

SECTION V: PRE FIRE MANAGEMENT TACTICS

DIVISION / BATTALION / PROGRAM PLANS

TRAINING BUREAU

1. Overview:

The Madera Mariposa Merced Training Bureau is responsible for training 350 CAL FIRE career firefighting personnel and 450 Madera and Merced county paid call firefighters. The training provided serves to educate firefighters from their first day on the job for the extent of their career. Additionally the Training Bureau is responsible for identifying the Unit's training needs. This includes CAL FIRE training; federal, state and OSHA mandates; and other fire-related service training. The training is accomplished through various methods: formalized classes at the CAL FIRE academy in Lone, multi-company drills, exercises of the Joint Apprentice Committee program, Firefighter I Returnee academies, HFEO proficiency training, Spring Training Preparedness exercises, and Continuing Professional Training courses.

Training is divided into 3 operational areas – Madera, Mariposa, and Merced. Madera training is overseen by an administrative battalion chief assigned to the Madera division. The paid call firefighters receive monthly training from the career firefighting personnel. The training headquarters is located within the Mariposa division. Mariposa tracks all of the training records and schedules yearly training for career staff. Additionally they are responsible for the returnee firefighter academies, spring preparedness exercise, and Continuing Professional Training courses. In charge of this task are a battalion chief and an office technician. Merced training is conducted at the former Castle Air Force Base, which is overseen by a fire captain. Merced training hosts its own academy for new paid call firefighters and provides Continuing Professional Training courses for career staff within Merced County.

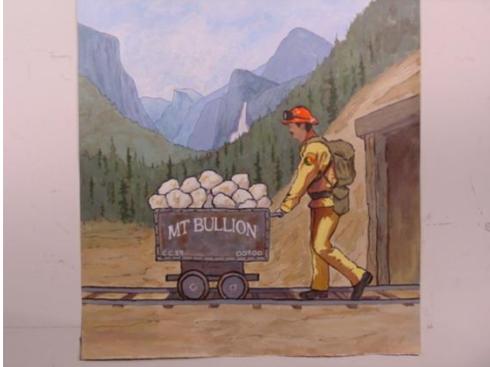
2. Goals

The Training Bureau has set several goals to improve firefighting operation efficiency and safety for the Unit.

- a. Provide educational courses (Continuing Professional Training courses) as appropriate to meet recertification needs and reviews expiration dates to schedule division CPTs accordingly.
- b. Improve employee performance in their current position through non-mandated, job enhancement training (We provide as many additional classes through our Unit as needed and as possible each year.)
- c. Produce a training calendar prior to the start of each year, and send it out to the Unit quarterly.
- d. Ensure that Training Requests have been submitted prior to October 1st of each year.
- e. Have the Unit's training needs assessment completed prior to February 1st of each year per the Needs Assessment Process as cited in CAL FIRE Handbook 4022
- f. Review the minimum Incident Command System (ICS) Qualifications Matrix (7700 Handbook) yearly and compare it to the Emergency Response Directory (ERD), to identify any lack of ICS qualified personnel within the Unit.
- g. Have training prepared for Amador Firefighters; usually takes place the second week of February. Approximately 10 employees are hired.
- h. Prepare training and preparation of spring transition for the first Firefighter hiring. This usually takes place mid-May and provides training for approximately 25 returning firefighters.
- i. Prepare training and preparation of second Firefighter hiring. This will bring the Unit to peak staffing levels around mid-June, training approximately 35 additional firefighters.
- j. Plan Spring Preparedness Exercise. All Schedule "B" engines and personnel participate in a skills and physical fitness evaluation. Usually takes place in June.
- k. Assist with 4036 training as needed

- l. Work with individual employees to develop individual training plans.
- m. Develop Record Retention Plan (Target Safety)
- n. Identify Unit classes and develop cadres

MOUNT BULLION CAMP CC#39



Mount Bullion Camp is located 6 miles north of the town of Mariposa off of HWY 49 at an elevation of 3200 feet and on the east side of Mount Bullion . It is the only fire camp in the CAL FIRE Madera, Mariposa and Merced Unit. The camp's maximum population is 110 low risk inmates that operate under the direction of the California Department of Corrections and Rehabilitation (CDCR) and CAL FIRE. CAL FIRE operates five hand crews in addition to an emergency response, small engine and chainsaw repair trailer that are all available to respond to all types of emergencies and disasters year round within the state of California.

1. CAMP HISTORY

Mount Bullion Camp opened as a California Youth Authority fire camp in 1958. In October of 2004 Mount Bullion was converted to an Adult Conservation Camp. Many modifications were made to existing structures to accommodate the one hundred and ten (110) inmate capacity population. Mt. Bullion's fire protection responsibilities fall within the Cal Fire MMU Unit, which includes Mariposa, Merced and Madera Counties. In 2008 there were two major fires within the Unit, the Oliver Fire and the Telegraph Fire. The Oliver Fire started June 25, 2008 consuming 2789 acres, and the Telegraph Fire started August 02, 2008 consuming 34,091 acres. The Telegraph Fire came within three hundred yards of the camp and although evacuation plans were in place but not activated, the camp did not suffer any damage. Cal Fire and the Department of Corrections and Rehabilitation have an excellent working relationship and have a lot of pride in the camp. Cal Fire and CDCR meet twice a week for an open discussion on safety and other issues concerning the smooth operation of the camp.

2. INMATE PROGRAMS

The Hobby Program runs at capacity with eighteen inmates involved. Our educational programs consist of the GED Program, Inmate sponsored Small Business Class, and Coastline Community College courses. The GED Program meets three times a week and had approximately 10 inmates enrolled with a completion rate of 85% in 2011. Currently there are approximately eight inmates enrolled in this semester's classes. They will be taking the GED test sometime in May 2012. We have an ongoing inmate sponsored Small Business Class designed to help inmates start their own business when they reach parole. This class is conducted two to three times a year. Currently there are ten inmates enrolled. We have Coastline Community College courses with a variety of classes offered. College classes are usually offered in the fall and spring semesters. There were twenty inmates enrolled in the 2011 winter semester. Final exams were taken in April / May 2012.

