

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 mapping (2007 FHSZ), shows 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.



NEVADA - YUBA - PLACER UNIT (NEU) Battalion 16- Administrative Boundaries

J. Harvey
August, 2011

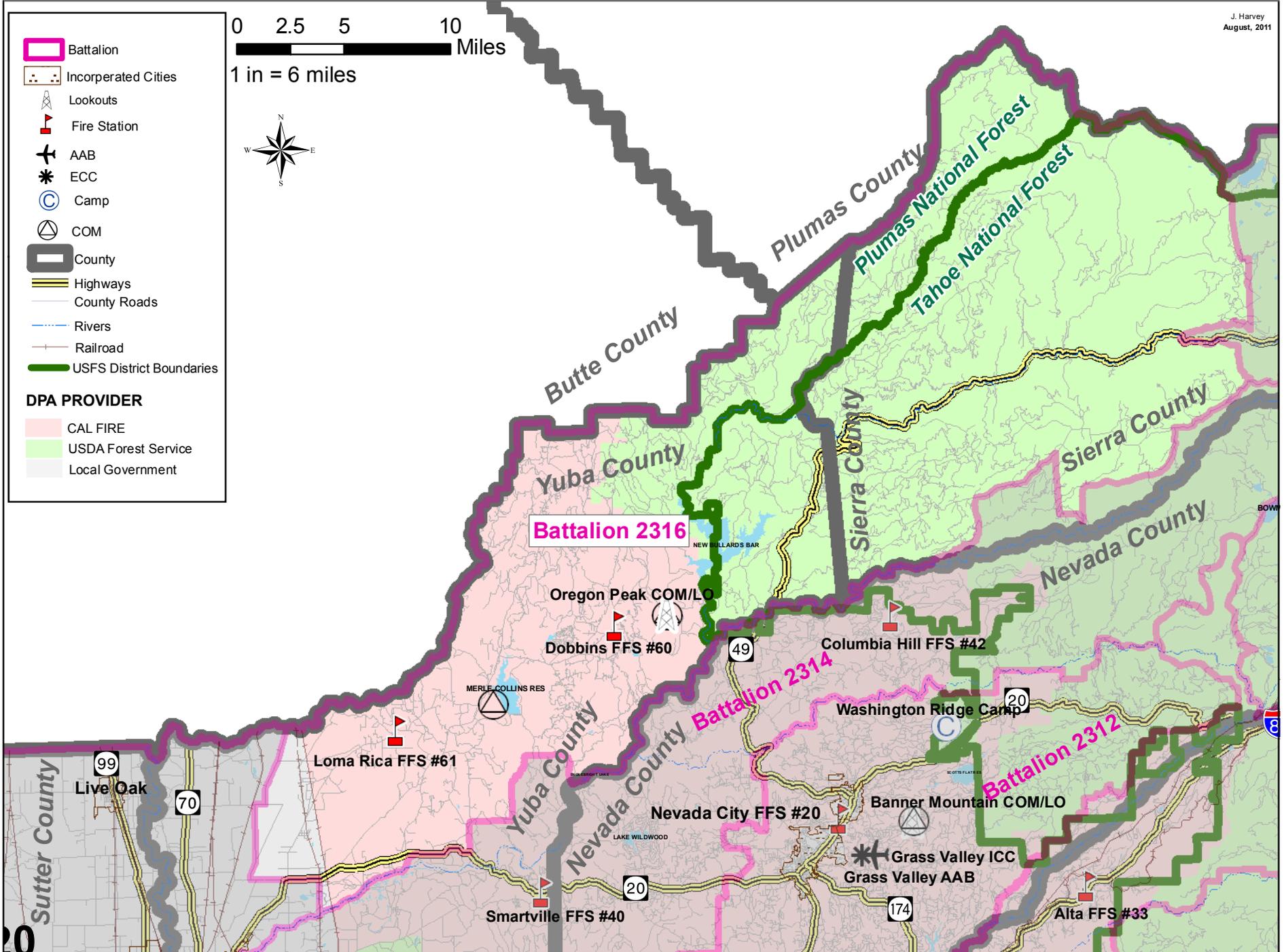
- Battalion
- Incorporated Cities
- Lookouts
- Fire Station
- AAB
- ECC
- Camp
- COM
- County
- Highways
- County Roads
- Rivers
- Railroad
- USFS District Boundaries

