbrush and thinned trees to cut a shaded fuel break 400 feet wide along the top of the ridge. The fuel break slowed the fire while it sheltered some of the 984 California Department of Forestry firefighters called out to battle the blaze. They stopped the fire from barreling down the other side of the mountain and through the town of Colfax. The fire, started by a vehicle, cost \$4.5 million and injured 19 firefighters. Luckily, it destroyed no houses and took no lives.*

(Source: University of California)

When Allen first began working his land he realized that he needed to consider the potential for a wildfire coming out of the canyon. One of his first efforts was to develop a fuelbreak along the ridgeline of his property to help reduce the likelihood of a fire spreading to the remainder of his parcels. Along the ridge top, his property was primarily a second growth mixed conifer woodland, typified by uneven aged Ponderosa Pines, Black Oak, and a heavy brush component. Allen took the time to thin the stands and prune all remaining stems up at least eight above the ground. By doing these two things he was able to have a significant effect on the fire's behavior within the fuelbreak. The work removed the ladder fuels and provided an open stand from which fire fighters could make a stand against the encroaching wildfire.

The canyon below the Edward's property was covered primarily by Manzanita, Ceanothus, and Scrub Oak. There were also pockets of oak and conifer stands in the drainages and scattered across the landscape. The brush was near critical levels based on live fuel moistures and due to its age had a very significant amount of dead material mixed in with the live. The standing fuels averaged between six and eight feet in height but could be found up to fourteen feet tall in places. The mixed oak and conifer stands typically had a significant brush understory. These stands were even more volatile than the rest of the landscape due to the presence of "needle drape" through-out the understory. This added layer of fine fuels resulted in an increase in torching which also increased the potential for spotting.

The North Fork of the American River flows almost due North - South below the Edward's property. Because of the topographic orientation, the fuels receive direct sunlight through the first half of the day. The humidity and fuel moisture are significantly reduced on this slope by mid-day and the fuel temperature is dramatically increased. Mid-September is typified by hot, dry weather and continuous canyon winds. The standard south-southwest winds combine with the daytime up-canyon winds to create very breezy conditions in the canyon and surrounding areas. Around mid-night the up canyon winds will give way to the colder air settling into the canyon causing strong down-canyon winds.

The topography of the American River Canyon has a very powerful effect on any fire that occurs within it. The slope ranges from ten to two hundred percent with most of it in the 45 - 75 % range. This slope greatly increased the fire's spread by allowing the pre-heating of the fuels and keeping the flaming front in contact with a constant supply of unburned fuel. It also hampered fire fighting efforts by limiting the access to the fire's edge as there were very few roads in the area.

The Division Supervisor that was responsible for that portion of the fire, Ken Hughes, said, "The fuelbreak was integral in our operations along Gillis Ridge. It gave us a place to safely fire from where we would not put our crews in danger. We were able to extend the fuelbreak along the ridge and tie in with the river to fully contain the head of the fire. Without the work he, (Allen Edwards) had done prior to this fire there is a very good likelihood that the fire would have run up into the homes further to the west."

It cost Allen Edwards and the NRCS about \$4,500 total to treat about ten acres of land. That money proved to be a wise investment as the fuelbreak resulted in a fire perimeter that had very few homes and other structures within it. Without the fuelbreak it is very likely that the fire would have continued up into the south-eastern edge of the city of Colfax.

The Gillis Hill Fuelbreak did not stop the Ponderosa Fire on its own. What it did is provide a strategic location for ground resources to attack the fire without putting the firefighters in danger. The roads that Allen Edwards had built in the area and the fuel he removed from the understory, provided access that previously was not available in this remote area.

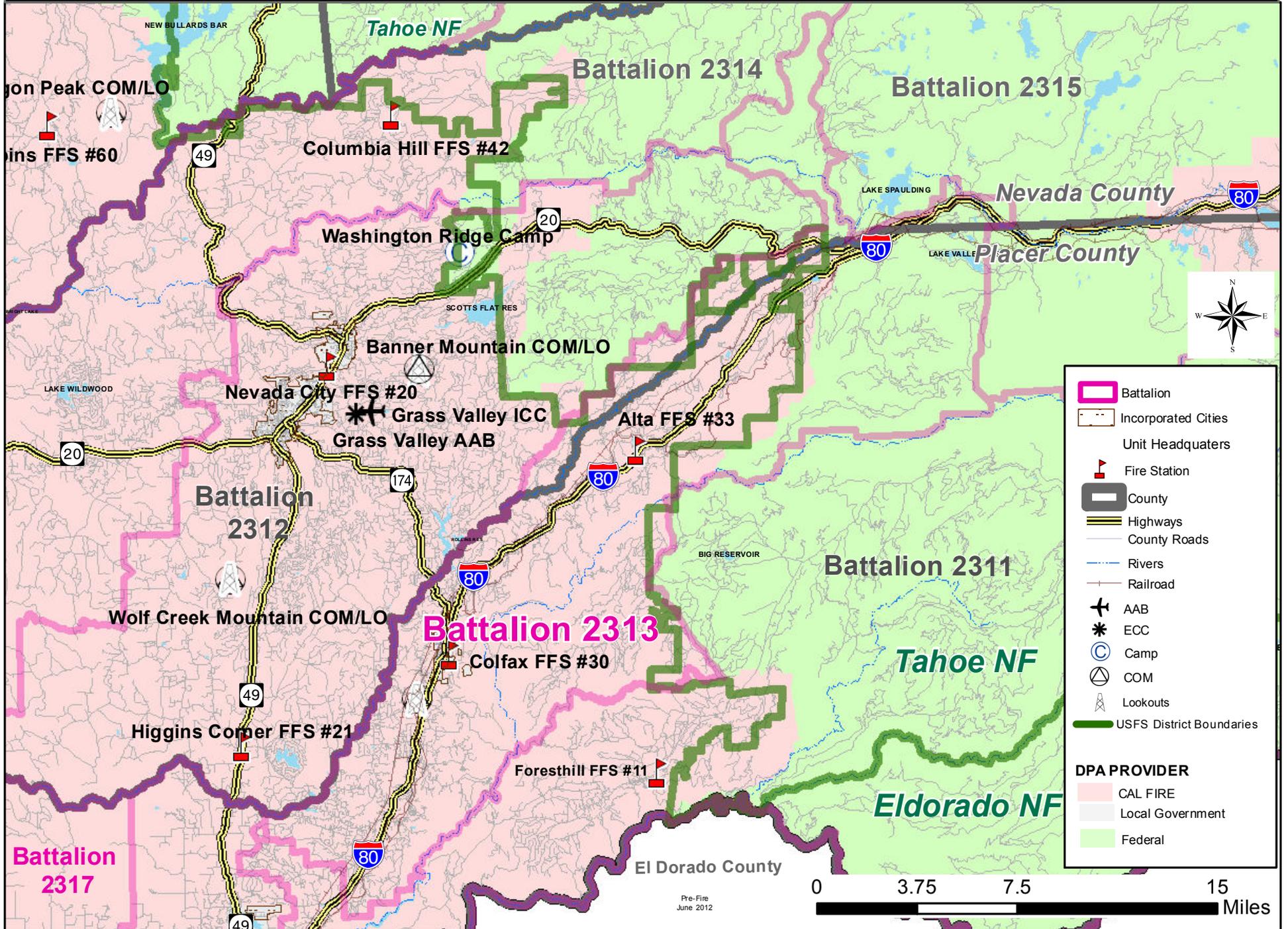
### **Action Plan**

- Public information at equipment rental locations (Hills Flat, Hansen Bros)
- Newspaper releases
- Signage
- Priority PRC 4291 inspection areas
- Focus on 80 corridor
- Monitor North Fork and Bear River to determine impact of lifting of the dredging moratorium on ignitions.
- Scotch Broom evasive species public education and mitigation



# NEVADA - YUBA - PLACER UNIT (NEU)

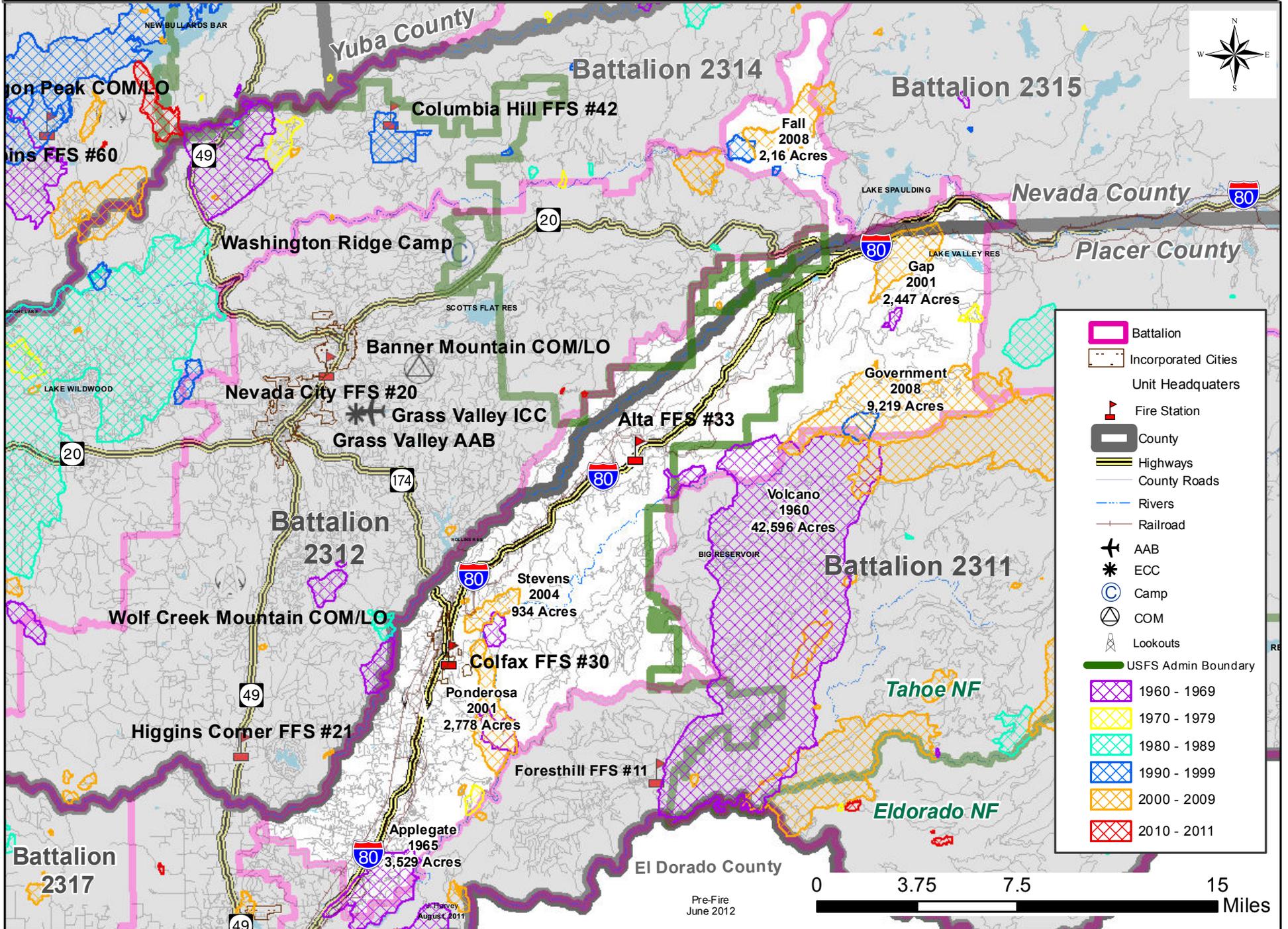
## Battalion 13-Administrative Boundary





# NEVADA - YUBA - PLACER UNIT (NEU)

## Battalion 13- Fire History



# ***Ignition Management Plan***

## ***Battalion 14***

### **Description of the Battalion**

At over 270,000 acres the Smartsville – Columbia Hill Battalion (B-14) is the largest in the Unit. It includes more than 160,000 acres of SRA and 15,000 acres of Federal land under State DPA. The main centers of population include Penn Valley, Rough & Ready, North San Juan, North Columbia, Smartsville, Beale Air Force Base, Linda and Wheatland. Most of these communities have been identified on the federal registry of Wildland Urban Interface Communities at Risk. The Battalion is made up of the Yuba River, Deer Creek, and Bear River Watersheds all of which have portions that have been identified as High Hazard Watersheds. From west to east the Battalion begins in the relatively flat lands of the Sacramento Valley and continues northeast to the mountainous terrain of the Tahoe National Forest (TNF). In between these boundaries one will find fuel types that represent at least twelve of the thirteen fuel models. From the valley floor to around 800' – 900' ft elevation is primarily the grass models. Beginning around 700', the oak-woodland begins to appear and it continues on up in elevation to about 1,400 ft. The brush models begin to appear around 800' and carry on up to over 3,000 ft in places. The timber models begin at approximately 1,600 ft, in places, and continue to the TNF boundary. Most of the Battalion is zoned for residential properties of five acres or more, agriculture, or timber production.

Along with the several fire agency cooperators, which include Penn Valley Fire Protection District, Smartsville Fire District, North San Juan Fire District, Rough & Ready Fire District, Wheatland Fire Authority, Linda Fire District, the Bureau of Land Management (BLM), the TNF, and Beale Air Force Base we have several non-fire agency cooperators that assist us with our fuel reduction and fire prevention efforts. These cooperators include but are not limited to: The University of California Research and Cooperative Extension Center who allows us to hold annual training burns at their facility. The California Department of Fish and Game (DFG), provides us with areas to conduct wildland training exercises and fuel reduction projects. The Army Corps of Engineers provides water shuttle services for rescues and fire responses across and around Englebright Reservoir. The California State Parks have worked with us in the past to conduct several large Vegetation Management Program (VMP) burns on their lands expanding our fuel reduction efforts in the Yuba River Drainage. Several large landowners who have also participated or are eager to take part in the VMP to continue to augment those same fuel reduction efforts.

### **Discussion of fire occurrence within Battalion**

Since 1970, there have been twenty-five fires in excess of 100 acres within the Battalion. The most notable of those are the 49er Fire, the Trauner Fire, and the Oak Tree Fire.

The Unit's most costly and damaging fire occurred entirely within the Smartsville – Columbia Hill Battalion. The 49er Fire began on Sunday, September 11<sup>th</sup>, 1988 near the intersection of Highway 49 and Birchville Rd. and was contained on Thursday September 15, 1988 about five miles south of Highway 20 in the Smartsville area. Over the course of five days the fire burned 33,500 acres and destroyed 148 homes, 358 other structures, 89 vehicles, and 17 boats. Suppression costs were estimated at 7.5 million dollars and the total dollar lost was estimated at 22.7 million dollars.

The Trauner Fire occurred in 1994. It burned 536 acres and destroyed several residences and historic structures within the community of Rough & Ready. The cause was determined to be poor maintenance of the vegetation growing around powerlines. As a result, 739 counts of

negligence were filed against Pacific Gas & Electric (PG&E) by the Nevada County District Attorney's office and it resulted in one of the largest claims against the company on record. The outcome of the case is considered to be the motivating force behind PG&E's current fuel reduction program.

The Oak Tree Fire occurred in 1974 and was the result of an airtanker crash while fighting the Keystone Fire in the North San Juan area. Both fires burned almost 900 acres each.