3. WORK PROJECTS

- a. Federal Forest Projects: Forest Restoration, Fire Breaks, Weed Abatement
- b. County Projects: Fire Breaks, Water Shed Management, Utility District Brush Clearing, Weed Abatement, Parks and Recreation restoration, School Clean Up, Roadside Clearing, Tree Clearing and Trimming.
- c. City Projects: Fire Breaks, Water Shed Management, Utility District Brush Clearing, Weed Abatement, Parks and Recreation restoration, School Clean Up
- d. National Park Projects: Forest Restoration, Fire



- Breaks, Weed Abatement.
- e. State Projects: Fire Breaks, Water Shed Management, Utility District Brush Clearing, Weed Abatement, Parks and Recreation restoration, School Clean Up, Roadside Clearing, and Tree Clearing.
- f. The camp also provides fire wood to senior citizens and low income families through the Mariposa County Department of Community Services.

4. VMP

- a. CAL FIRE VMPs
 - i. Lushmeadows / Tip Top Fuel Break
 - ii. Ponderosa Fuel Break
 - iii. Watts / Stumpfield Fuel Break
 - iv. Kinsman Flat VMP
- b. Madera County Fire Safe
 - i. John West and Jean Rd AKA Six Mile, brush clearing
 - ii. RD 425 B brush clearing
 - iii. Cascadel Woods Fuel Break
 - iv. RD 620 AKA Stagecoach Rd Fuel Break



BATTALION PLANS

Battalion 1: Battalion Fire Management Plan

Battalion Overview:

1. Located in the northeast corner of the Madera Mariposa Merced Unit, encompassing 274,462 acres and 426 square miles lies the Coulterville Battalion containing a diverse amount of topography and vegetation. The western half of the battalion is range land with light flashy fuels in rolling hills. Once you progress in elevations you notice the changing topography from rolling hills to steeper slopes and canyons in oak woodland. As you travel above the 2,500' elevation you see the transition from oak woodland to major river drainage topography and fuel. The northern Highway 49 corridor drops into and out of the Merced River Drainage. The fuel transitions into the brush model of chamise, white thorn, and manzanita. As you move eastward to the USFS/CAL FIRE DPA line, the fuel transitions into timber. The battalion has several thousands acres of BLM and a great relationship has been established with the Folsom Office personnel. To the east the battalion is bordered by the Stanislaus National Forest. To the west SRA runs into Merced and Tuolumne counties. TCU borders the battalion to the north. Several communities are based in the battalion and are mostly developed along state highways and county roads. State Highway 140 runs east to west and intersects the community of Catheys Valley. State Highway 49 runs north and south and intersects the communities of Bear Valley and Coulterville. County road J132 intersects the communities of Don Pedro, Coulterville, and Greely Hill. Hornitos Road is a county road that connects Hwy 140 into Road J132. This road intersects the community of Hornitos and runs into Merced county and Tuolumne county. While these communities are fairly spread out due to restrictions on land division, there are pockets of subdivisions that create a Wildland Urban Interface challenge. Whispering Oaks and Whispering Oaks West, in Catheys Valley, is a 640 acre development of high end homes while the Don Pedro subdivision is a 4,500 which is split between Mariposa and Tuolumne counties. Historic assets include the Jeffries Hotel in Coulterville, the Trabucco house and General store of Bear Valley, and the Catholic Church and Manuela's in Hornitos. Interspersed throughout the varied topography and vegetation you will find large cattle ranches, federal forest, parks, and recreation areas and vineyards.

Weather patterns in Battalion 1, during declared fire season, consist mostly of diurnal winds that combine with topography to create a predictable NNW air flow mass. Spring and fall weather

patterns are affected by approaching low pressure systems that generally have a southerly flow. When a high pressure establishes itself over California, dry, warm air from the NNW occurs. Late spring and early fall weather changes between low and high pressure. Such changes drastically increase winds in the western side of the battalion and you can see a spread component index of up to 200.

Fire history in the battalion includes some of the largest fires in the Madera Mariposa Merced Unit: the Hunter Fire of 2000, the Creek Fire of 2001, and the Telegraph Fire of 2008. The potential lies in the fuel and topography of the Merced River drainage. This is major River Drainage Fire Fighting that is found throughout the California foothills. Fires in this country have the time, fuel, and topography to establish themselves due to poor access for suppression resources.



The VMP (Vegetation Management Program) project work that was done in the past never was completed and it is my opinion that it may never get done due to Cal Fire's cumbersome VMP process and the authority that has been given to the Air Pollution Control Districts. Past VMP projects like the Adams 800 acre VMP died on the vine due to a lack of resources and APCD issues. Currently there is hope for the long-awaited Greely Hill VMP. The BLM has funded the project and we are in the process of waiting for the EIR and burn plan to be approved so that we can move forward with our hand crews to start the pile and burning process and to reestablish control lines. Over the past few years we have been maintaining the private portions of the project with Prop 40 dollars and agreements with private land owners on the perimeter of the project. This funding will allow for maintenance of part of the Ponderosa fuel break and a joint effort between CAL FIRE and BLM to get this completed. We are looking at burning this in the fall of 2012.

Sacramento is encouraging us to get as many LE-100 inspections done as possible. This push resulted in the hiring of a FFI specifically for this assignment. Unfortunately for Battalion I, we had an early season FFI injury and our LE-100 FFI was pressed into service on an engine. We

were not allowed to hire behind so our program for the LE-100 FF was scrapped and all three stations, Catheys Valley, Hornitos, and Coulterville, stepped up and completed 100% of their inspections. Catheys Valley and Hornitos completed their entire PRA while Coulterville completed their entire target area of Don Pedro. One reason for this success was the inception of the LE-100 mailers. This program jumpstarts the inspection process and, when inspectors are properly trained, helps the private property owners get started or complete their defensible space.

In conjunction with the Unit's prevention staff to provide a quality school program. Catheys Valley FFS judged and hosted the competition for the best home fire prevention plan. The winners from each class came to the station and were fed hotdogs cooked by the firefighters. Catheys Valley personnel also attended the Fall Festival where fire prevention for kids is the main message.

2. Goals and Objective

The goal of the Battalion Prevention Plan is to prevent unwanted wildfire within the battalion boundaries. With dedicated and committed battalion employees, Prevention Bureau Staff, and Pre-Suppression Staff, this prevention plan will be the leading document that supports our Unit Fire Plan and a model for the protection and safety of the citizens of Battalion 1 and the communities it serves.

3. Measurement of:

The methods used to accomplish our goal will consist of public education, prescribed fire projects, mechanical fuel reduction and modification, range improvement, fire road maintenance, and always an aggressive LE-100 inspection program. The fire station managers will again be the catalyst to carry forth and complete many of the programs. Fire Prevention and Pre-Fire Suppression staff will again be called upon to assist in this year's program.