DPA PROVIDER

- CAL FIRE
- USDA Forest Service
- Local Government

0 2.5 5 10
Miles

1 in = 6 miles





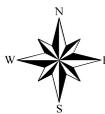
NEVADA - YUBA - PLACER UNIT (NEU)

Battalion 16- Fire History

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August, 2011



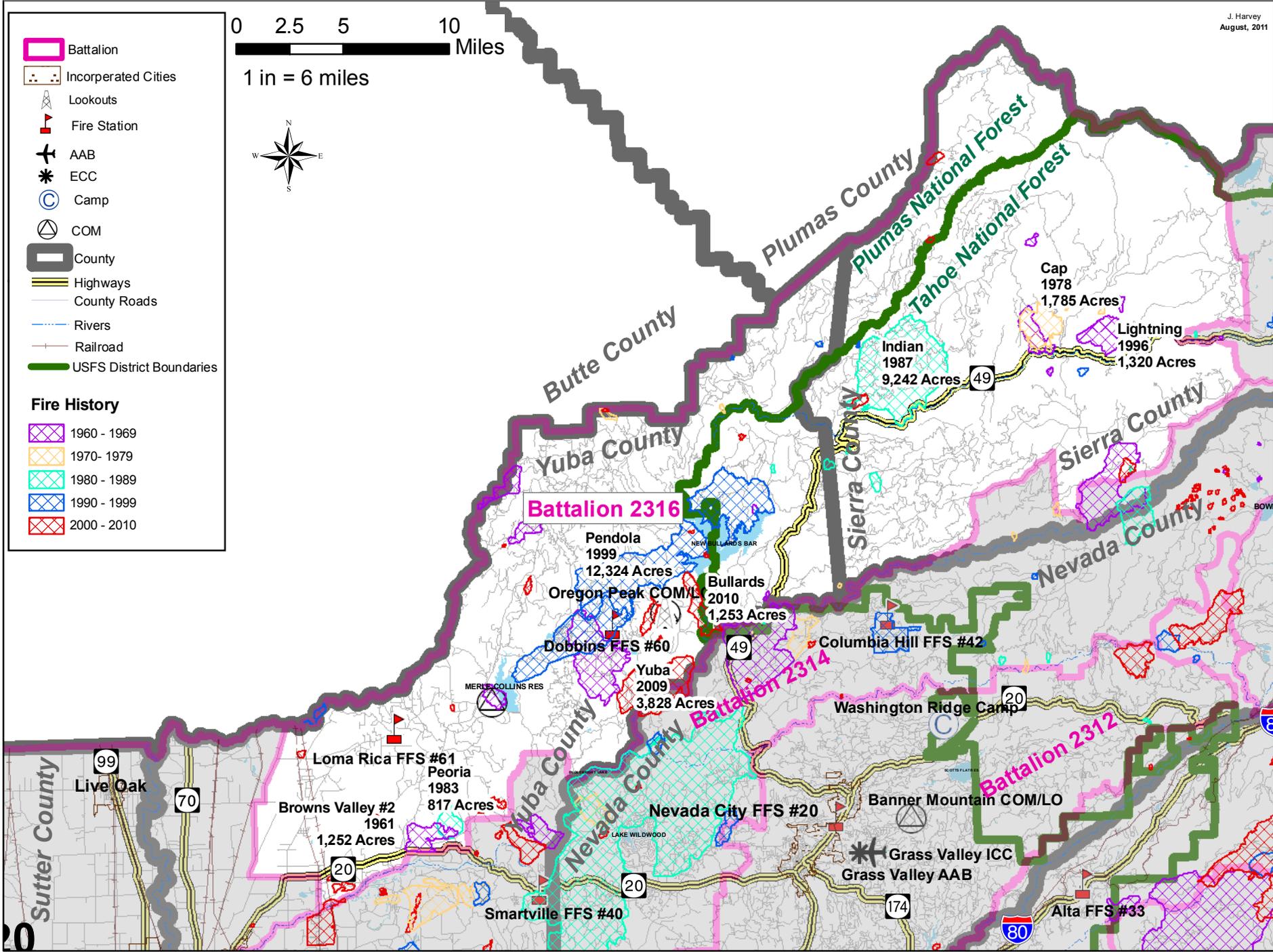
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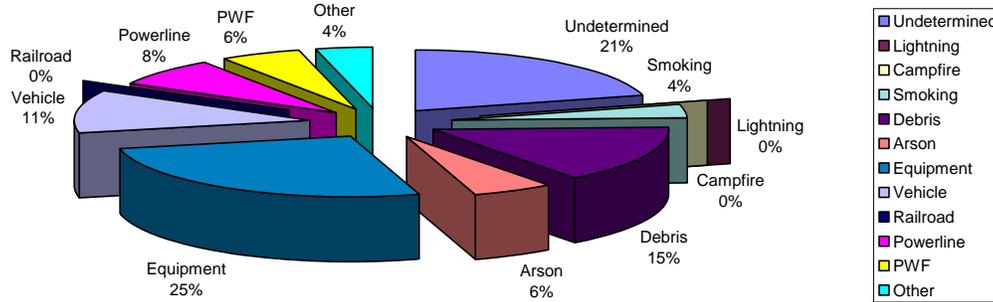
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Fire History