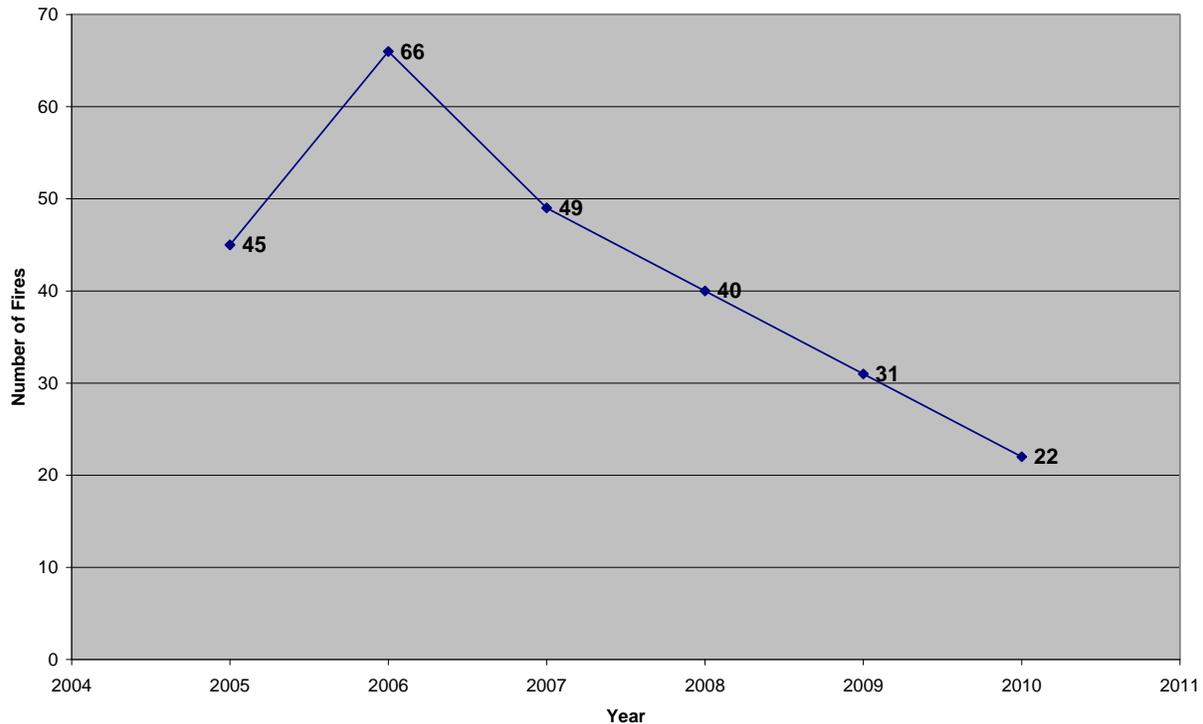
There are areas in the Battalion that experience at least one fire annually.

The Spenceville Wildlife Area Shooting Range on Waldo Rd burns every year. To reduce the threat of these fires becoming extended attack fires, a line is cut around the area each Spring. The area behind the shooting range is broken into two units. The upper unit has several rock outcroppings and typically dries out before the lower unit. Even though the rocks are outside the designated shooting area, shooters with high powered rifles will regularly set targets on them. Eventually, this combination will lead to a rock strike resulting in a fire. By the time responders arrive the shooters will be gone. In the event the fire starts after the fuels have finished curing, responders will fire out the remainder of the unit that is burning. Any fires that start prior to the fuels being cured will be extinguished by the responders. Ignitions at the shooting range have several causes: rock strikes, use of metal targets, and the use of tracer rounds are the most common. All of these cause result from activities that are either illegal or not permitted and the DFG Wardens have been citing individuals found participating in any of those activities. All Battalion personnel are briefed on the plan regarding the shooting range and will evaluate the feasibility of firing it out upon arrival, extinguishing it, or watching as it burns within the pre-designated area(s) then make a decision on the best course of action.

Beale AFB has had fires come off of the base eight of the last ten years. These fires generally originate from birds into powerlines, hazard reduction burns, or munitions work on the base. In an effort to reduce the threat of these fires burning onto SRA, each year Beale AFB puts a fuel break around the perimeter of the base. However, due to their environmental constraints they must leave breaks in the line wherever it crosses winter wetlands or vernal pools. These gaps can be several hundred feet in length and provide significant avenues for the fires to escape the base.

By preparing for these events, we are usually able to keep them in the initial attack phase.

**Battalion 14 Ignitions (2005-2010)**



### **Mitigation Strategies**

There are several roads in B-14 that were maintained for fire access since the early 1950s. With changes in personnel and land ownership, many of those have been neglected over the past ten to fifteen years. Due to years of neglect many of these roads have become nearly impassable for emergency vehicles. In several places changes in ownership have resulted in the new landowners being unaware of the agreements to the point that North Ponderosa Way now has a home built in the original road prism. Over the next several years, efforts will be made by B-14 personnel to identify the roads that will significantly improve the access into the back country within the battalion and work towards re-establishing as many of the original agreements as possible.

- In 2010 work was completed to improve Spenceville Rd from Pitman Rd to the Double Diamond Ranch to allow access of emergency vehicles into the area. The goal for Spenceville Rd is to continue to work with the landowners and re-establish access from the maintained roads in the Double Diamond Ranch all the way to Pitman Rd. When the most recent work was completed on Spenceville Rd, work was also done to improve the road from Spenceville Rd to Beale Falls.
- Also in 2010, B-14 personnel were able to gain permission from the owners of the Selby Ranch to clear brush and small trees along Scott Forbes Rd and the Woods Creek Truck Trail. These roads had become overgrown to the point of completely restricting access of anything larger than a passenger vehicle. As these are the only roads to access the back country north of Englebright Reservoir, it was essential that work be done to allow emergency vehicles in.
- Additional roads to be included as fire access roads in the battalion's are: North Ponderosa Way from Rough & Ready Hwy to Bitney Springs Rd, South Ponderosa Way from Rough & Ready Hwy to Squirrel Creek Rd, Jackass Flats Rd from Tyler Foote Rd

to Purdon Rd, Hoyt's Crossing Rd from Milhous Boys Ranch to the South Fork of the Yuba River, Murphy Rd from Purdon Rd to Milhous Ranch Rd., and Hatchet Creek Rd from McAndrews Rd to Spenceville Rd.

- Point Defiance/Rices Crossing Fire Access Roads along and adjacent to the South Yuba River State Park in the Bridgeport area will be graded at least every other year when weather and equipment availability permit.

Signs are posted along Hwy 20 to advise travelers that fireworks are not allowed in the rural areas of Nevada County. In cooperation with the Penn Valley Fire Department, at least one engine from the Smartsville Station will be sent to patrol the area during the fireworks display put on by the Lake Wildwood Homeowners Association. The Columbia Hill engines will be out in the rural areas during the week of July 4<sup>th</sup> to remind the residents of the rules regarding fireworks use in the area.

## **1. Fire Safe Programs**

Work with developers and the Planning Dept to ensure that PRC 4290 requirements are met or exceeded on all new construction.

Work with the Fire Safe Councils in both Nevada and Yuba County to identify and implement Fire Safe projects in their areas

## **2. Burn Permit Administration**

Cooperators consistent with past practice will issue LE-62's. Issuing points will be all CAL FIRE, the Penn Valley Fire District, and the North San Juan Fire District. The Penn Valley Fire Protection District will issue at Station #44 and at the administrative office for those areas within Penn Valley and Rough & Ready. The North San Juan Fire District will issue out of Station #3 on Tyler Foote Crossing Road. This process will ensure that homeowners can get a permit when the CAL FIRE station is not staffed. Burn hours will be determined by CAL FIRE outside the city limits and the individual cities within their boundaries. There will be open hours during the winter. Burn hours will be implemented around May 1 and total restriction will start around July 1 depending on weather. The Ban will be lifted as per CAL FIRE in the fall at the end of declared fire season.

An authorized employee of CAL FIRE or the USFS will issue LE-5 and Project permits on SRA.

## **3. Defensible Space**

Section 4291 of the Public Resources Code will be addressed on SRA. A County funded inspector will be used to cover door to door in all areas of SRA within Nevada County and station personnel will be used in Yuba County. Target areas for 2011 are Big Oak Valley and the Sicard Flat – Scott Forbes Rd areas.

The CAL FIRE stations and Battalion Chief will continue to support this activity with logistical support, inspections and citations, if needed.

## **4. Railroad / Power Companies**

Past spot inspections indicate no violations; however fire occurrence has become significant.

Powerline inspections will occur during the PRC 4291 inspections as inspectors look up and down while conducting their inspection, and where the lines are available. The Prevention Bureau Chief will be meeting with Powerline Representatives to discuss PRC 4292. Powerline caused fires, within the Battalion, relating to negligence are insignificant and do not warrant the resources to follow up.

## **5. Public Education**

CAL FIRE staff is involved in numerous public education programs. The area is a well-known recreation area. The target audience is quite large and has proven to be receptive to various programs as follows:

School Programs - An interagency effort targets all schools in Penn Valley, reaching grades K - 12 in the spring.

Fourth of July Parade – CAL FIRE will have an engine and an antique engine in this year's parade.

Beale AFB Fire Prevention Week – CAL FIRE will provide an engine for the parade and static display for public education.

## **6. On going events throughout the year**

Lake Englebright Camp Ground - The Army Corp. of Engineers and CAL FIRE will construct fire lines around all shoreline campsites starting in May.

Malakoff State Park Camp Ground - A CAL FIRE engine will address campers during special events planned by the camp area.

Spenceville Rifle Range – A fuelbreak will be constructed around the rifle range during May, and the interior burnt.

Channel 44 - The local message station will run the defensible space tape throughout the summer and event specific messages on request.

## **Vegetation Management:**

### **UC Field Station VMP**

Location: The VMP area encompasses treating approximately 1,040 acres in 7 units of the UC field station, approximately 12 miles west of Grass Valley, 7 miles southeast of Loma Rica, and 9 miles southwest of Dobbins.

Purpose: The UC Research Station VMP is an ongoing project to help manage and study means of managing and controlling noxious weeds and fire impacts on water quality. The weeds that are attempting to be controlled are yellow starthistle, barbed goatgrass, and medusahead. These burns allow the field station to scientifically evaluate the effectiveness of burning in a control program. The affect of a controlled, cool to moderate temperature burn on blue oaks will also be studied.

CEQA: PEIR

### **Bunker Hill VMP**

Location: Approximately 5 miles northwest of the town of Nevada City. The proposed project consists of approximately 1,000 acres of mixed brush, primarily on west, north and east facing slopes.

Purpose: The project is within the South Yuba River Watershed. Shady Creek runs through the north end of the project and discharges into the South Fork of the Yuba River.

The project objective is to reduce the potential of a costly and damaging fire within the treated and surrounding area.

A series of prefire projects have been planned to create a contiguous are of hazardous fuel reduction to effectively create a shaded fuel break from Bridgeport extending east up the San Juan Ridge to North Bloomfield. These projects include the completed Bridgeport State Park prescribed VMP burns, the completed VMP prescribed burn at French Corral, Browning property, the completed and proposed Reader Ranch VMP projects, this proposed project, the completed Malakoff Diggins VMP project east of this project, and the completed Montezuma fuel break. These projects have been developed to create a strategic location where fire fighting resources may more effectively attempt fire suppression activities to stop a costly and damaging fire such as the 49'er fire of 1988.

This proposed project will entail the pre-treatment of the brush fuel by creating hand piles with crews and/or piling and crushing with machinery. Control lines will also be re-established by dozers and/or hand crews. Burn piles are to be treated in spring and early fall, however, other conditions may occur that will allow burn treatment at another time of the year. Some areas may be broadcast burned.

CEQA: PEIR

### **Reader Ranch VMP**

Location: Approximately 5 miles northwest of the town of Nevada City. The proposed project consists of approximately 1,200 acres of mixed brush, primarily on west, south and east facing slopes.

Purpose: The project is within the South Yuba River Watershed. Shady Creek runs through the north end of the project and discharges into the South Fork of the Yuba River.

The project objective is to reduce the potential of a costly and damaging fire within the treated and surrounding area.

A series of pre-fire projects have been planned to create a contiguous are of hazardous fuel reduction to effectively create a shaded fuel break from Bridgeport extending east up the San Juan Ridge to North Bloomfield. These projects include the completed Bridgeport State Park prescribed VMP burns, the completed VMP prescribed burn at French Corral, Browning property, the proposed Bunker Hill VMP projects, this proposed project, the completed Malakoff Diggins VMP project east of this project, and the completed Montezuma fuel break. These projects have been developed to create a strategic location where fire fighting resources may more effectively attempt fire suppression activities to stop a costly and damaging fire such as the 49'er fire of 1988.

This proposed project will entail the pre-treatment of the brush fuel by creating hand piles with crews and/or piling and crushing with machinery. Control lines will also be re-established by dozers and/or hand

crews. Burn piles are to be treated in spring and early fall, however, other conditions may occur that will allow burn treatment at another time of the year. Some areas may be broadcast burned.

CEQA: PEIR

### High Priority Target Areas

Big Oak Valley, Sicard Flat – Scott Forbes Rd

**Table 7 – Battalion 14 Fuel Modification Projects, Community Outreach and Education**

Project Name	Status	Estimated Completion Year	Project Type	Net Acres
UC Field Station VMP	O		Prescribed Fire	
Bunker Hill VMP	P		Prescribed Fire	
Reader Ranch VMP	P		Prescribed Fire	
Yuba County Roads	O		Fuel Treatments	
Spenceville VMP			Prescribed Fire	
Shady Creek Fuel Break			Fuel Treatments	
Columbia Hill Fuel Break	C		Fuel Treatments	
Selby Ranch	O		Roadside Clearing	

**Status Guide:** A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance.

### Success Stories

The line put around the Spenceville Shooting Area has been successful in holding the fires to the control lines every year since it began. Each and every year we experience between one and four starts out there caused by target practice and every year the fires are kept with in our pre-established control lines. Without the lines, many of those fires would have easily developed into an extended attack fire.

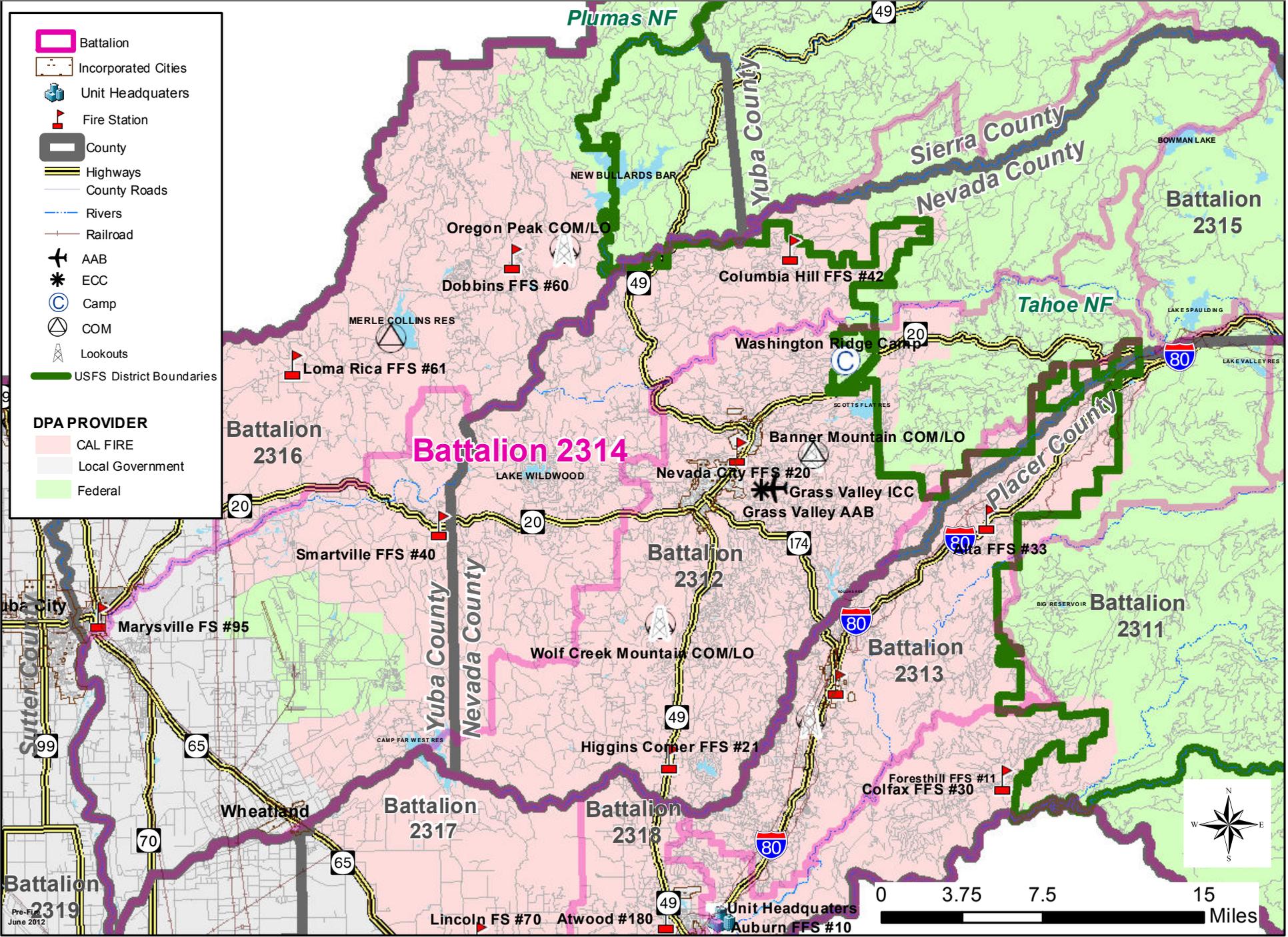
### Action Plan:

- Continue to pursue completion of the VMP contracts that remain in the planning stage. As the contracts are completed we will focus on implementation. Implementation will focus on fuel reduction and live fire training for fire personnel.
- Opportunities to combine our VMP projects with the Fire Safe Council efforts will be researched.
- Continuance of the public education efforts will be a priority for battalion personnel.
- All personnel will focus their daily training efforts on wildland fire suppression.