4. Information Education

a. School Programs:

- i. Through the Unit Prevention Bureau, Battalion 1 personnel prepare and present programs to school children, assist school teachers and administrators, either in or out of classroom, and prepare or present fire prevention or conservation education subjects and materials, with emphasis on K-2 students that reside in State Responsibility Area (SRA) lands.
- ii. Battalion 1 school programs consist of a coordinated effort between cooperating fire agencies known as "TEAM TEACHING".

This allows a great opportunity and potential for stimulating interest in wildfire prevention. The classroom atmosphere makes an ideal place to acquaint children with fire prevention responsibility. Here it is possible to form fire-safe attitudes in children.*Please see attachment A for a "TEAM TEACHING" schedule

b. Fire Prevention Signs

- i. In 2009 the Fire Prevention Bureau developed new prevention signs for roadways throughout the Unit. In 2010 a complete revitalization and addition of new prevention frames for the signs went into effect in Battalion 1. A new prevention sign was added to the intersection of Greely Hill Road and Ernst Road and a new prevention sign is being installed on the Reddington Ranch on the south side of Highway 140. The new prevention signs are rotated based on the Fire Prevention Bureau rotational schedule. Station managers have been diligent in maintaining that rotation. Currently there are 5 Fire Prevention signs in Battalion 1.
- ii. Catheys Valley:
 1. In cooperation with Company 23 of the Mariposa County Volunteer Fire Department, one prevention sign is located on the south side of Hwy 140 at McCay Community Park.
 2. With appreciated cooperation from the Reddington Ranch, one prevention sign will be installed on the south side of Hwy 140 near the entrance to the ranch.
- iii. Hornitos:
 1. Current sign is located on the southwest corner of CAL FIRE property at the Hornitos FFS and is visible from Bear Valley Rd.

2. One more sign will be added in 2011 in the Hornitos area along Bear Valley Road, east of the town of Hornitos.
- iv. Coulterville:
 1. One sign is located on the southwest corner of CAL FIRE property at the Coulterville FFS and is visible from Hwy 49.
 2. Second sign is located at the intersection of Greely Hill Road and Ernst Rd.
 3. Third sign will be added to the Don Pedro
- c. Public Events
 - i. All on-duty company officers in Battalion 1 will attend public events in the local community they serve. This participation creates an environment that builds trust and friendship between CAL FIRE employees and the residents of the community. A professional, polite, and friendly attitude will be maintained at these events and fire prevention message is encouraged. If a station is invited to a public event that is not listed, it will be the responsibility of the company officer to decide if attending will have an impact on station management. The following events are attended each year by our on-duty personnel.
 1. COULTERVILLE:
 - a. Coyote Howl
 - b. Greely Hill Breakfast
 - c. Coulterville Pancake breakfast
 - d. Ambulance Association Dinner
 2. HORNITOS:
 - a. Hornitos Enchilada Feed
 - b. Flea Market
 3. CATHEYS VALLEY:
 - a. Agri-nature trail
 - b. Coyote Springs Buck-n-Bash
 - c. Coyote Springs Western Carnival
 - d. Catheys Valley Elementary Fun Day
- d. Media

Media contact for Battalion 1 has traditionally been through the Unit's Prevention Bureau in the form of a press release or a direct phone call from the Mariposa Division Chief to the editor of the Mariposa Gazette in the event of a specialized training activity. Burn permits are required on May 1st of every year (PRC 4423 (b)). The on-duty Battalion Chief, with approval from the Mariposa Division Chief, may restrict burning hours, burning elevations, and burn pile sizes based on fire weather, fuel conditions, and predicted weather based on fire weather reports from the National Weather Service. These changes are communicated to the public through contact with media outlets determined by the Unit's Prevention Bureau.
5. Planning, Engineering & Structure Ignitability
 - a. The VMP (Vegetation Management Program) project work that was done in the past never was completed and it is my opinion that they may never get done due to CAL FIRE's cumbersome VMP process and the authority that has been given to the Air Pollution Control Districts. Past VMP projects, like the Adams 800 acre VMP, died on the vine due to a lack of resources and APCD issues. Currently there is hope for the long-awaited Greely Hill VMP. The BLM has funded the project and we are in the process of waiting for the EIR and burn plan to be approved so we can move forward with our hand crews to start the pile and burning process and to reestablish control lines. Over the past few years we have been maintaining the private portions of the project with Prop 40 dollars and agreements with private landowners on the perimeter of the project. This funding will allow for maintenance of part of the Ponderosa fuel break and a joint effort between CAL FIRE and BLM to get this completed. We are looking at burning this in the fall of 2012.
 - b. Public Resource Code 4291
 - i. Mailers-

The CAL FIRE Prevention Bureau mailed self inspection letters to residents in Mariposa County. They were asked to return these mailers to CAL FIRE headquarters when they had completed all tasks to make each residence "in compliance". When each of the battalion stations received the mailer from

headquarters, they would log the address as completed and “in compliance”. Mailers are used as first inspections completed by local owners. Residents of Mariposa County received these mailers by the first week of June.

ii. Inspection Process-

1. Each station within Battalion I starts weed abatement inspections during the month of June. These inspections were conducted by station personnel this year due to limited firefighter staffing eliminating the battalion LE-100 firefighter position. Every station’s company officer and crew drove to each residential structure and visually inspected and handed helpful information out to homeowners. If extra firefighters were available or overtime was authorized we would use these individuals to perform inspections within the 2010 target areas.
2. If a residence was “out of compliance” we would hand a written LE-100 form to the property owner stating each violation along with a second inspection date judging by the amount of work required to become compliant and/or fourteen days after first inspection. If the residents were not home during the inspection and were “out of compliance” station personnel would mail the LE-100 form to residence via certified mail to confirm reception of violations.
3. If during inspections a residence was “out of compliance” and the station had received a mailer, this would be counted as a second inspection. One copy would be given to home owner either in person or certified mail along with a copy to prevention to schedule a third inspection.

iii. Augmented LE-100 Firefighter-

1. The augmented Battalion 1 LE-100 firefighter was not used this year due to limited firefighter staffing within the battalion.
2. Planning with a designated LE-100 firefighter would have started in the Catheys Valley area first and worked toward Hornitos and then to the Don Pedro area. This firefighter’s goal was to provide each station with 100% of only first inspections; second inspections were to be completed by station personnel.

iv. Tracking of inspections-

Each of the three station assigned to Battalion 1 has different means of tracking residences and “compliant”/“out of compliance” structures. The Coulterville fire station uses a County APN listing to identify each property owner within Don Pedro, Coulterville and Greeley Hill. Along with roads and addresses, they have property owner names and mailing addresses if the owner is not presently living at the residence. After completing field inspections they enter all information into the same form and save it on the computer. Catheys Valley and Hornitos use a mapping system that has all residences and mailing addresses within their Initial Attack area.