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

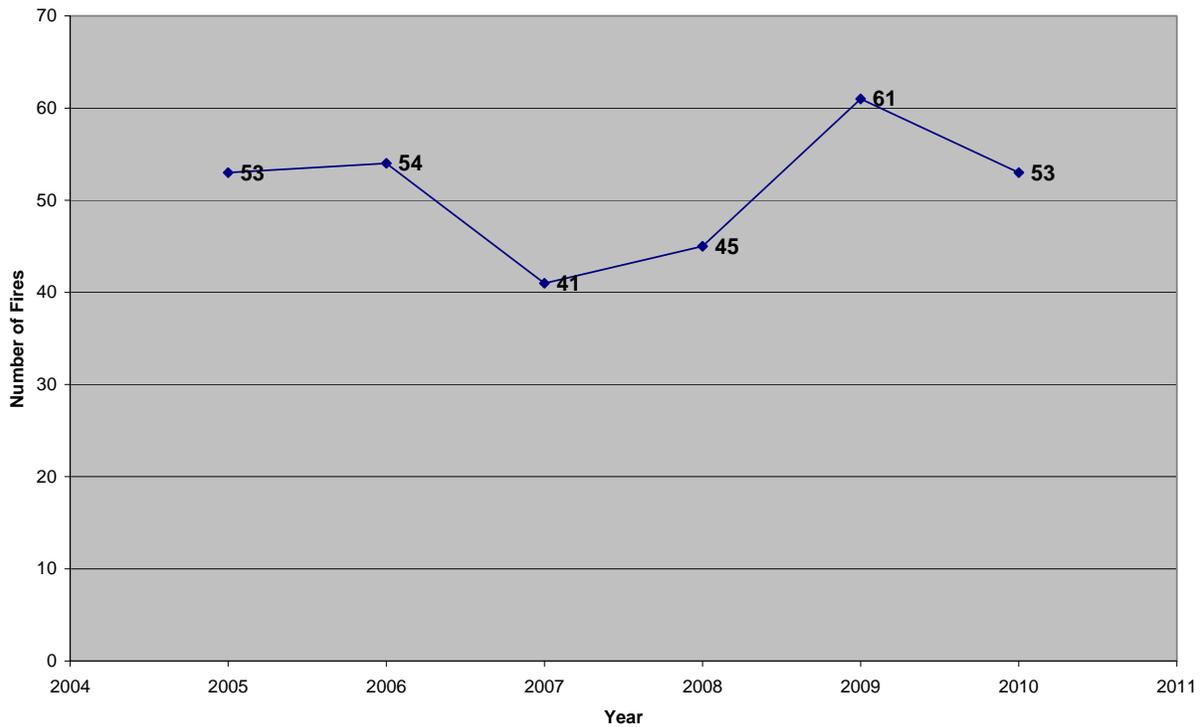


2010 Battalion 16 Fire Causes



Undet.	Lightning	Campfire	Smoking	Debris	Arson	Equipment	Vehicle	Railroad	Powerline	PWF	Other
11	0	0	2	8	3	14	6	0	4	3	2

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 cooperator's 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 7 – Battalion 16 Fuel Modification Projects, Community Outreach and Education Programs

Project Name	Status	Estimated Completion Year	Project Type	Net Acres
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	O	O	Vegetation Management	3,375

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

Fuel reduced along the Yuba County's Marysville Road slows 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



Fire stopped at the Middlebrook fuel break and access road

northerly it 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.

2011 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.