# NEVADA - YUBA - PLACER UNIT (NEU)

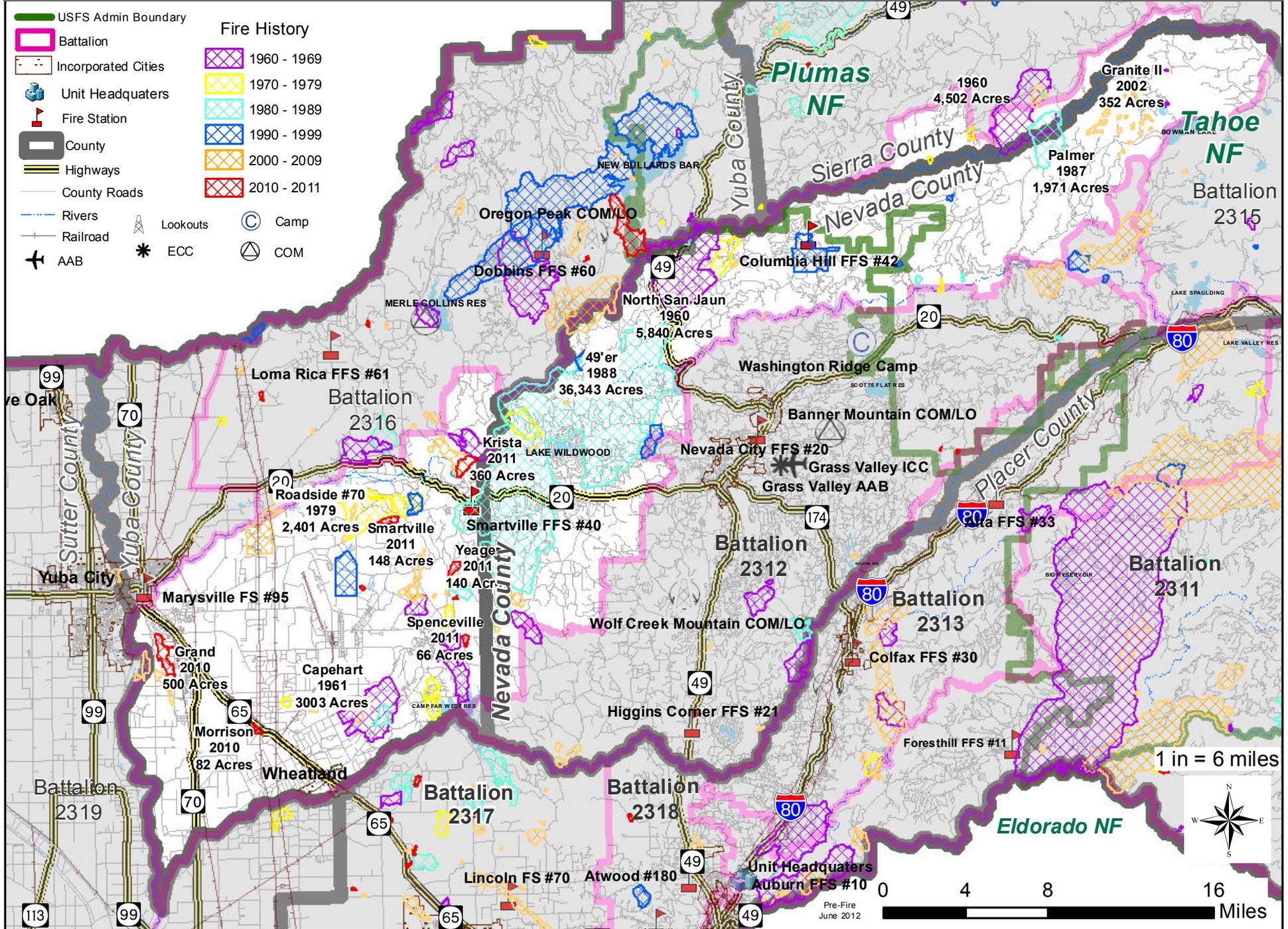
## Battalion 14- Administrative Boundaries





# NEVADA - YUBA - PLACER UNIT (NEU)

## Battalion 14- Fire History



# ***Ignition Management Plan***

## ***Battalion 15***

### **Battalion Description**

Battalion 15 covers approximately 115,000 acres within Placer and Nevada counties including some portions of Sierra County. The primary population center is the Town of Truckee which is the Battalion Headquarters. This high sierra community has a permanent year-round population of 18,000 people. Due to the large number of vacation homes in the Battalion, the population can double on summer week-ends. A large portion of the Battalion lies within the boundaries of the Truckee Fire Protection District. In 1994, the Town of Truckee was incorporated, converting 21,000 acres of SRA to LRA. In 2010, a contract was in place between the Town of Truckee and Cal Fire for fire suppression on approximately 10,400 acres of wildland within Truckee's LRA.

Fuel type varies from desert grass/brush to timber in topography ranging from mountain valleys to peaks over 9,000 feet. The fuel makeup is typical of this eastside timber and meadow environment. The fuel loading is indicative of a rain shadow with generally lower fuel loading than Significant WUI problems exist and are difficult to mitigate due to the temporary nature of the residents. Up to half of the residential structures are vacation homes.

Cooperators include Truckee Fire, Northstar Fire, North Tahoe Fire Protection District, Fire Safe Council of Nevada County, US Forest Service (TMU, Tahoe N.F., Plumas N.F.), and Army Corp of Engineers.

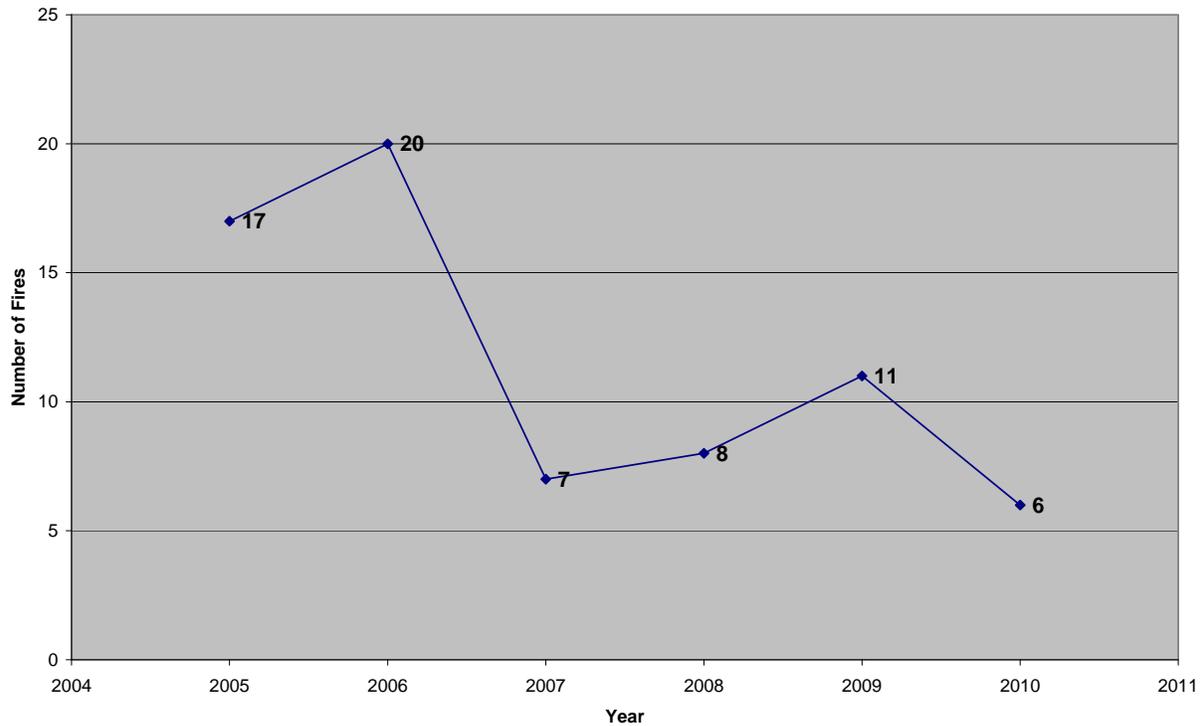
### **Battalion Fire History and Occurrence**

Large damaging and costly fires do occur on the east side of NEU. Significant in terms of acreage are the Donner Ridge Fire (1960 – 44,812 acres), Cottonwood Fire (1994 - 46,800 acres), and Martis Fire (2001 – 14,126 acres). Fire hazard severity (2007 FHSZ) predicts a high likelihood that such fires will occur again. Typically, Battalion 15 will receive 15-25 vegetation fires per year dependent upon the occurrence of lightning, normally the primary ignition source (50% of ignitions). The balance of normal fire activity is primarily campfires, including homeless fires and party fires started by careless individuals. Other historic problems include freeway related causes from vehicle fires. Overheating and consumption of vehicles with the wildland as an exposure is the normal vegetation fire ignition source.

Statistics from the 2010 fire season do not represent normal fire occurrence in the Battalion. The fuel moistures and relatively cool moist fire season yielded fewer fires with abnormal ignition sources. Railroad caused fires are represented as 32% of the ignitions, which is typically much fewer. The 2010 railroad fires were a function of workers using fire causing tools and ignition within the locomotive which spread to the vegetation. Prevention is taking place by performing industrial inspections at work sites and providing advice on improving fire fighting ability of workers, by permitting work during fire season with mitigations to prevent fire, and by Union Pacific Railroad activities geared toward vegetation management along the rail line.

The balance of 2010 fire cause appears normal and do not reflect a significant fire problem. Despite this fact, the staff of the Battalion continues to employ fire prevention practices outlined below in order to reduce the total number of ignitions within the Battalion.

**Battalion 15 Ignitions (2005-2010)**



## **Mitigation Strategies**

### **1. Public Education:**

Battalion 15 will work to reduce fire ignitions and reduce damage by fire occurrences by actively participating in public education programs, fuel reduction programs, and homeowner education programs. The components to meet these goals are as follows:

#### **A. Burn Permit Administration**

About 2,000 dooryard burn permits are issued annually in the battalion. The majority are issued by our local government cooperators. Permits are required from May 1 through December 1. The CAL FIRE imposed burn ban is an important and necessary regulation. Burning on the eastside is daylight hours only on approved burn days. Escapes are rare and usually insignificant.

LE-5 (California Inter-Agency Burning Permit) and LE-7 (Project Type Burning Permit) are issued on SRA lands after an inspection by an authorized employee of CAL FIRE or USFS. These project burn permits are typically used to dispose of larger piles of material and typically require an inspection by agency personnel prior to authorization to burn. About three project burn permits are issued annually by the Battalion Chief.

## **B. Public Education Forums**

CAL FIRE staff is involved in numerous public education programs. The Truckee-Tahoe area is a world known resort area. The target audience is quite large and has proven to be receptive to various programs.

On going events throughout the year:

- Truckee Rodeo Kid's Day – CAL FIRE will have an engine for interactive demonstrations at this year's event, scheduled for Friday, July 22<sup>nd</sup>.
- School Programs - An interagency effort by CAL FIRE, the Truckee Fire Prevention District, Northstar Fire Department, and the USFS, targets all schools in Truckee, reaching grades K - 3 in the spring. Students create fire safety posters for display on roadside fire prevention signs.
- Fourth of July Parade – CAL FIRE will have an engine in this year's parade.
- Pre School Programs – CAL FIRE will continue to provide age appropriate fire safety programs with an appearance by Smokey Bear at the request of any public day care centers.
- Reno Rodeo - Assist Sierra Front with staffing a booth.
- Tahoe Re Green - An on going process assisting allied agencies around the Lake Tahoe Basin. Projects include: fuel reduction on state owned and conservancy lands and PRC 4291 cooperative inspections.
- Channel 6 - The local message station will run the defensible space tape throughout the summer and event specific messages on request.

## **C. Fire Prevention**

Martis Peak Fire Lookout - Martis Peak Fire Lookout is traditionally put into service as a detection platform on mid-July, and is staffed daily through September 30<sup>th</sup>. Martis Peak has the ability to report at distances of up to 40 miles away. Martis Peak has been documented as reporting numerous initial reports as far away as South Lake Tahoe and has also recorded the locations of numerous lightning strikes, and is instrumental in tracking the progress of developing thunderstorms. Lookout VIP staff at Martis Peak make over 2,000 public contacts annually, speaking with visitors from as far away as South Africa. The operating agreement with the USFS remains in place. We will continue to promote the lookout through the local media and community groups this spring to generate interest in volunteer staffing. All volunteers will be signed up as Volunteers in Prevention (VIP). The Truckee Town Wildland Contract will fund a paid CAL FIRE Lookout position for Martis Peak as in past years. This will be a four days per week position, so the remaining three days per week will require staffing by VIPs.

Fire Safe Programs – The Battalion will work regularly with developers and County Planning Departments to ensure PRC 4290 requirements are met on all new construction. Planners are assigned to Nevada and Placer Counties and will review projects where necessary. The BC will participate in field inspections at the BC level when needed. The objective is to emphasize fire safety during construction and compliance with PRC requirements when complete. The BC will also participate in the Eastside Chapter of the Nevada Fire Safe Council.

Railroad and Power Company Contact - The Battalion Chief makes annual contact with Union Pacific representatives. The Battalion is informed of any on-going maintenance along the thirty miles of active track within the Battalion. Spot inspections are usually

made and provide suggestions on areas of fire safety improvement. Railroad starts in the area average about one per year.

Annually, the BC meets with both Sierra Pacific Power and Truckee Donner PUD reps to discuss summer work projects in the area. Report and cooperation with SPP has been outstanding. Conductor clearance crews are aggressive in the Battalion. Power line inspections are currently performed by the companies themselves.

**D. PRC 4291 inspection:**

PRC 4291 inspections serve a dual purpose. One is as a vegetation management motivator. The other is as a public education tool. Battalion staff will continue to support this activity. Station 55 personnel will continue to assist the North Tahoe Fire District with LE-100 inspections on the north and west shores of Lake Tahoe. NEU will supply a Fire Prevention Specialist to assist the Truckee Fire Protection District with LE-100 inspections within the Truckee town limits.

Northstar FD has a comprehensive inspection program in Placer County within SRA that has achieved near 100 percent compliance.

- 2. Vegetation Management:** The vegetation management programs are directed at reducing the potential of a large fire and reducing the damage from a large fire.

**B. Chipper Program / Residential Fuel Treatment**

Truckee Fire funds and supports a residential chipping program within the Truckee Fire District. The program provides chipping services to landowners to abate hazardous vegetation with reduced costs to the landowner and fewer opportunities for an escaped control burn with the added benefit of reduced impacts to air quality. The Battalion receives great benefit from this program. The Battalion encourages landowners to keep their properties free from flammable vegetation. NEU will support this chipping effort by providing funding when available.

**B. Installation and Maintenance of Fuel Breaks**

The Battalion will support the acquisition of project funds that will achieve the installation and maintenance of fuel breaks. NEU Washington Ridge Fire Crews will continue to support the communities of Tahoe Donner and Northstar in a comprehensive fuel reduction and fuel break program.

**C. VMP Projects**

The purpose of these projects is to eliminate the potential for a large and damaging wildfire by eliminating the fuel in a controlled fashion. The current VMP schedule includes:

Donner State Park VMP –

Location: Approximately 23 acres within the Donner State Park boundary. The project area is located south and west of the town of Truckee. Donner Lake is north of the project area.

Purpose: In cooperation with California State Parks, the primary objectives of the project are fuel hazard reduction and wildlife habitat improvement. The project area

is strategically located to protect State Park facilities and the Town of Truckee from a summer wildfire burning in the Coldstream Valley or on Schallenberger Ridge. The project shall reduce the threat of catastrophic wildfire and improve native forest composition and structure.