c. Coulterville’s three target areas-

Coulterville station has three target areas which consist of: Don Pedro, Coulterville and Greeley Hill. When combined between the three are about 180 square mile of area to cover. In the year on 2010 Don Pedro will be the main target area. In 2011 the main target area will be moved to the Coulterville area, and in 2012 the target area will be Greeley Hill. Each of these three target areas will be 100% completed, rotating every year.

d. Fire Safe Council-

The Fire Safe Council is a non-profit 501C3 program which is funded by grants through the state and federal governments to provide weed abatement assistance to disabled, elderly, or low-income families. Throughout the communities of Coulterville, Greeley Hill, Don Pedro, Hornitos, and Catheys Valley approximately 120 people have been helped by the Fire Safe Council program, removing and clearing property to the LE-100 guidelines. About 50 people have called the Fire Safe Council to have trees trimmed, brush removed, or requested a chipper to mitigate larger fuel piles they have cleared but are unable to dispose of.

e. Fire Roads Battalion 1 Fire Road System

- i. Over the last 10 years in Battalion 1 we have been successful in reestablishing fire roads. We have striven to maintain both the roads and the trust and commitment from the private landowners and federal government agencies. This

has been a long process that has been successful due to the fact that equipment and personnel were re-committed to fire road improvements after the "49" fire in 1999 and once again on the "Telegraph" fire of 2008. Re-contacting landowners along the "Buckhorn" and other fire roads and providing road maintenance have provided an enormous safety and operational benefit during fire suppression attempts. This year we will attempt to expand this type of effort and continue to regain the upper hand on fire road improvement. With the development of the "Old Highway" fire road project, the Battalion has tied the Guadalupe Ridge Road to the old highway in the Catheys Valley area. In the past this type of fire road development has not received the type of support needed for completion. We are hoping for a positive change in this thought process by putting motivated personnel in our Pre-Suppression position.

- ii. Listed below and supported with topographical maps are the fire roads and their current status that run through Battalion 1.
 - iii. Buckhorn Fire Road verbal agreements have been secured with surrounding landowners to allow for annual maintenance. The A-19 will be updated with the new A-719 as soon as it is available. FC32 documentation for crew work has been completed. This is a critical fire road within the Battalion and this need to get done. It is 9.5 miles in length .See attached map.
 - iv. Crown Lead Fire Road - Because it is has not been properly maintained in years, Crown Lead Fire Road is a CAL FIRE road in dire need of maintenance. It is 4 miles in length. See attached map.
 - v. Van Ness Fire Road - It runs from the end of Cornetts entrance to White Rock Road. Currently the Catheys Valley "RAWS" station is located at the McGonigle Ranch on this fire road of 7 miles in length. See attached map.
 - vi. Tim Brush Fire Road - Annual maintenance for this road is provided by CAL FIRE. It is 4.5 miles in length. Currently we can only maintain on the ridge of this fire road due to the BLM installing a non-opening gate before the fire road runs into wild and scenic habitat. Severe maintenance is needed on the downhill switchback that runs to the North Fork drainage. See attached map.
 - vii. Black Mountain Fire Road - Annual maintenance of this road is provided by CAL FIRE. Road is 4.25 in length. Currently working on a solution to repair the uphill grade, 1.0 mile east of the North Fork of the Merced River, which was washed out the winter after the Telegraph fire. See attached map.
 - viii. Hunters Valley Access Road - Annual maintenance is provided by CAL FIRE. Road is 1.0 miles in length. This fire road received maintenance in 2008 and has held up nicely but continued maintenance is required.
 - ix. Peno Blanco Lookout Road - This road runs from Highway 49 to Granite Springs Road. It provides access to the Peno Blanco lookout and because of its location seconds as a fire road. It is a CAL FIRE maintained road. See attached map.
- f. Fuel Reduction
- i. SWIFT fuel reduction projects in Battalion 1 have been a cooperative effort through state, federal, and local stakeholders. These stakeholders developed a group called SWIFT (SouthWest InterFace Team). SWIFT meets once a month to give updates, progress, and come up with new fuel reduction projects that will create a strategic fire defense system designed to reduce the loss of life, property, and the severity of major fires in the northern section of Mariposa County, the southern section of Tuolumne County, the US Forest Service lands, Bureau of Land Management lands, and National Park Service lands.
 - ii. Local stakeholders include Mariposa County Fire Department, Tuolumne County Fire Department, Groveland Fire Department, Tuolumne County RCD, District, Mariposa Fire Safe Council, Yosemite Foothills Fire Safe Council, Pine Mountain Lake Association, and Hetch Hetchy Water and Power.
 - iii. Currently there are three major shaded fuel break projects, three road corridor hazard reduction treatments, two direct residential area fire protection actions, two forest health and fuel reduction projects, two VMP projects, and a strategic water system support project.

6. Fire Prevention

Reducing Ignition

- a. The purpose of this document is to identify how Battalion 1 educates the public in preventing unwanted fire, how to safely use fire to reduce unwanted fuels in the Wildland Urban Interface, large scale fuel reduction projects, fire road maintenance for access to unpopulated areas, and how unwanted ignitions can be reduced. As the reader examines the ignition statistics it is important to note that the majority of ignitions in the Battalion are related to debris burning, equipment use, and vehicles.
- b. The goal of the battalion is to work through the Unit's Prevention Bureau to address strategies that will reduce these unwanted ignitions. Strategies may include public education by working with local merchants who sell weed- and grass-cutting machines. This should include pamphlets located in their stores that address mowing times, conditions, and maintenance, including spark arresters, to insure a fire safe process to reduce residential fuels.
- c. Debris fires are generally a matter of carelessness on the homeowner's part. Burning permits are issued and the terms of the permit are not only stated on the permit but are reiterated when the public comes to a CAL FIRE station for a permit. Stressing the importance of common sense goes a long way, especially when several unwanted ignitions came from the dumping of fireplace and woodstove ashes. While incinerators (burn barrels) have been banned for almost a decade, there still needs to be a renewed educational process regarding the ban on incinerators.
- d. To reduce unwanted ignitions by vehicles in Battalion 1 an aggressive road corridor hazard reduction treatment needs to happen along the south side of Highway 140 from the Mariposa-Merced County line east to the Lasgoity Ranch. Cooperation from landowners to disk their property adjacent to Hwy 140, cooperation from the Mariposa County Health Department, cooperation from CAL TRANS and CHP could make this possible, thereby creating a defensible fuel break which would benefit landowners, reduce the risk of traffic accidents when a significant fire starts along this corridor, and significantly reduce vehicle caused ignitions.