Program Funds: VMP

CEQA: PEIR

Chinquapin – North Tahoe Fire Protection District VMP

Location: Approximately 20 acres between the Dollar Point subdivision and the Chinquapin Condominiums within the North Tahoe Fire Protection District near Tahoe City and Kings Beach. An additional 50 acres will be treated south of the Kingswood West subdivision. The burn will be conducted by CALFIRE, North Tahoe Fire Protection District and other local fire agencies.

Purpose: The primary objectives of the project are for fuel hazard reduction, fuel modification and wildlife habitat improvement. The project area consists of Sierra mixed-conifer timber type.

Program Funds: VMP, Community Assistance Grant

CEQA: Cal Fire Mitigated Negative Declaration

Waddle Ranch VMP

Location: Waddle Ranch consists of approximately 1,462 acres of forest land within the Martis Valley. The landowner is the Truckee Tahoe Airport District.

Purpose: The primary objective is the reduction of fuel. Project area is 60 acres divided into 10 units, all of which have been previously masticated.

Program Funds: VMP

CEQA: PEIR

**Table 8 – Battalion 15 Fuel Modification Projects, Community Outreach and Education Programs**

Project Name	Status	Estimated Completion Year	Project Type	Net Acres
Chinquapin	A		Prescribed Fire	
Donner State Park VMP	A		Prescribed Fire	
Waddle Ranch	P		Prescribed Fire	
Truckee Home Show	O		Community Education, 2-Day Event	
Truckee Rodeo	O		Youth Education	

**Status Guide:** A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance.

## Success Stories

### 80 Fire Success Story Results from Cooperative Fuel Reduction Efforts

CAL FIRE works cooperatively at the state, county and local levels to complete fuels reduction projects throughout the Nevada-Yuba-Placer Unit. Projects are designed to encourage landowners to create defensible space and to protect communities from costly and damaging fires. NEU utilizes state and federal grant funds to support these fuels reduction projects.

Recently, on August 22, 2007 cooperative fuel reduction efforts completed by the Tahoe/Donner Homeowners Association, Truckee Fire District and CAL FIRE proved to be a critical component in stopping the advancement of what could have been a devastating wildland fire. The fire started near Highway 80 and quickly advanced upslope towards the Tahoe/Donner subdivision. As the fire



approached the subdivision, it burned into an existing fuel break and was stopped. The fuel break was designed and implemented by the Tahoe/Donner Homeowner's Association and the Truckee Fire District fuel reduction programs. Cal Fire has provided support to these programs through the California Forest Improvement Program (CFIP) and the Proposition 40 Fuels Reduction Program.

The purpose of Cal Fire's California Forest Improvement Program (CFIP) is to encourage private and public investment in, and improved management of, California forest lands and resources. The program scope includes the improvement of all forest resources, including fish and wildlife habitat, soil, and water quality. Cost-share activities include land management planning, site preparation, tree purchase and planting, timber stand improvement, fish and wildlife habitat improvement, and land conservation practices.

The goal of Cal Fire's Proposition 40 Fuels Reduction Program is to reduce wildland fuel loadings that pose a threat to watershed resources and water quality. This fuel reduction program is funded by Proposition 40, the California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002.

### **High Priority Target Areas**

- North side of Highway 80
- Glenshire
- Tahoe-Donner.

### **Action Plan:**

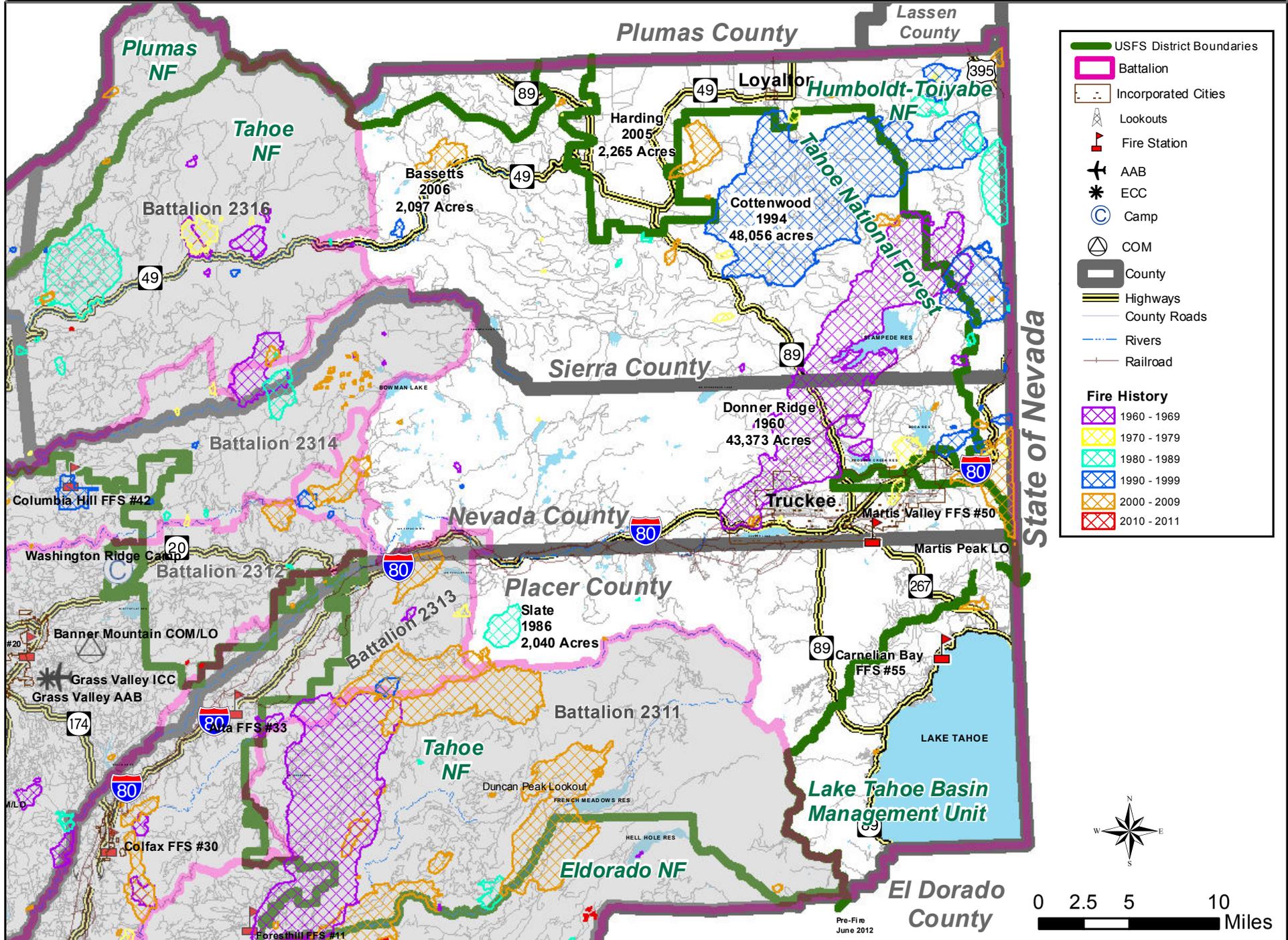
Although past years have proven to be slower than average for vegetation fires, Battalion 15 remains quite busy with prevention activities. The strong relationship between CAL FIRE, Truckee Fire Protection District, North Tahoe Fire Protection District, Northstar Fire Department, U.S. Forest Service and others has provided for a professional and comprehensive program that has shown benefits in public awareness and concern. Many of the fires are caused by people who reside outside the area. Lightning activity is traditionally a wild card in the high country, and most lightning activity has brought significant moisture. There were no fire starts in recent attributed to debris burning or playing with fire. This indicates that education of the public during dooryard burn permit issuance, and education programs aimed at preschool and school aged children have been quite successful.





# NEVADA - YUBA - PLACER UNIT (NEU)

## Battalion 15 - Fire History



# ***Ignition Management Plan***

## ***Battalion 16***

### **Battalion Description**

The Loma Rica/Browns Valley battalion serves a large area of SRA. Population densities within the Battalion consist of the towns of Loma Rica, Browns Valley, Brownsville, Dobbins, and Oregon House. The battalion is dominated by grass fuel models in the low valley areas giving way to oak woodlands, mixed brush and conifer at the higher elevations. The topography is flat near the valley floor changing to gentle rolling slopes as one moves west toward the Sierra Nevada. The battalion contains several areas where small fires could likely become large damaging incidents.

There are several cooperators within the Battalion including Dobbins/Oregon House Fire Protection District, Foothill Fire Protection District, Loma Rica/Browns Valley Fire and the Yuba Watershed protection and Fire Safe Council.

### **Battalion Fire History and Occurrence**

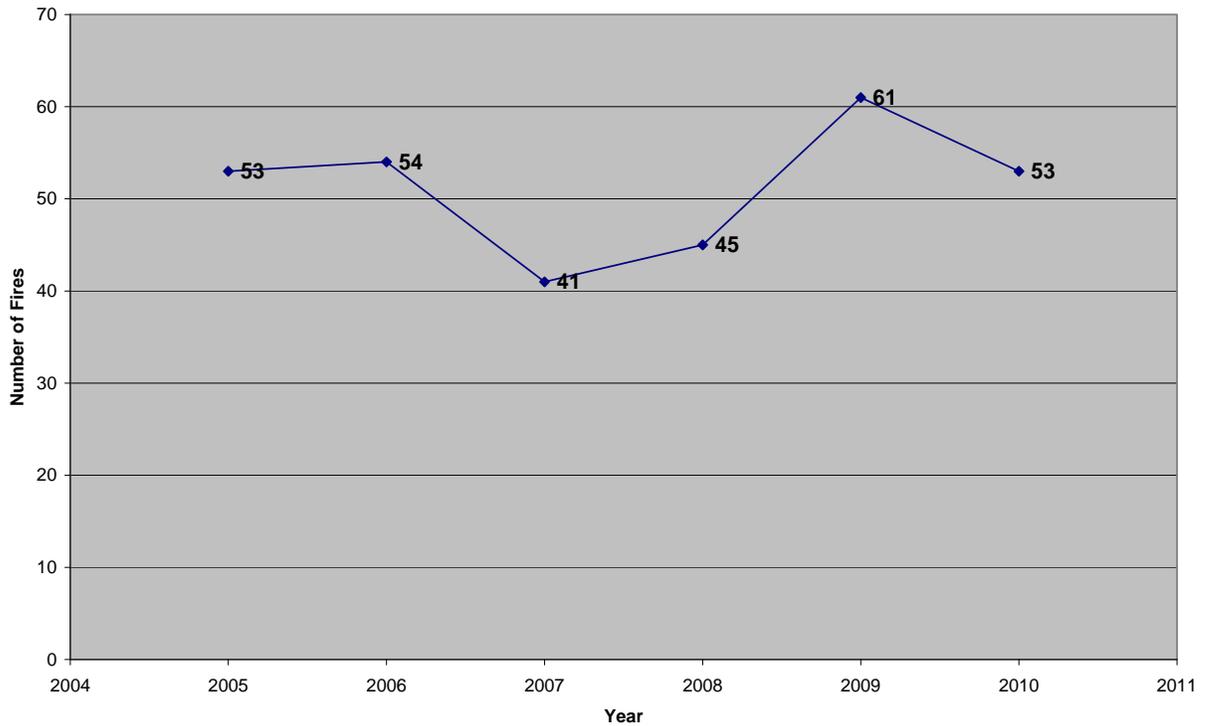
Large fire activity in the Battalion has been consistent over the past few years within Battalion 16. Large fire events include the Williams fire (Sept 1997- 5,838 acres), Pendola Fire (Oct 1999 – 11,725 acres), Marysville Fire (Aug 2006 – 388 acres), Yuba Fire (Aug 2009 – 3,829 acres), and Bullards Fire (Aug 2010 – 1,307 acres). Large damaging and costly fires are a regular occurrence in the Battalion. Fire Hazard Severity Zone mapping (2007 FHSZ), illustrates that there is a high hazard that large damaging and costly fires will occur in the future.

Historically debris fires have been the biggest problem within this battalion. This is followed by a consistent arson problem in the summer and increasing quantities of roadside fires. For the year 2010, equipment use at 25% was the greatest cause of fire within the battalion. Construction and land management activities often require the use of equipment. Many of the roads in the Battalion have vegetation growing very close to the road edge, or near the road surface. The exposure of these fuels to hot exhaust, exhaust discharge, or flame impingement from fires originating within the vehicle is a problem typical of any community.

The statistics show that debris burning continues to be a significant cause (15%) of wildfire in the battalion. Residents often delay burning until the final weeks prior to burn bans being instituted. The result is a greater number of burn piles being burned later in the season, when control of the fires is more difficult due to weather and fuel conditions. Public education at the time of burn permit issuance will continue to be used to reduce the number of escapes.

Arson and undetermined fires are considered equally and account for 27% of the fires in the battalion. These fires are intentionally set or fires which the ignition could not be determined due to various factors. These fires are the most difficult to reduce due to their nefarious nature. The Unit's prevention program is charged with investigation and pursuit of arson as a felonious activity. The NEU prevention bureau will continue to assist battalion staff with cause determination, if a fire problem persists with no apparent cause. The result is, over time, a reduction in arson fires due to arrest and prosecution and determination of cause on undetermined fires allowing fire prevention education or hazard mitigation to address the actual cause.

**Battalion 16 Ignitions (2005-2010)**



## **Mitigation Strategies**

Mitigation strategies within the battalion include: advertising and executing LE-100's, year round public education and fuel break construction.

### **1. Public Education**

#### **A. Burn Permit Administration**

In March update the Yuba County Burning Permit Issuance Plan in conjunction with the Feather River Air Quality Management District.

In April, Battalion staff will train the V.I.P.s in burning permit issuance and ensure that Cal Fire employees have reviewed the the Yuba County Burning Permit Issuance Plan.

#### **B. Public Education Forums**

Community Involvement - Public relations and interaction between Cal Fire and the community is a key factor in promoting a public understanding of fire prevention. Each year Battalion staff will:

- Station 61 will continue a year round coordination of the sales and installation of street and address signs and house numbers.
- Station 60 and 61 along with VIP's and the volunteers from the LR/BV C.S.D. will participate in local community activities including Wild Hog Glory Daze – Loma Rica Lions Club in May, Brownsville Mountain Fair –

Foothill Fire Department in July, Bok Kai Parade – Marysville in March, Beale Fire Prevention Week – Beale A.F.B. in November.

### **C. Fire Prevention and Awareness**

An ongoing program, which furthers the public's awareness of the wildland fire problem and develops public habits conducive to fire safety, will be provided. Annually the Battalion staff will:

- During the months of May and June release (4) four general fire prevention news releases to the Appeal Democrat and the Rabbit Creek Journal newspaper.
- Post fire prevention signs
- Volunteers in Prevention (VIP) will conduct school programs each winter at the following schools: Yuba Feather, Dobbins, Loma Rica, and Browns Valley. Station 60 and 61 will provide assistance and an engine at each program
- Station 60 and 61 will be expected to conduct fire prevention programs when requested by local groups, provided fire activity allows for the commitment.
- Participate as an acting member on the Yuba Watershed Protection and Fire Safe Council.
- Conduct PRC 4291 inspection.
- Coordinate with Loma Rica/Browns Valley CSD personnel and incorporate fire prevention and burning permit issuance program to the local responsibility areas of the fire district.
- A door-to-door program to promote the reflective house numbering program.
- Meetings will be conducted with local cooperators covering fire prevention specific to their facilities or agency.
- Reduce the wildland fuel loading by 1) reviewing development projects within the SRA and require developers to instill fuel reduction practices, 2) Yuba Watershed Protection and Fire Safe Council Fuel Break/modification projects, 3) Yuba County Road fuel modification project, 4) CSA 2 emergency evacuation route development
- Each spring spot check 1/3 of the power lines within the Battalion, a map will be maintained to ensure that a different area is inspected each spring.

## **2. Vegetation Management:**

### **A. Chipping**

### **B. Fuel Breaks**

## **C. VMP Projects**

### Richards Ranch II VMP (Yuba County)

Location: Approximately one mile south of the town of Oregon House and ½ mile north of Englebright Lake and the Yuba River.

Purpose: The project area encompasses the cooperators' total land ownership (6,045 acres), of which 3,375 acres are included in the burn units. The project objective is to reduce the potential of a costly and damaging fire which may originate within the project or on adjacent property.

A series VMP prescribed burn projects adjacent to this project, scattered from the Yuba River to Dobbins and Oregon House are in the planning phase. Together, these projects will create a location where fuels have been modified to effectively create a fuel break and provide a tactical position to attempt to stop a large fire. The project area has been treated by the landowner over the last few years. The land owner has constructed control lines over that same period of time.

The overall objective is to remove the standing Manzanita and live oak stands which have taken over the project area, reduced the grazing capabilities of the land, and created a heavy fuel load for firefighting efforts. Reducing the fuel load will improve wildlife habitat, improve grazing use and allow for better fire protection to the communities of Oregon House and Dobbins from wildfires that may originate in the Englebright Reservoir. Prescribed fire will be the treatment method for the entire project.

CEQA: Programmatic EIR

### **High Priority Target Areas**

- Due to the demand for water quantity and clarity, watershed protection is a high priority.
- High tension power lines in the Battalion
- Yuba River drainage
- Dobbins Area WUI
- Daugherty Hill Wildlife Area
- Along Rural Roads in the Battalion
- Oregon Ridge Fuel Break

**Table 9 – Battalion 16 Fuel Modification Projects, Community Outreach and Education Programs**

<b>Project Name</b>	<b>Status</b>	<b>Estimated Completion Year</b>	<b>Project Type</b>	<b>Net Acres</b>
Yuba County Chipper	A	O	Fuel Reduction/Chipper	
Yuba County Roadside Clearing	A	O	Fuel Reduction	
Daugherty Hill Wildlife Area Fuel breaks	O	O	Fuel Break project with DFG	
Yuba Firesafe Council	O	O		
Richard’s Ranch VMP	C		Vegetation Management	<b>3,375</b>

**Status Guide:** A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance.

## **Success Stories**

### BLM Grant for Fuel Reduction is One of the Keys to Stopping the Dry Fire

The Yuba Watershed Protection & Fire Safe Council is targeting fuel reduction along roads as a focus for fire season planning in the Yuba County foothills. The Council’s partnership with the Yuba County Public Works Department has resulted in the treatment and maintenance of fuel along over 40 miles of road to reduce vehicle fires from spreading to the wildland. The Bureau of Land Management provided funding through California State Fire Safe Council Clearinghouse to reduce fuel along a six mile portion of Marysville Road.

On the early evening of July 31, 2009, a truck traveling on Marysville Road started at least 5 small road-side grass fires along the cleared section of the project. The reduction of fuels along the road slowed the intensity and spread of the fires. Another large factor in controlling the fire was a dozer line constructed annually by CALFIRE in a wildlife refuge uphill from the fire starts. The fires initially did not burn with high intensity due to fuel reductions. Air tanker use would have been limited if the fire continued to burn into the night, as operations must be suspended shortly after sunset.

Strong initial attack by CALFIRE air resources reinforced the fire lines, allowing ground forces to rapidly control all the fires. CALFIRE fire modeling estimated without the fire prevention work the flame length could have exceeded 20 feet (too extreme for direct attack by ground units at the head of the fire) and the fire would have reached the top of Stanfield Hill in about a half hour. Homes would have been critically threatened and destroyed. There was a potential for significant spotting. This fire would have exceeded initial attack, and would have required a significant augmentation of resources. It is very likely that this fire would have grown to at least a hundred acres, and destroyed several

homes. This is the third documented vehicle-caused fire that did not become catastrophic because of these roadside fuel reduction projects.



Roadside fuel reduction also provides other management benefits during a fire by improving evacuation corridors for citizens and better access for fire fighters and equipment. Due to the roads' bare surface and the commitment of the Yuba County Public Works to maintain the fuel reduction along treated roads, they can also serve as fuel breaks in limited intensity fires.

For more information contact Yuba Watershed Protection & Fire Safe Council Facilitator, Glenn Nader at

[ganader@ucdavis.edu](mailto:ganader@ucdavis.edu)

*Fuel reduced along the Yuba County's Marysville Road slowed the rate of spread of the Dry Fire*

#### Middlebrook Fuel Break Used as a Fire Fighter Tool in the Yuba Fire

A CAL FIRE Prop 40 funded grant to the Yuba Watershed Protection & Fire Safe Council was used by fire crews to stop the Yuba Fire from going to Marysville Road and blocking traffic and damaging more watershed and homes in the Dobbins community.

In 2004, landowner, John Middlebrook completed construction of a fuel break 300 feet wide  $\frac{3}{4}$  of a mile on his property along Marysville Road and a portion of the east boundary using his own money. The Yuba Watershed Protection and Fire Safe Council, with assistance from High Sierra Resources Conservation and Development Council Inc. obtained a Proposition 40 grant from Cal Fire to complete an additional 1.1 miles of fuel break along the easterly boundary and southerly end of Middlebrook property. Brush and small trees were masticated with equipment or hand cut, piled and burned. A maintenance/access road within the SFB was also constructed. The project was started in 2007 and was completed early in 2008.



On Friday, August 14, 2009, the Yuba Fire started as a result of a bird hitting powerlines. The fire consumed 3,891 acres before it was contained. The fire was slowed down by the southerly end of the fuel break. If the fire had extended 500 to 1000 feet northerly it

*Fire stopped at the Middlebrook fuel break and access road*

would have entered into young timber stands and done much economic damage and marched northerly uphill toward Marysville Road, a main arterial highway in the County. The fuel break provided time to marshal firefighting resources. Quick access to the fire was also gained from Lake Francis Road to the south into the fire and through the grant funded fuel break access road. The \$52,500 fuel break grant paid off many times over by slowing and stopping the fire, while at the same time providing access for the successful firefight.

### **Yuba County Roads Project**

After the 1997 Williams fire and following the recent (2009) Yuba Fire, the Yuba Watershed Protection & Fire Safe Council (YWP&FSC) identified that heavy fuel along roadways restricted the evacuation of residents and limited fire fighter access. Through this request, 7.5 miles of Oregon Hill Rd (45 acres) will have a shaded fuel break constructed along the county road easement. This will help ensure safe ingress / egress during future community evacuation and fire suppression efforts. This project will also show the public the need and success of reducing fuel loading on their properties. The Yuba County Department of Public Works with assistance from Cal Fire's Washington Ridge Conservation Crew will be completing the work. The hand crews will cut and chip small fuels, while larger fuels will be cut into firewood lengths and left for local landowners. The common chaparral species to be removed are Manzanita, deer brush, toyon, ceanothus, and tanoak. Some small conifer species will also be removed. Completing this project will increase community safety. This project continues a successful program that was initiated through 7 previous grants & has completed 100 miles of shaded fuel breaks along Yuba County Roads.



*Roadside Chipping Before.*



*Roadside Chipping After.*

### **Action Plan:**

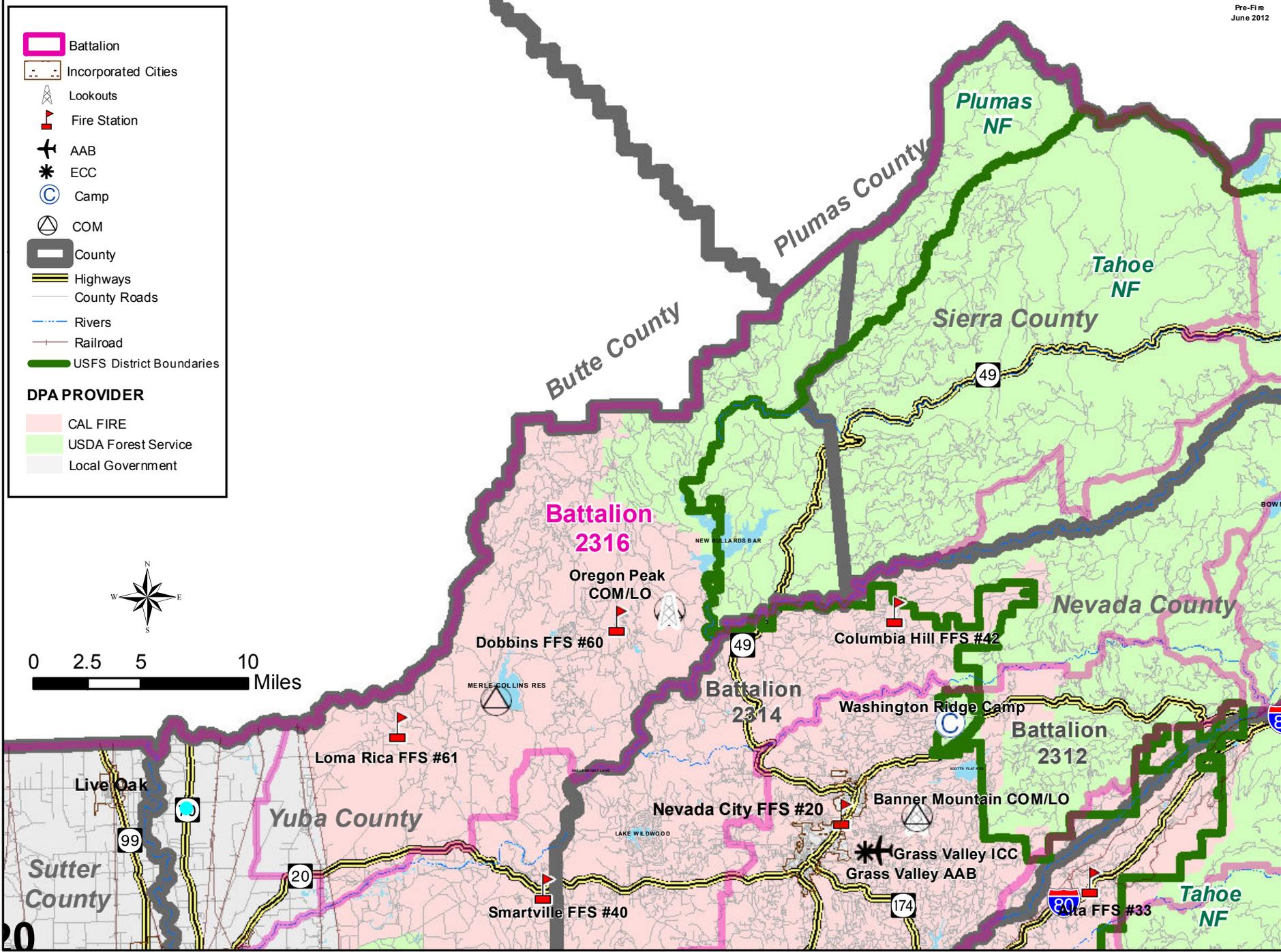
- Increase advertising exposure and executing of LE-100 inspections.
- Continue year round public education efforts within the battalion
- Continue to support fuel reduction efforts within the battalion
- Establish roadside voluntary disking program where feasible on private property.



# NEVADA - YUBA - PLACER UNIT (NEU)

## Battalion 16- Administrative Boundaries

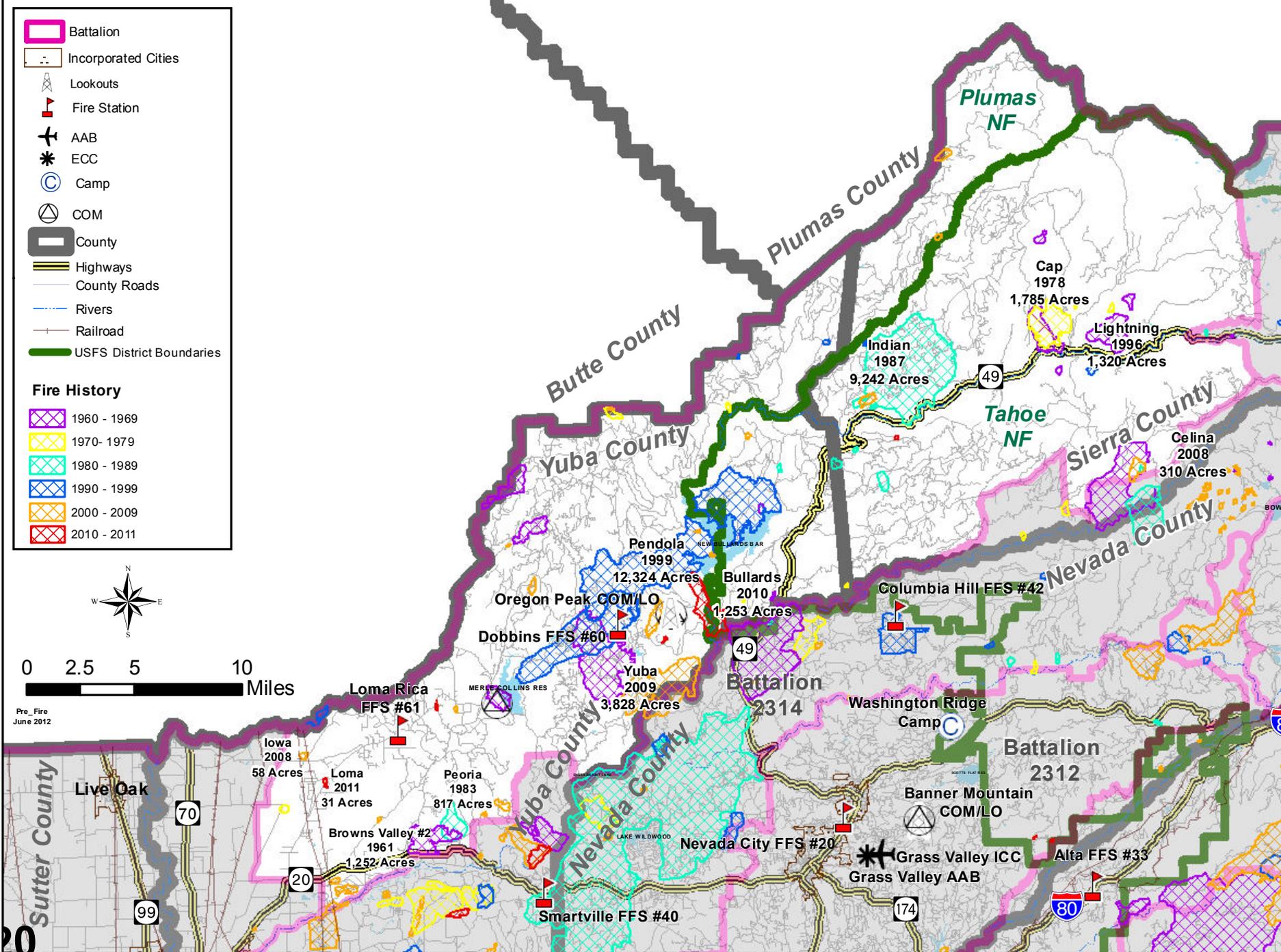
Pre-Fire  
June 2012





# NEVADA - YUBA - PLACER UNIT (NEU)

## Battalion 16- Fire History



# *Ignition Management Plan*

## *Battalion 17*

### **Description**

The Lincoln Battalion serves a mixture of SRA and LRA. The battalion is dominated by grass fuel models in the lower valley area and oak woodlands and mixed brush at higher elevations. The topography is flat near the valley floor changing to gentle rolling slopes as one moves east toward the foothill areas. The battalion contains several areas where small wind-driven fires could likely become large and damaging events.

There are several cooperators within the battalion including the cities of Lincoln, Roseville, Wheatland, Rocklin and Loomis Fire Departments, Placer County.

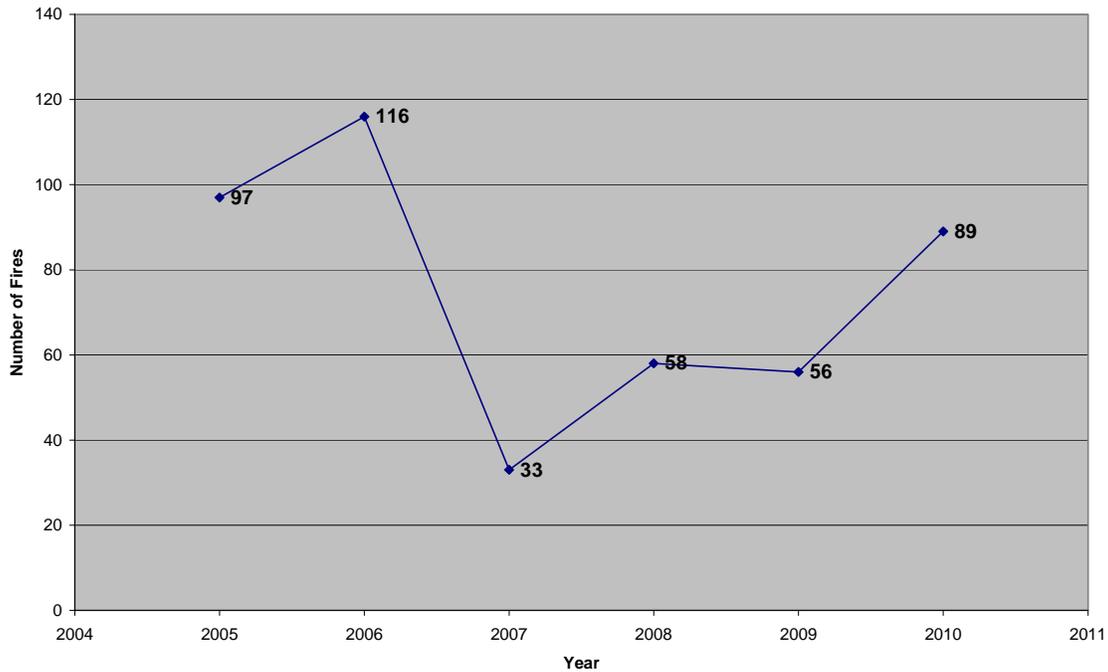
### **Fire occurrence within Battalion**

The Battalion 17 area historically has small acreage fire events. This area does have the potential to experience severe wind driven events. One of the most notable in past years is the wind driven Gladding fire (Sept 2008 – 1,090 acres). Lincoln has traditionally been an area of agriculture and irrigated pastures which served as effective firebreaks. Today development is changing the rural landscape, creating a wildland urban interface at risk.