Battalion 2: Battalion Fire Management Plan

Battalion Overview:

1. Battalion 2 stretches through the upper portion of Mariposa County with State Highway 49 and 140 intersecting in the town of Mariposa. The communities of Mariposa, Bootjack, Lushmeadows, Ponderosa Basin, Midpines, Mount Bullion and Mormon Bar are within this Battalion. The most populated areas are the communities located on the Highway 49 corridor. The areas of Mariposa, Bootjack, Lushmeadows, Midpines and Ponderosa Basin have grown in recent years with new residential construction. This rate of development created numerous areas in the Battalion that have a high potential for rapid fire spread and loss of structures.

Areas in Battalion 2 that have communities at risk include Ponderosa Basin, the Woodland area, Bootjack area, the Midpines area and the Mariposa area. The influencing factors involved housing density, timber, fire history, range, and fuel hazard ratings. Most of the Unit's large, damaging fires have originated within these areas. The fires that start in these areas immediately threaten high value/high-risk exposures. The historic ignitions are difficult to manage; therefore, the emphasis of efforts will involve fuel management activities and protection of asset exposures.



2. Goals & Objective statement:
 - a. Support the Mariposa Fire Safe Council on current and future fuel treatment projects and public outreach.
 - b. Complete current projects and identify future targets.

- c. Maintain an aggressive LE-100 program within target areas.
 - d. Support local and Unit fire prevention activities.
 - e. Accomplish the objectives
 - f. Designate personnel to provide winter time support for ongoing fuels treatment projects being conducted within the battalion.
 - g. Educate the community within the battalion on proper fire hazard reduction through face-to-face contact during annual LE-100 inspections.
 - h. Participate with local stakeholders in annual community public education events.
 - i. Provide monthly statistics to fire prevention on activities.
3. Measurement
- The methods used to accomplish our goal will consist of public education, prescribed fire projects, mechanical fuel reduction and modification, range improvement, fire road maintenance, and always an aggressive LE-100 inspection program. The fire station managers will again be the catalyst to carry forth and complete many of the programs. Fire Prevention and Pre-Fire Suppression staff will again be called upon to assist in this year's program.
4. Information & Education
- a. Both Mariposa and Usona Stations participated, along with the Unit's Prevention staff and V.I.P.s, in our Team Teaching venture at local schools and special events within the community such as the Mariposa County Fair and the Butterfly Parade.
 - b. TEAM TEACHING: Our Team Teaching was conducted alongside the Fire Prevention Specialist and V.I.P.s. Most of the Team Teaching occurred at local elementary schools and preschools. The events drew participation from the Mariposa Station, Usona Station and the United States Forest Service. The program's message focuses on kids not playing with matches, Stop drop and roll, and Stay low and Stay out.
 - c. Static display: During the Mariposa County Fair, engine crews from the Mariposa Division rotated into the Unit's prevention booth to assist with delivering the message to the public about the need for 100 feet of clearance around all structures as well as public awareness of CAL FIRE's role as an all risk department.
5. Planning, Engineering & Structure Ignitability
- LE-100 Program
- a. The LE-100 Program in Battalion Two is quite extensive due to the population density that resides in or around the town of Mariposa, along the Highway 49 South corridor toward the Madera County line, and along Highway 49 North toward the Merced River. Due to the sheer number of structures, each response area is divided into three inspection zones. Both Mariposa and Usona Stations conduct inspections within one zone each year, as depicted in the Battalion Two LE-100 Priority Area map. See attachment.
 - b. The Battalion averages 2,700 inspections, yielding an average of 4,700 structures. One address is considered a single inspection, but the inspection site could have multiple structures such as the residence, detached garages, sheds, barns and pump houses. A detailed inspection matrix is included in the LE-100 section of this report.
 - Inspections were also conducted by the U.S. Forest Service in their Direct Protection Area (DPA) of State land. Attached guidelines illustrate the inspection process for U.S. Forest Service personnel along with the Battalion Two's guidelines.

The LE-100 program continues to bring to light the need for defensible space to the public, specifically in the wake of the Telegraph Fire, where 30 dwellings and 100 outbuildings were destroyed. A common response from the public during LE-100 inspections was, "After the Telegraph fire, I need to get on this..." with respect to cleaning up their property.
 - c. Projects
 - a. There are no prescribed burns being pursued. However, fire road maintenance is progressing with the near completion of the Stumpfield/Watt Road project in the Usona response area. A summary of the fire road projects will be mentioned later in this document.
 - b. Stumpfield Road Fuel Break

- i. A 6 mile long, 300 feet wide, shaded fuel break along Stumpfield Mountain Road South of Mariposa adjacent to the Chowchilla River Drainage.
- ii. Facilitated by the Mariposa Fire Safe Council through funding from Prop 40 Community Action Grant.
- iii. Environmental Compliance review was conducted in spring 2007 and 2008.
- iv. Project was started during spring of 2008 with mastication equipment working in specific areas that were considered suitable for mechanized equipment.

- v. Private hand crews were used to identify and create buffers around endangered elderberry bushes. These crews also achieved fuel reduction in the sensitive riparian areas.



- vi. Project was temporarily stopped due to a Proposition 40 funding freeze by the State of California.
- vii. Funding Restored fall of 2009.
- viii. Project restarted October 2009 using Cal Fire CDC hand crews.

c. Watt Road Fuel Break

- i. A 1.5 mile long, 300 feet wide, shaded fuel break along Watt Road South of Mariposa and East of the Stumpfield Mountain Road fuels treatment area, adjacent to the Chowchilla River Drainage.
- ii. Facilitated by the Mariposa Fire Safe Council through funding by Prop 40 Community Action Grant. Environmental Compliance review was conducted in spring 2007 and 2008.
- iii. Project was started during spring of 2008 with mastication equipment working in specific areas that were considered suitable for mechanized equipment.
- iv. Private hand crews were used to identify and create buffers around endangered elderberry bushes. These crews also achieved fuel reduction in the sensitive riparian areas.
- v. Project was temporarily stopped due to a Proposition 40 funding freeze by the State of California.
- vi. Funding Restored fall of 2009.
- vii. Project restarted October 2009 using Cal Fire CDC hand crews.

d. Lushmeadows Fuel Break

- i. A 5 mile long, 300 feet wide, shaded fuel break starting at Clouds Rest area of the Lushmeadows Subdivision following the ridge line and ending at Tip Top Road and Highway 49. The project will protect the communities of Lushmeadows, Usona, and Ponderosa Basin.
- ii. Facilitated by the Mariposa Fire Safe Council through funding by Prop 40 Community Action Grant. Environmental Compliance review is being conducted in fall of 2009.
- iii. Project will begin during spring of 2010 with mastication equipment working in specific areas that were considered suitable for mechanized equipment.
- iv. Cal Fire CDC hand crews will be utilized to establish the 300 foot shaded fuel break in areas unsuitable for mastication equipment. These crews will establish the desired fuel reduction in the sensitive riparian areas and in steep terrain.

e. Grist Fire Road

- i. Improvement of existing fire road that runs 2.5 miles along Grist Road, south of Mariposa.
 - ii. Facilitated by local property owners working in conjunction with battalion personnel and Cal Fire Sacramento.
 - iii. Project is approximately 60% complete with additional crew days needed.
 - iv. Project work is ongoing.
 - f. Mount Ophir Fuels Reduction Project
 - i. 1300 acres near Old Toll Road and Hwy. 49 North, northwest of Mariposa.
 - ii. Fuels reduction will be accomplished through mechanized equipment and hand crew work.
 - iii. Cal Fire MMU hand crews and engine crews, under the permission of the property owner, have been utilizing this property for a training area and have contributed to the fuels being reduced within the area.
 - iv. Project work is ongoing.
 - g. Colorado Road Fuel Break
 - i. Mariposa Fire Safe Council Project
 - ii. A 300 foot wide shaded fuel break along Colorado Road between Hwy. 140 and Whitlock Road.
 - iii. Treatment types will include mechanical mastication, hand brushing and tree limbing.
 - iv. Fuels reduction to be accomplished through the use of mechanized equipment, hand crews and winter time pile burning.
 - v. This project would protect residents along Colorado Road, Rancheria Creek Road, and Davis Road.
 - vi. Awaiting a funding source.
 - h. Dubberke Fuel Reduction Project
 - i. A proposed fuel break on the east side of the town of Mariposa starting at the Stockton Creek Watershed running north to Highway 140.
 - ii. Treatment types will include mechanical mastication, hand brushing and tree limbing.
 - iii. Fuels reduction to be accomplished through the use of mechanized equipment, hand crews and winter time pile burning.
 - iv. In the conceptual phase at this time.
 - i. Feliciana Strategic Fuel Treatment
 - i. A proposed fuels break from U.S. Forest Service fuel break on Feliciana Mountain to Highway 140 at Bear Creek Bridge.
 - ii. Treatment types will include mechanical mastication, hand brushing, and tree limbing.
 - iii. Fuels reduction to be accomplished through the use of mechanized equipment, hand crews, and winter time pile burning.
 - iv. The project would protect the east side of Midpines from a fire that is coming up out of the Merced River Canyon and/or Bear Creek drainage.
 - v. Property ownership is almost entirely Bureau of Land Management.
 - vi. Mariposa Fire Safe Council Project
 - vii. Contingent on funding with a Sierra Nevada Conservancy Grant (\$200,000)
 - j. Fish Camp Strategic Fuel Reduction Project
 - i. A proposed fuels reduction project to include State Responsibility Area in and around the community of Fish Camp in Mariposa County.
 - ii. Treatment types will include mechanical mastication, hand brushing, and tree limbing.
 - iii. Fuels reduction to be accomplished through the use of mechanized equipment, hand crews, and winter time pile burning.
 - iv. Use of California Forest Improvement Project (CFIP) funding on parcels meeting requirements.
 - v. In the conceptual phase at this time.
 - k. Mariposa Fuel Reduction Project
 - i. A proposed fuel break on the west side of the town of Mariposa starting at Highway 140 running north to Highway 49. (Phase 1).
 - ii. A proposed fuel break on the north side of the town of Mariposa starting at Highway 49 running east to Highway 140. (Phase 2).

- iii. Treatment types will include mechanical mastication, hand brushing, and tree limbing.
- iv. Fuels reduction to be accomplished through the use of mechanized equipment, hand crews, and winter time pile burning.
- v. In the conceptual phase at this time.
- I. Midpines / Mt. Bullion Fuel Break
 - i. A 400-500 acre proposed shaded fuel break to follow a path of ridge tops and established fire line from Midpines to Mt. Bullion.
 - ii. Will use fire control and contingency fire lines that were utilized during the Telegraph Fire and were found to be strategically appropriate.
 - iii. Treatment types will include mechanical mastication, hand brushing, and tree limbing.
 - iv. Fuels reduction to be accomplished through the usage of mechanized equipment, hand crews, and winter time pile burning.
 - v. In the conceptual phase at this time.
- m. Midpines Interior Strategic Fuel Reduction Project
 - i. A proposed fuels reduction project bounded by Colorado Road, Rumley Mine Road, Telegraph Road, Sherlock Road, East Whitlock Road, and Highway 140.
 - ii. Treatment types will include mechanical mastication, hand brushing, and tree limbing.
 - iii. Fuels reduction to be accomplished through the use of mechanized equipment, hand crews, and winter time pile burning.
 - iv. Use of California Forest Improvement Project (CFIP) funding on parcels meeting requirements.
 - v. Use of Fuel Hazard Reduction Emergency funding on parcels meeting requirements.
 - vi. In the conceptual phase at this time.
- n. Silver Bar Fuel Break
 - i. A 120 acre proposed shaded fuel break to follow Silver Bar Road in Mariposa County.
 - ii. Treatment types will include mechanical mastication, hand brushing, and tree limbing.
 - iii. Fuels reduction to be accomplished through the use of mechanized equipment, hand crews, and winter time pile burning.
 - iv. In the conceptual phase at this time.
- o. Vanderau VMP
 - i. A fuels reduction project on 180 acres of a 429 acre parcel located northeast of Mariposa, adjacent to the Stockton Creek Watershed area. This area had a high dead to live fuel ratio present due to chemical treatment from property owner.
 - ii. Fuels reduction completed through mechanized equipment, crew brush clearance, and pile burning.
- p. Wood for Seniors Program established.
- q. Long VMP
 - i. A 4000 acre ranch southwest of Mariposa adjacent to the Stockton Creek Drainage.
 - ii. Several VMP burns have been conducted over the years with the last one in 2004.
- r. Stockton Creek Fuels Reduction
 - i. Several acres of brush clearing and piling along the Stockton Creek Watershed north and east of Mariposa.
 - ii. Project was facilitated by the Mariposa Resource Conservation District (RCD) for \$300,000.
 - iii. Project was completed in 2003 and is in need of maintenance.
- s. Basin VMP
 - i. A 400 acre fuels reduction project in Ponderosa Basin Subdivision south of Mariposa.
 - ii. Fuels reduction was accomplished through crew brush clearance/pile burning.
 - iii. Project was completed in 2003 and is in need of maintenance.