Arson, most often sourcing from the urban center, is a significant problem within the battalion constituting 16% of the fires during the 2010 season. Battalion personnel are working with the prevention bureau to address this issue. Equipment use comprised 21% of the ignitions with 2010.

The majority of the fires within the battalion during the 2010 season were from undetermined (25%) causes. Prevention staff is working with the battalion on cause determination training to help reduce the undetermined causes. The result will allow hazard mitigation to address actual causes.

**Battalion 17 Ignitions (2005-2010)**



### **Mitigation Strategies**

#### **Fire Protection Planner**

The Placer County Fire Protection Planner will continue to provide building plan fire and life safety reviews for PRC 4290 and uniform fire code regulations.

#### **Burn Permit Administration**

Issuing points for LE-62's will be Cal Fire/Placer County Fire Station 70 and Station 77. The local pollution control district determines burn hours. Pre-inspections will be provided on a requested or as needed basis. With each permit written, a Placer County Air Pollution Control District's Residential Open Burning informational sheet will be included. A copy of the permit will be filed at Station 70 or Station 77.

#### **Defensible Space**

A battalion goal is to target areas within the foothills that have a significant wildland fire threat or historical clearance problems and inspect homes using the PRC 4291 program. Campgrounds at Camp Far West Lake will be inspected prior to June 15<sup>th</sup> for compliance of related Forest and Fire Laws.

#### **Power line Inspections**

Inspection of power lines will occur during the PRC 4291 inspections. Staff will advise the battalion chief of a violation, the battalion chief will coordinate an inspection by the Units Fire Prevention Bureau.

## **Volunteer Presence**

Battalion 17 has a strong volunteer firefighter presence, including the following stations Paige (Station 75), Thermolands (Station 74), Fowler (Station 73), and Sheridan (Station 78).

## **Community Involvement**

National Night Out

Thermalands Volunteer Fire Department Pancake Breakfast

## **Public Education**

*School programs-* Station 70 staff along with the Lincoln group; provide fire safe presentations to schools within the battalion. Age specific fire prevention material will be handed out at each presentation.

*Parades-* each year the City of Lincoln invites Station 70 and the Lincoln companies to their annual parade. The engine company staff will display the engine so members of the public can inspect the engine and equipment, staff will hand out fire prevention material and discuss fire prevention issues.

*Business fire safety programs-* Station 70 and Station 77 staff will provide instruction on the proper use of fire extinguishers to local businesses within the battalion.

*Fire Prevention Signs-* Station 70 staff provide maintenance of several signs within the Battalion. Station 70 staff request 3 additional fire prevention signs that will be placed in targeted areas during the fire season.

*Thunder Valley Casino-* Station 77 in cooperation with Thunder Valley Casino will provide fire prevention material and information to customers of the Casino during National Fire Prevention Week.

## **High Priority Target Areas**

Lincoln City boundaries, Sheridan

Open space areas surrounding dense populations and main road ways are included in the high priority areas.

## Projects

Table 10 – Battalion 17 Fuel Modification Projects, Community Outreach and Education

Project Name	Status	Estimated Completion Year	Project Type	Net Acres
Hidden Falls	A	O	Fuel Reduction	
Placer County Land Trust VMP	P	P	Vegetation Management	
Fiddymont Training Area	O	O	Firefighter Training Area	
Trail Corridors	O	O	Fuel Reduction	

**Status Guide:** A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance.

### Success Stories

- Juvenile fire setter program

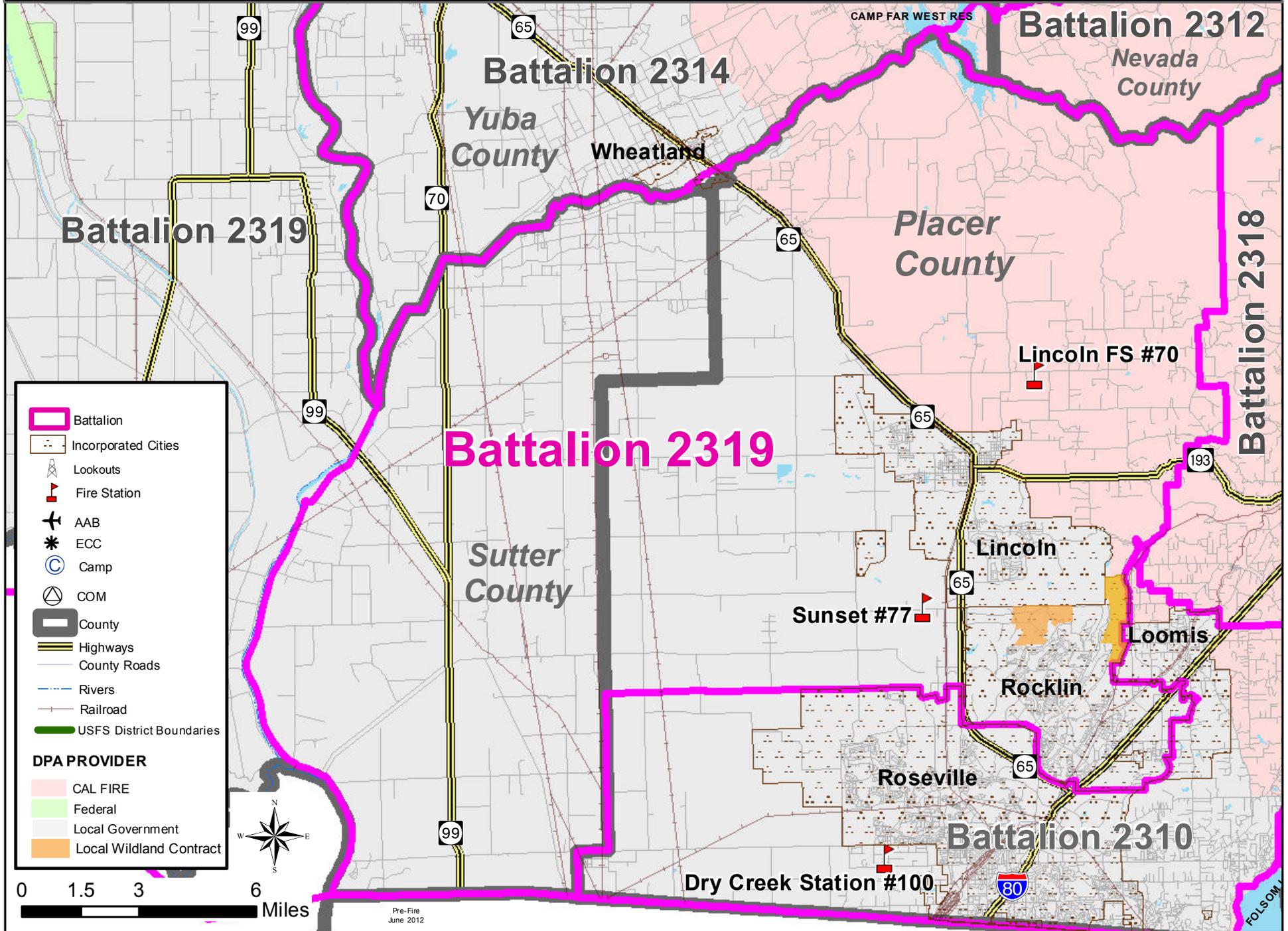
### Action Plan:

- Work with Unit prevention to reduce the number of undetermined fire causes: battalion staff will continue prevention training to help improve undetermined fire causes within the battalion.
- Continue public education efforts within the battalion
- Continue defensible space inspections within the battalion
- Focus on business inspections and pre-fire plan activity.



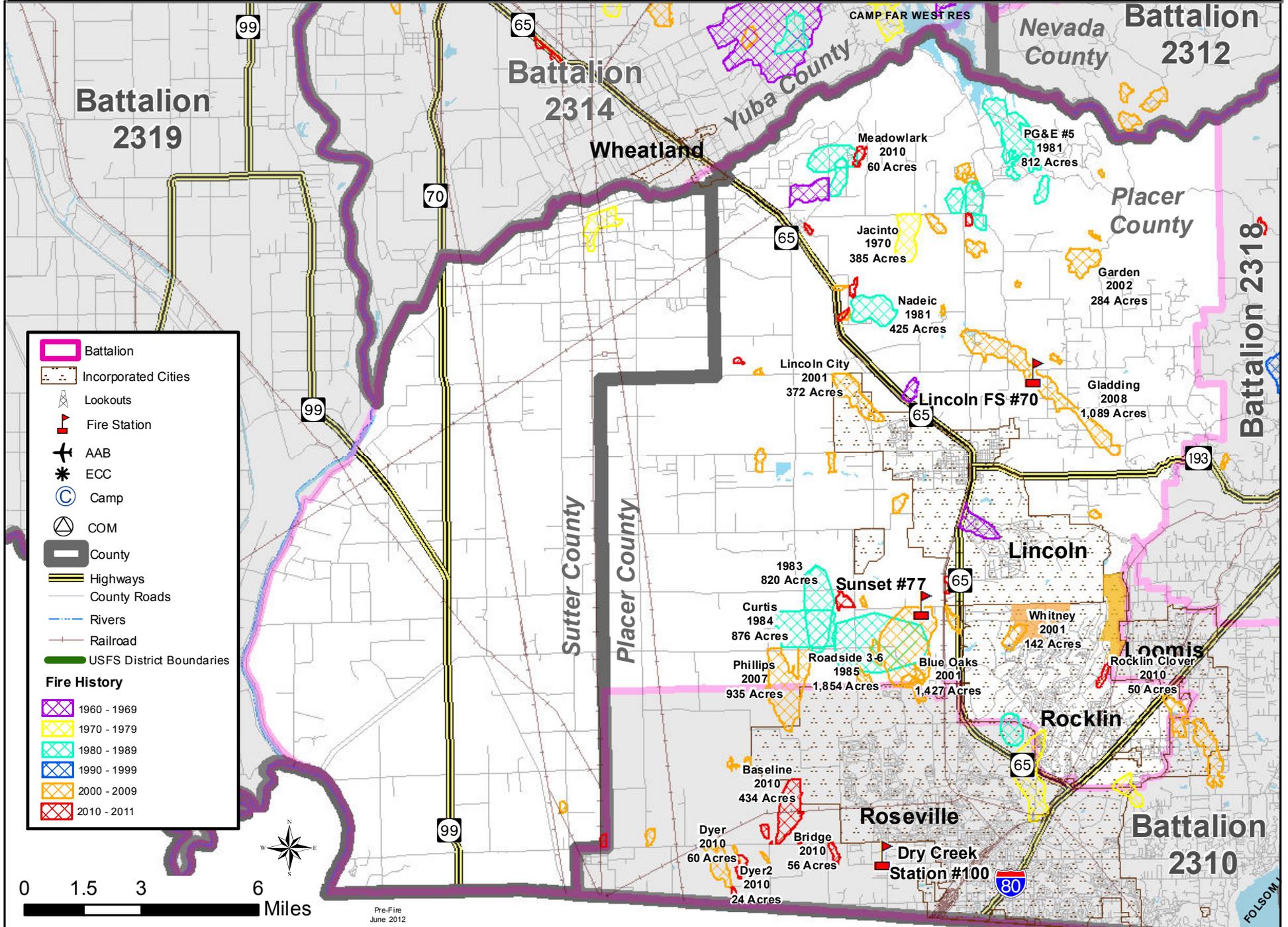
# NEVADA - YUBA - PLACER UNIT (NEU)

## Battalion 17- Administrative Boundaries



# NEVADA - YUBA - PLACER UNIT (NEU)

## Battalion 17- Fire History



# ***Ignition Management Plan***

## ***Battalion 18***

### **Description of the Battalion**

The Battalion includes unincorporated areas within Placer County and northwest Auburn City through Local Wildland Contract. Highway 80 borders the eastern portion of the battalion and Highway 193 comprises the southern boundary. The topography is characteristic of the Sierra Nevada foothills containing gentle slopes in the flat valley areas to steep inner gorge canyons along upper watercourses. Fuels are a mosaic of grasses, mixed brush, oak woodlands and mixed hardwood-conifer. The battalion includes an extensive amount of urban and rural developments, all bordered by wildland urban interface.

The Battalion contains several cooperators including Auburn City Fire, Newcastle Fire, Penryn Fire, Placer County, Placer County Fire Alliance, Placer County Resource Conservation District, U.S. Bureau of Reclamation.

### **Discussion of fire occurrence within Battalion**

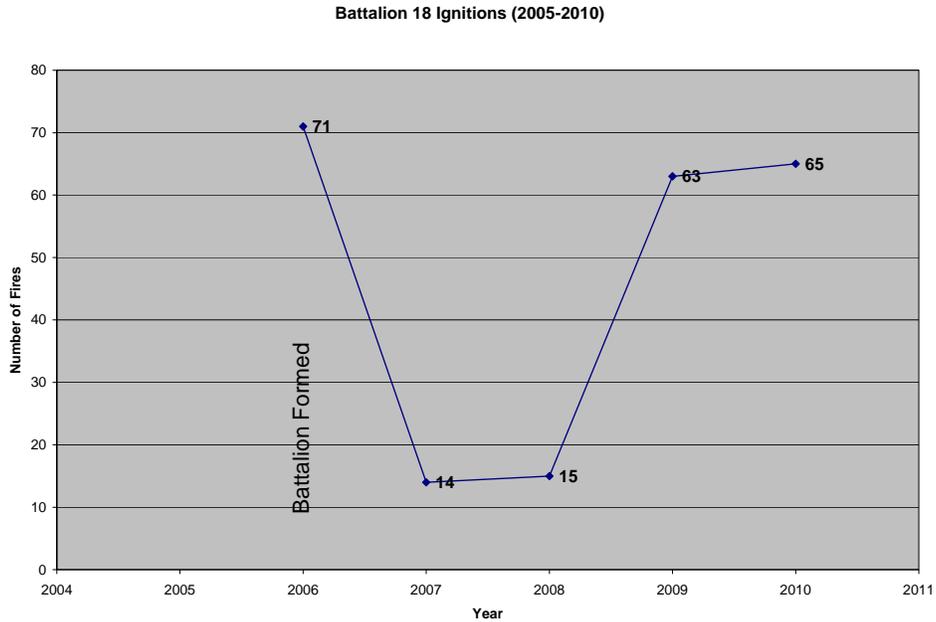
Historically both debris burning and homelessness have been the most significant problems within the battalion. Homelessness caused ignitions seems to be decreasing with development. Several of the undetermined fires may in fact be attributed to arson. The prevention bureau is assisting battalion staff with cause determination training to help reduce the number of undetermined causes.

Equipment use combined with vehicles comprised 40% of the fire causes within the battalion during the 2010 season. Construction and land management activities within the WUI often require the use of equipment. This equipment is often rented and use takes place where vegetative fuels are available and susceptible to burning.

The statistics show that escaped debris burns are also a significant cause (12%) of wildfire in the battalion. The residents realize that the fuel treatments near their residences must be done and often delay burning until the final weeks prior to burn bans being instituted. The result is a greater number of burn piles being burned later in the season, when control of the fires is more difficult due to weather and fuel conditions. Public education at the time of burn permit issuance is used to reduce the number of escapes.