- t. Ponderosa Basin Strategic Fuel Treatment
 - i. A 300 foot shaded fuel break approximately 1 ¼ miles long.
 - ii. Total treatment area is 105 acres.
 - iii. The treatment will be along a strategic ridge line adjacent to the community of Ponderosa Basin.
 - iv. Fuel Break ties in with Cal Fire's Ponderosa Basin VMP and U.S Forest Service Sunny Meadows Project.
 - v. Treatment types will include mechanical mastication, hand brushing, and tree limbing.
 - vi. The Mariposa County Fire Safe Council facilitated work through a 2008 U.S. Forest Service grant of \$131,670.
 - vii. Completed 2009
- u. Guadalupe Fire Road
 - i. A shaded fuel break following Guadalupe Fire Road
 - ii. The treatment is along the strategic ridge line of Guadalupe Mountain. Needs Maintenance.

6. Fire Prevention

Fire cause analysis – To reduce ignitions within the battalion we are working with the public through education programs to keep them informed on the potential causes of fire and working with our stakeholders to complete, improve, and start shaded fuel break projects. We will also continue to conduct LE-100 inspections in the communities most threatened by wildfire.

Battalion 4: Battalion Fire Management Plan

Battalion Overview:

1. The 2011 fire season was relatively quiet in Battalion 4. Above normal rainfall levels resulted in relatively high live fuel moistures. The mild summer had the result of the fuels never having the opportunity to dry out to sustain extreme burning characteristics. In contrast, below normal winter (2011/2012) precipitation resulted in several SRA fires during the winter preparedness period. More acres were burned in the winter period than the previous fire season. The below normal precipitation compounded by the snow in lower elevations and blow down damage to the fuels from this winter and previous winter's storms created a considerable fire hazard. The March 21st 2011 snow storm damaged a significant number of trees in the Oakhurst and surrounding areas. The damage primarily affected the large oak trees that were not able to accommodate 14" of snowfall in a few, short hours. Nearly 100% of the properties in the Oakhurst Basin, and Ahwahnee community lost trees in this storm.

<http://www.youtube.com/watch?v=NdXcac94VF0>

<http://abclocal.go.com/kfsn/story?section=news/local&id=8025858>

The November 30th 2011 and December 3rd 2011 wind events resulted in a significant 'blow down' of oak and large pine trees. The wind events were more widespread than the earlier snowstorm, but it resulted in additional significant damage in the Oakhurst and Ahwahnee communities.

<http://abclocal.go.com/kfsn/story?section=news/local&id=8453138>

LE-100 inspections have showed that many properties had not cleared their downed trees. Many homeowners struggled to open up their access roads to achieve 100' clearance around their homes and structures. Due to reductions in personnel (3 person staffing), the LE-100 inspections were only able to inspect a small fraction of the residences in the Oakhurst/Ahwahnee communities. The homes which were inspected still show a large fuel loading of downed trees. Many of these trees have been on the ground since March of 2011.

2. Goals & Objectives

- a. Goal Statement: The goal of the Battalion Prevention Plan is to prevent unwanted wildfire within the battalion boundaries. With dedicated and committed battalion employees,

Prevention Bureau staff, and Pre-Suppression staff, this prevention plan will be the leading document that supports our Unit Fire Plan and a model for the protection and safety of the citizens of Battalion Four and the communities it serves.

- b. Objective Statement: Communities at risk in Battalion Four include the areas of Oakhurst, Nipinnawasee, Ahwahnee, Bass Lake and Raymond. The influencing factors involved in identifying fuel reduction projects include: fire history, housing density, fuel hazard, timber values and range. Fire ignitions have traditionally, not been a problem in these areas. However, these areas are directly threatened by fires starting in the Chowchilla and Fresno River drainages. Past fires that have threatened or in one case destroyed these communities include the Harlow Fire and the Stumpfield Fire. The Harlow Fire devastated the area in 1961. The Stumpfield Fire in 1996 was almost a repeat of the Harlow Fire, but fortunately was stopped in the Chowchilla River drainage by an aggressive firefighting effort.

Additional communities at risk in Battalion four include Cedar Valley, the John West Road area, and Sugar Pine. These areas were identified as having significant asset values with medium and high fuel hazard ranks. Fire prevention efforts will emphasize structure clearance and fuel management to mitigate the wildfire hazard in the area.

3. Measurement

- a. Priorities for Fire Management plan will include:
 - i. Support the Eastern Madera Fire Safe Council with current and future fuel treatment projects.
 - ii. Educate the public on fire safety and hazard reduction.
 - iii. Implement an aggressive LE-100 inspection program.
 - iv. Support Unit and local fire prevention activities.
 - v. Establish a pre-suppression plan for fire in the Chowchilla and Fresno River Drainages using the MMU Structure Defense and Evacuation Plan model.

4. Information & Education, School Programs, Prevention Signs, Public Events, & Media Events. Battalion personnel actively participate in Information & Education, School Programs, Public and Media Events. Fire Prevention signs are in place at each facility and in high visibility locations.

5. Planning, Engineering & Structure Ignitability

- a. VMP – No VMPs are currently planned in Battalion Four.
- b. PRC 4209/4291
- c. Fire Roads
- d. Listed below are the fire roads and their current status for Battalion Four.
 - i. Potter Ridge Fire Rd. - Verbal agreements have been secured with surrounding landowners to allow for annual maintenance. This road was graded by CAL FIRE in the winter of 2011 and is in good condition. An FC32 for crew work has been completed for clearing overgrown sections of the road. This road parallels and is encompassed by the Potter Ridge fuel break in several areas.
 - ii. Metcalf Gap Fire Rd - This road is in need of maintenance and brush clearing. It ties into Bat 2 – Watt Rd fuel break in the Chowchilla River Canyon. An FC32 for crew work has been completed for clearing overgrown sections of the road. This is a critical road for access into the Chowchilla River Canyon.
 - iii. Shannon Fire Rd. – The Raymond Granite Quarry has purchased the majority of the Shannon Fire Rd, and they have maintained this road and the surrounding roads at a very high level. CAL FIRE locks are no longer on any of the gates, but quarry personnel are available to allow access. The shallow water crossing at the Fresno River (near Rd 400) is largely impassable to fire equipment.
 - iv. Old Dupzik Fire Rd. – This road has not been maintained in the last 15 – 20 years and the agreements with the property owners have been allowed to lapse. This road runs between Rd 600 (Leland Gulch) and Rd 415 (Wells Rd). The Old Dupzik Fire Rd is the only access to the Fresno River Drainage west of Deadwood Mountain and south of the community of Ahwahnee.
- e. Fuel Reduction
 - i. Mudge Ranch (Road 420) Fuel Break & Fresno Flats (East of Hwy 41)