Arson and undetermined fires when combined account for 40% of the fires in the Battalion. These fires are intentionally set fire or fires which the ignition could not be determined due to various factors. These fires are the most difficult to reduce due to their nefarious nature and difficulty in assessing. The Unit's prevention program is charged with investigation and pursuit of arson as felonious activity. The Unit prevention also assists Battalion staff with cause determination if a fire problem persists with no apparent cause. The result is, over time, a reduction in arson fires due to arrest and prosecution and determination of cause on undetermined fires allowing fire prevention education or hazard mitigation to address the actual cause.

Significant fire events within this battalion include the Fawn Fire (August 1992 - 350 acres), 13 structures destroyed and most recently the 49 Fire (Aug/Sept 2009) that burned 343 acres, destroying 65 residential and commercial structures.



## Mitigation Strategies

### Public Education

- The battalion mitigation strategies will focus on public education and outreach geared toward equipment use and defensible space.
- The battalion will continue to support defensible space inspections and chipping services to reduce fuels
- Battalion staff will work with local cooperators to develop and construct fuel breaks.

### Training

- Battalion staff will work with prevention on cause determination training to help reduce the number of undetermined fires within the battalion

### Burn Permit Program

It must be recognized that public contact during burn permit issuance provides Cal Fire with the best opportunity to present a fire prevention message.

## High Priority Target Areas

Watershed, high tension power lines, the American River drainage, Ophir, Newcastle / south of 80, Jordon, Mt Vernon, Lonestar, Christian Valley and the Penryn fire district

**Projects**

Table 11 – Battalion 18 Fuel Modification Projects, Community Outreach and Education

Project Name	Status	Estimated Completion Year	Project Type	Net Acres
Placer County Chipper	A	O	Fuel Reduction	
Hidden Falls Park	O	O	Fuel Reduction	

**Status Guide:** A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance.

**Success Stories**

49 Fire – Moss Rock Dr homes had exceptional defensible space.

Placer County Chipper – over the past several years the Placer Chipper program has provided chipping services and encouraged defensible space for hundreds of homeowners within the battalion.

**Action Plan:**

- Work with Unit prevention to reduce the number of undetermined fire causes: battalion staff will continue prevention training to help improve undetermined fire causes within the battalion.
- Continue public education efforts within the battalion
- Increase defensible space inspections within the battalion



# NEVADA - YUBA - PLACER UNIT (NEU)

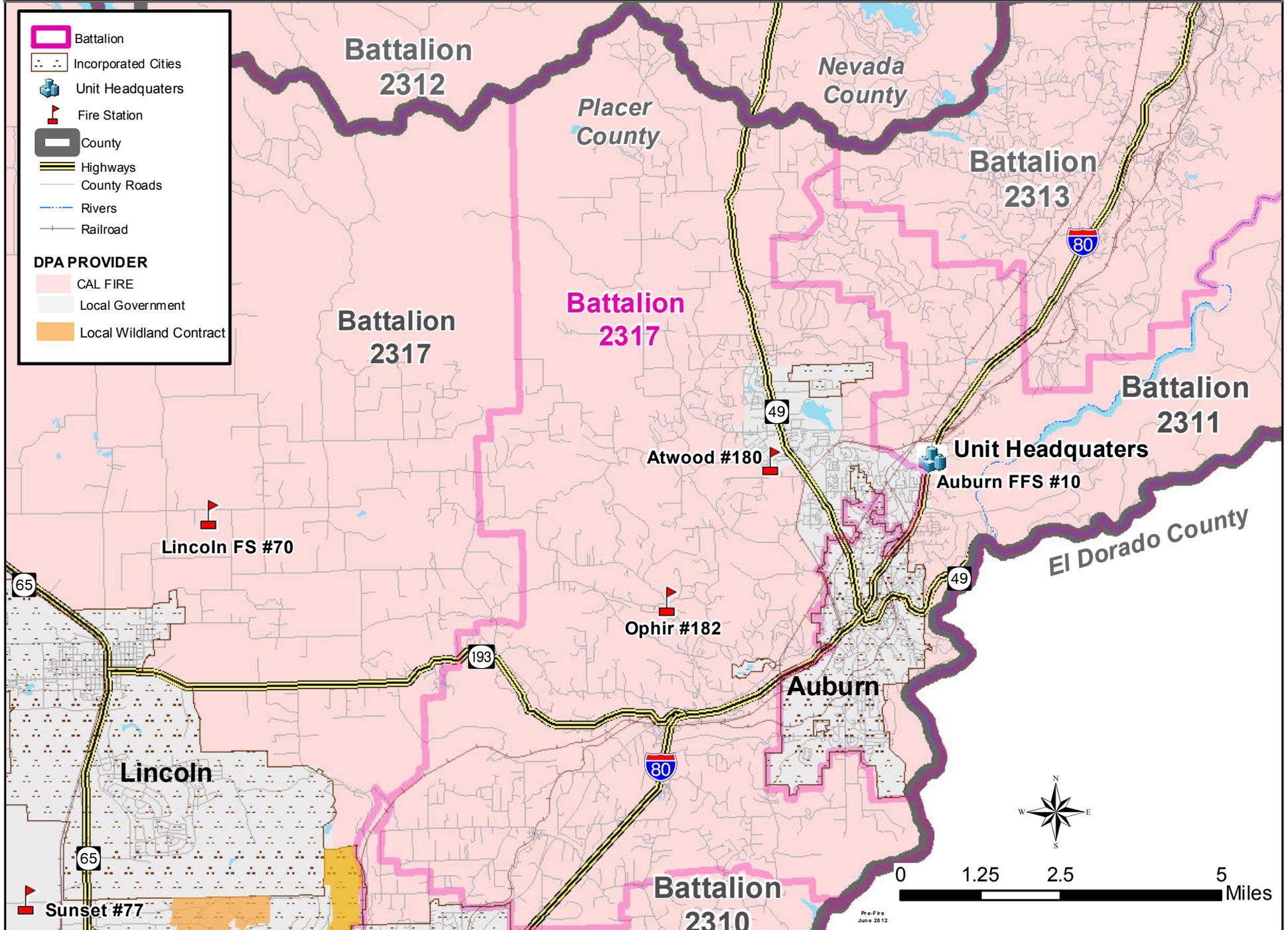
## Battalion 18- Administrative Boundaries

**Legend**

- Battalion
- Incorporated Cities
- Unit Headquarters
- Fire Station
- County
- Highways
- County Roads
- Rivers
- Railroad

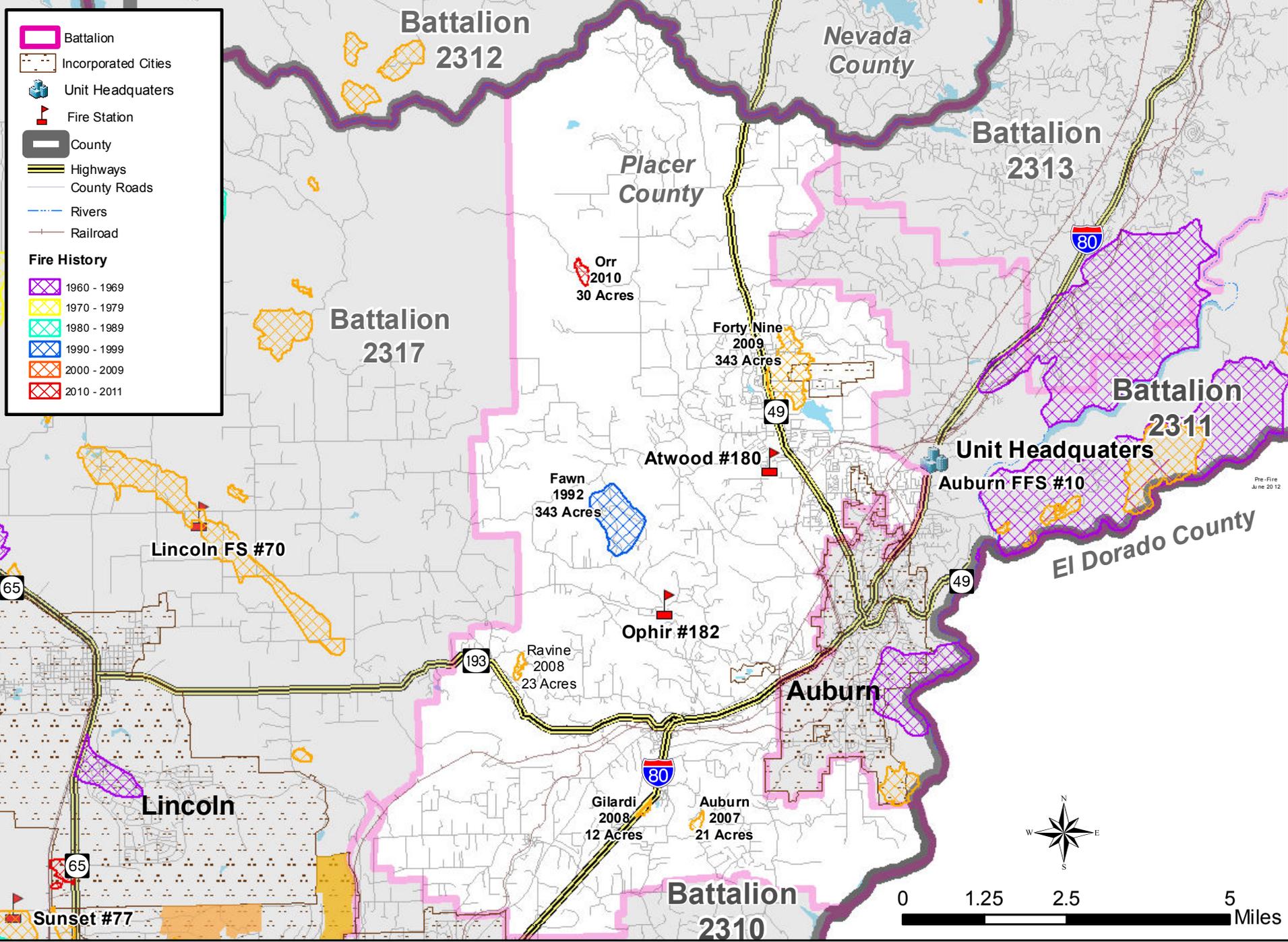
**DPA PROVIDER**

- CAL FIRE
- Local Government
- Local Wildland Contract





# NEVADA - YUBA - PLACER UNIT (NEU) Battalion 18- Fire History



# ***Ignition Management Plan***

## ***Battalion 19***

### **Description of the Battalion**

The Marysville battalion includes the Schedule A Contract for the City of Marysville and surrounding SRA lands. The area is commonly referred to as the Yuba-Sutter Area after the two counties. The City of Marysville is 40 miles north of Sacramento and located in the Sacramento Valley where the topography is generally flat. The city has a total area of 3.6 square miles and a population of approximately 12,072 people. The city is bordered on the south and east by the Yuba River and the west by the Feather River. The two rivers converge just southwest of the city and pose a serious flooding hazard during years of heavy precipitation and affiliated runoff. Fuels are dominated by grasses but dense brush is common along river bottoms and in non-agricultural areas. Agricultural crops comprise a significant portion of the battalion. Varying crop stages are often determinant of fire risk within the area. This battalion currently has CAL FIRE administrative battalion for Sutter County. It should be noted that the Marysville Fire Department utilizes Firehouse software for tracking of fire reports and all other activities.

All burn permits for Marysville are issued directly from the air district; mostly ag/non-residential permits.

Cooperators within this battalion include Sutter County Fire, Yuba City Fire, Linda Fire

### **Discussion of fire occurrence within Battalion**

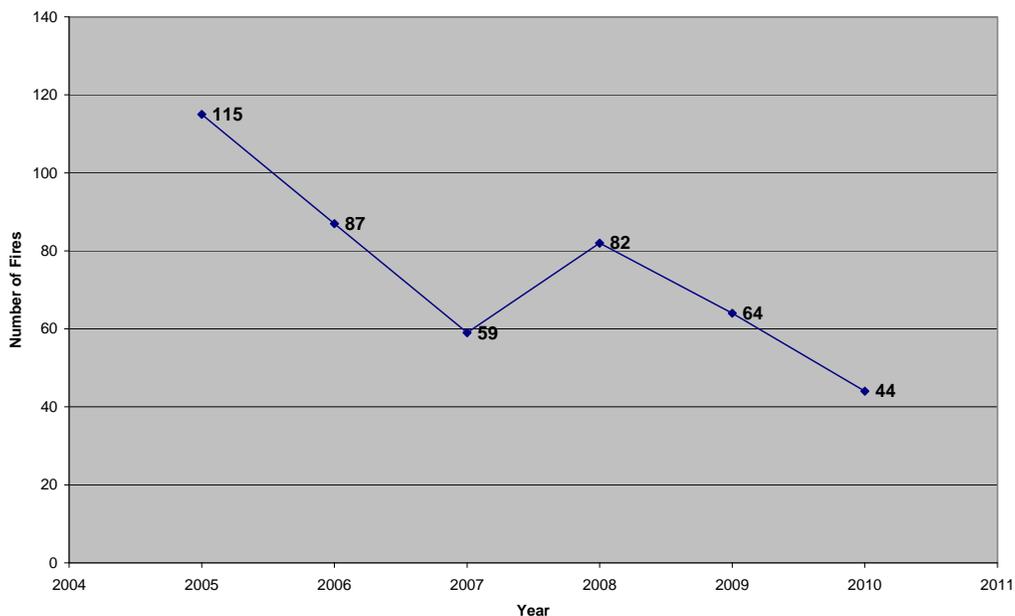
Arson and undetermined fires are considered equally and account for 39% of the fires in the Battalion. These fires are intentionally set fire or fires which the ignition could not be determined due to various factors. These fires are the most difficult to reduce due to their nefarious nature and difficulty in assessing. This community has a significant transient river population. CAL FIRE has been working closely with law enforcement to mitigate. The community also has a large number of abandoned alleys and buildings that tend to attract warming type fires.

For the year 2010, the most significant cause within the battalion was vehicle fires (20%).

Outside the city boundaries, equipment and debris escapes are the most significant causes. Equipment use was a significant cause of fire within the battalion during the 2010 season at 18%. Construction and land management activities often require the use of equipment. This equipment use takes place in the wildland areas where vegetative fuels are available and susceptible to burning.

The statistics show that escaped debris burns are also a significant cause (16%) of wildfire in the battalion. The battalion plans to work with the air district to increase education with permit issuance.

Battalion 19 Ignitions (2005-2010)



### Mitigation Strategies

Battalion 19 will work to reduce fire ignitions and reduce damage by participating in public education programs, business inspections, and the plan review process. The components to meet these goals are as follows:

#### *Commercial Business Inspections*

- Inspect local businesses (high risk hazard inspection, sprinkler inspections)

#### *Fire Preplans*

- Update fire preplans for all businesses.
- Currently over 800 buildings within city limits with no preplan.
- Work to document resident knowledge of buildings and infrastructure.

#### *Plan Review*

- Conduct fire plan review on building projects within the city and district.

#### *Prevention*

- Continue working with law enforcement to mitigate homeless caused ignitions.

#### *Vegetation Management*

- Complete weed abatement inspections in Marysville City limits.
- Vegetation management along river bottom.
- Work with MPD on annual cleanup day.

#### *Public Education*

- Participate in public education programs within the City and Yuba-Sutter Area.
- Marysville Joint Unified School District – Provide public education along with participation in

School organized functions i.e., Read-a-Thon, Athletic events, lunch visits, Fire Station tours, Fire department class visits, School Safe program planning. Senior Safety-Provide fire safety training and public education to local senior care facilities.

- City sponsored Activities- Christmas Parade, Bok Kai Festival, Fourth of July Parade, Gold Days, Peach Festival, Hot Rod Jamboree, Marysville Rodeo, and the Yuba-Sutter Fair.
- Participate in Fire Prevention week with Fire Station Open House
- Participation at Marysville Motocross, providing prevention and EMS standby duties.

*Training*

- Cause investigation training.
- Inter-company training with Yuba City Fire
- Coordinated hazmat exercises with cooperators.

**High Priority Target Areas**

River bottoms, the Hollywood area and Thorntree Fish and Game property, open spaces surrounding the city, abandoned structures.

**Projects**

Table 12 – Battalion 19 Fuel Modification Projects, Community Outreach and Education

<b>Project Name</b>	<b>Status</b>	<b>Estimated Completion Year</b>	<b>Project Type</b>	<b>Net Acres</b>
Public Education	A	O	Education/Outreach	
Fire Prevention Week	A	O	Education/Outreach	

**Status Guide:** A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance.

**Action Plan:**

The Marysville Battalion continues to interact with its community emphasizing fire safety. Marysville maintains a good cooperative relationship among its neighbors and collectively provides a strong fire safety message that benefits all. This message helps protect its citizens and the surrounding areas. Battalion staff will continue to educate the public on fire prevention and fire safety. Additionally, staff will work to identify fuel reduction opportunities for densely vegetated areas within and surrounding the city.



# NEVADA - YUBA - PLACER UNIT (NEU)

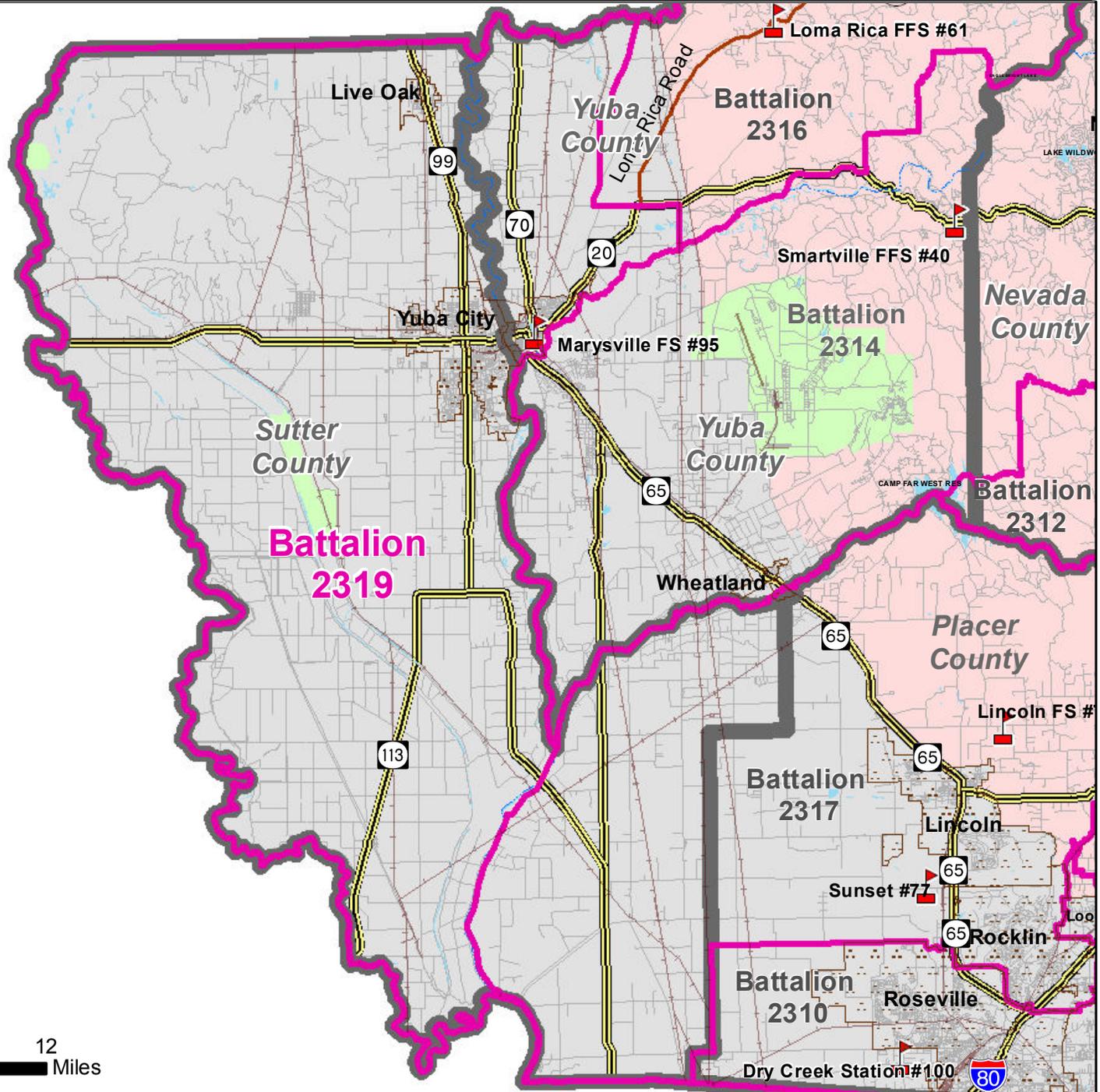
## Battalion 19- Administrative Boundaries

**Legend**

- Battalion
- Incorporated Cities
- Lookouts
- Fire Station
- AAB
- ECC
- Camp
- COM
- County
- Highways
- County Roads
- Rivers
- Railroad

**DPA PROVIDER**

- CAL FIRE
- Federal
- Local Government





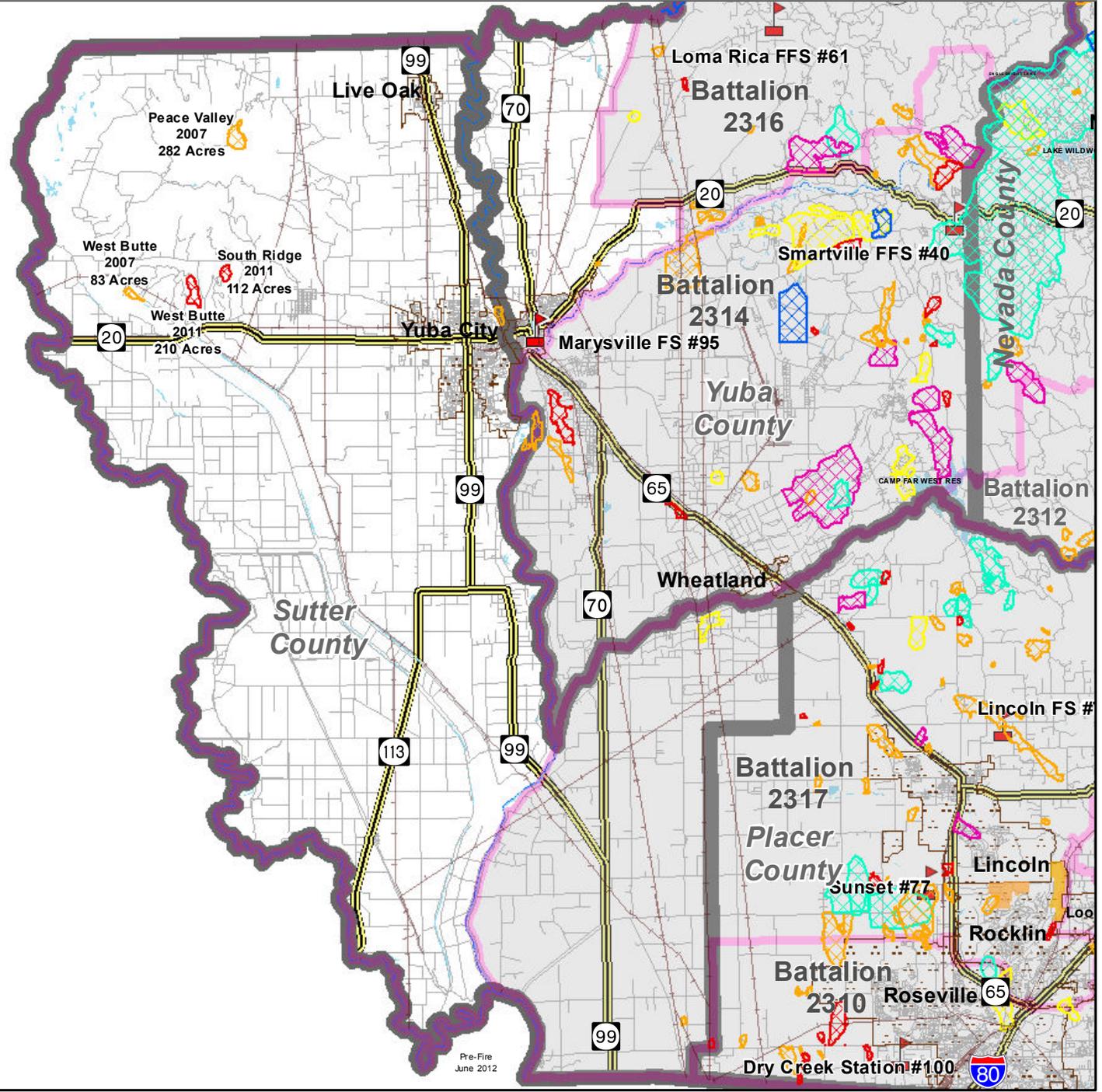
# NEVADA - YUBA - PLACER UNIT (NEU) Battalion 19- Fire History

**Legend**

- Battalion
- Incorporated Cities
- Lookouts
- Fire Station
- AAB
- ECC
- Camp
- COM
- County
- Highways
- County Roads
- Rivers
- Railroad
- USFS District Boundaries

**Fire History**

- 1960 - 1969
- 1970 - 1979
- 1980 - 1989
- 1990 - 1999
- 2000 - 2009
- 2010 - 2011



Pre-Fire  
June 2012

# *Training / Safety Battalion*

## Training

The Unit Training Bureau maintains a highly active and dynamic program.

The Battalion Staff is comprised of one Battalion chief and one engine captain and/or engineer that work in training during non-peak staffing. The Staff continually strives to provide creative, cost effective, innovative training, and always providing the highest commitment to safety. The state-funded training operations, which are divided into 18 separate program areas, are a seven-day a week operation and are listed below:

- Administration and Office staff
- Battalion Chiefs
- Company Officers
- Firefighters
- Training
- Emergency Command Center
- Air Attack
- Fire Prevention and Engineering
- Automotive Fleet Maintenance
- Pre-Fire Engineering
- Joint Apprenticeship Program
- Vegetation Management
- Emergency Medical Services
- Hazardous Materials Responses
- Volunteer Firefighters
- Volunteers-in-Prevention
- Fire Safe Councils
- Joint-Agency Operations

## Strategies

- Identify the legal state and federal requirements for training in each program area.
- Identify training requirements for contract programs within the Unit.
- Meet or exceed those training standard identified in the CAL FIRE State Training handbook.
- Identify training priorities set by Senior Staff.
- Identify the needs of each of the 18 program areas to meet the training requirements established by the program managers.
- Maintain and update the Unit's Emergency Resources Directory (ERD).
- Determine the training needs for the Northern Region Training allocations.
- Work towards enhancing the knowledge and skill levels necessary for safe and effective response to possible weapons of mass destruction incidents.
- Identify the training needs of cooperators.
- Identify CAL FIRE's new training programs in the early stages of development, project their impact and develop an implementation plan.
- Identify projected vacancies and the training requirements necessary to help those personnel filling vacancies to do so successfully.
- Identify projected vacancies and the training requirements necessary to help those personnel filling vacancies to do so successfully.
- Identify the needs of each employee to help achieve career development goals.

- Identify CAL FIRE's new training programs in the early stages of development, project their impact and develop an implementation plan.
- Identify the training needs of cooperators.
- Seek alternative funding sources in the form of grants, participation with universities and course sharing with other agencies.
- Establish a training priority list and develop a Training Plan with achievable goals for the Training and Safety Battalion.
- Work with Sierra College and other local cooperators to develop interagency training opportunities and strategies.

## Safety

The Nevada Yuba Placer Training Battalion Chief also serves as the Unit Safety Officer. The Unit Safety Officer oversees the Safety Committee meetings to discuss Safety issue; review personnel and vehicle accidents; recommend steps to prevent future mishaps; ensure the department's safety requirements and safety programs are being adhered to in the fire stations and on incidents.

Listed below is the Nevada Yuba Placer Unit Safety Committee Charter.

### Mission Statement

The NEU Safety Committee shall serve as an advocate for optimal employee health and safety. The committee's goal is a reduction in the frequency and severity of workplace accidents and near misses through information, research, education, prevention, and attitude.

### Points of Charter

The NEU Safety Committee shall:

- Interpret and apply all aspects of safety from government regulations and department policies into everyday operations within CAL FIRE.
- Serve as a communications conduit between unit management and field personnel on safety related issues and concerns.
- Be proactive on issues related to employee health and safety.

Each Safety Committee member shall:

- Carry forth their knowledge of and enthusiasm for safety to all personnel within their area of representation.
- Carry safety questions, concerns, and suggestions for safer work practices from personnel within their area of representation back to the Safety Committee for discussion and appropriate action.
- Work with all personnel in their area of representation to assure that compliance is achieved for:
  - Facility Safety Inspections
  - The Injury and Illness Prevention program
  - Material Safety Data Sheets
  - Mobile Equipment Safety Inspections
  - Personal Protective Equipment
  - Safety related training
  - The California Code of Regulations, Title 8

At a minimum, the Safety Committee shall meet every other month to address acute and chronic safety issues affecting the unit. Issues and topics to address may include:

- Reviewing accidents and near misses to determine how to reduce or alleviate their occurrence.
- Reviewing current unit safety policies and practices for possible revision.
- How to best proceed with updating all work locations with information and education to obtain compliance, and achieve a safety consciousness among all employees to reduce the frequency, severity, and cost of injuries and accidents.

The committee shall be comprised of representative from each of the unit's battalions, as well as representatives from administration and resource management in order to encompass a wider range of knowledge, experience and ideas. Guests will be encouraged to attend committee meetings to express comments, concerns, and solutions to the wide array of issues pertaining to employee health and safety.

## *Automotive Battalion*

Nevada Yuba Placer Unit's (NEU) Automotive Battalion (2330) encompasses facilities and resources across three counties and is responsible for both California State wildland protection funded equipment and Placer County Schedule A contract equipment. Two major automotive repair shops are at Auburn Headquarter (Station 10) and Nevada City Fire Station (Station 20). A smaller capability shop is located at Dobbins (Station 60) and is Schedule B, operating only during the fire season. The Heavy Fire Equipment Operators (HFEOs) assist the SCU's Heavy Equipment Mechanics (HEM) with automotive repairs, maintaining state fire breaks and roads and participate in VMPs and training burns when not assigned to wildland fire incidents. The Fleet Equipment Manager (FEM) directs and manages the NEU Automotive Battalion. The FEM manages the automotive budget, assigns repair projects, projects automotive needs of the future and coordinates equipment replacement.

The automotive battalion attempts to maintain each piece of mobile equipment in a condition consistent with the work for which it was designed. This is accomplished through the uniform application of an effective, preventive maintenance program in accordance with all state automotive and fiscal requirements. Repairs are made and parts replaced as necessary to keep the equipment functional, with priority being given to those items contributing to personnel safety. Mobile equipment is not altered or modified except, as outlined in the CAL FIRE Mobile Equipment Handbook. Approval for modifications or alteration is granted in writing by the appropriate level.

Regular inspections of all mobile equipment are made as outlined in the preventive maintenance procedure and record. The Automotive Battalion maintains accurate records of maintenance and repairs on all mobile equipment. As much as possible, major repairs are scheduled during the time of least expected incident activity. The Type III fire apparatus have the majority of maintenance performed during the winter months.

### Automotive Equipment Statistical Data:

Nevada Yuba Placer has the following equipment (Schedule B).

25 Type 3 (Wildland Engines)	3 Fire Suppression Bulldozer
37 Utility vehicles (four wheel drive)	3 Transports
2 Service Units (Mobile repair vehicles)	3 Low Bed Trailers
1 Mobile Communications Unit	1 Grader
3 Sedans	1 Front End Loader
2 Supply Van	2 Stakesides (1 big and 1 small)
3 Dozer Tenders (Bulldozer Service Units)	1 Dump Truck
6 CCVs (WAR)	4 Forklifts
4 ATVs	

### Placer County Schedule A Equipment (Reserve Equipment Included)

10 Type 3 (Wildland Engines)	8 Water Tenders
17 Type 1 (Structural Engines0	1 - Hazmat Support Unit
2 100ft Ladder Trucks	1 Mobile Breathing Support
5 Command Vehicles	1 Squad Vehicle 4x4
4 Chippers	1 – MCI Trailer
10 Utilities	1 Repair Vehicle

Automotive Battalion Goals:

- Enhance skills and certifications of the automotive staff in order to stay current with automotive technology changes.
- Maintain the Unit's emergency response equipment in a safe, incident ready status.
- Continue to operate a cost effective and efficient automotive operation.
- Coordinate with the Unit's Vegetation Management Program to maintain fuel breaks and fire roads.
- Work closely with DGS and Regional Technical Service to maintain and upgrade facilities.