1. A three mile long, 300' wide shaded fuel break south of Oakhurst.
2. Facilitated by the Eastern Madera County Fire Safe Council through funding by the United States Forest Service, (USFS).
- ii. Road 620 Phase 1 Fuel Break (Roundhouse 1 & 2)
 1. A seven mile long, 300' wide shaded fuel break northeast of Ahwahnee.
 2. Facilitated by the Eastern Madera County Fire Safe Council through funding by Prop-40 Community Action Grant, (CAG).
- iii. New Road 620 Phase 2 Fuel Break (Old Nip)

1. A three mile long, 300' wide shaded fuel break north of Ahwahnee.
2. Project starts at the intersection of Road 620 & Road 628 and ends at Worman Road and Highway 49.
3. Facilitated by the Eastern Madera County Fire Safe Council and funded by Prop-40 Community Action Grant (CAG).



- iv. Road 620 Phase 3 Fuel Break
 1. A proposed fuel break to allow for fuel breaks from Road 620 Bissett Station Rd south along the Miami Creek and Carter Creek drainages.
 2. Currently these drainages do not have accessible control points for fires coming from the Chowchilla or Fresno River drainages (Harlow Fire burn pattern).
 3. Fuels reduction to be accomplished through the use of mechanized equipment, hand crews and winter time pile burning.

- v. John West Rd (Badger Gap) Fuel Break
 1. This fuel break and fuel thinning covers the road network off of John West Rd in the Oakhurst area. The area sits in drainage above the Oakhurst basin and has a single access road that is overgrown with



- vegetation.
2. Treatment types have included mechanical mastication, hand brushing and tree limbing.
3. Fuels reduction has been accomplished through the use of mechanized equipment, hand crews and winter time pile burning.
- vi. Hwy 41 Deadwood Summit Fuel Break

1. A proposed fuels reduction project to allow for fire safe clearance along the CalTrans right-of-way north of the Deadwood summit into the town of Oakhurst.
 2. Hwy 41 in this area is an overgrown midslope road that represents the primary ingress and egress thoroughfare for eastern Madera County.
 3. Fuels reduction to be accomplished through the use of mechanized equipment, hand crews and winter time pile burning or chipping
 4. Coordination with CalTrans as a project sponsor and traffic control will be essential.
 5. It will be necessary to limit the impact to traffic along this busy thoroughfare.
- vii. Fresno River – Oakhurst town site
1. The Fresno River in Oakhurst proper is overgrown and is a continuous fuel bed along the banks of the river.
 2. Fuels reduction to be accomplished through the use of mechanized equipment, hand crews and winter time pile burning.
 3. In the conceptual phase at this time.
 4. Project sponsor is being sought for this project
- viii. Sugar Pine Strategic Fuel Reduction Project
1. A proposed fuels reduction project to include State Responsibility Area (SRA) in and around the community of Sugar Pine in Madera County.
 2. Treatment types will include mechanical mastication, hand brushing and tree limbing.
 3. Fuels reduction to be accomplished through the use of mechanized equipment, hand crews and winter time pile burning.
 4. Use of California Forest Improvement Project (CFIP) funding on parcels meeting requirements.
- ix. Bass Lake Interior Strategic Fuel Reduction Project
1. A proposed fuels reduction project bounded by Road 274 (Crane Valley Road) and the Bass Lake shoreline.
 2. Treatment types will include mechanical mastication, hand brushing and tree limbing.
 3. Fuels reduction to be accomplished through the use of mechanized equipment, hand crews and winter time pile burning.
 4. Use of California Forest Improvement Project (CFIP) funding on parcels meeting requirements.
 5. Use of Fuel Hazard Reduction Emergency funding on parcels meeting requirements.
- x. Cedar Valley Fuel Reduction Project
1. Eastern Madera County Fire Safe Council Project
 2. A 300 foot wide shaded fuel break along Cedar Valley Road.
 3. A 300 foot shaded fuel break located strategically around the community of Cedar Valley.
 4. The fuel breaks is on State Responsibility Area (SRA) and enhance existing U.S. Forest Service fuel reduction projects in the Cedar Valley area.
 5. Treatment types include mechanical mastication, hand brushing and tree limbing.
- xi. Crook's Mountain Fuel Break
1. A twelve mile long, 300' wide shaded fuel break northwest of Oakhurst, (See Figure_).
 2. Facilitated by the Eastern Madera County Fire Safe Council through Prop-40 Community Action Grant Funds.
- xii. Massetti Range Improvement (RI) Burns
1. A series of eight (8) RI burns starting in the mid 1990s through 2007.
 2. Area southwest of the town of Oakhurst, (See Figure_).
 3. Funded through Prop-40 California Forest Improvement Program (CFIP).
- xiii. VIP/Cooperators/Stakeholders
Fire Safe Council

The Eastern Madera County Fire Safe Council has been very successful in securing grant dollars and following through with well

thought out, effective fuel breaks and thinning projects. A strong cooperative relationship exists with the Eastern Madera County Fire Safe Council, Firewise Community personnel, and CAL FIRE. Efforts between the groups and CAL FIRE are coordinated and mutually supportive.

6. Fire Prevention

Fire cause analysis – To reduce ignitions within the battalion we are working with the public through education programs to keep them informed on the potential causes of fire and working with our stakeholders to complete, improve, and start shaded fuel break projects. We will also continue to conduct LE-100 inspections in the communities most threatened by wildfire.

Battalion 5: Battalion Fire Management Plan

Battalion Overview:

1. Battalion 5 is located on the south side of Madera County bordering Fresno County to the south, Sierra National Forest to the east, the valley floor of Madera County to the west and Battalion 4 to the north. Battalion 5 fuel models transition from annual grasslands, oak woodland with annual grass, brush, and conifers. There are 3 lakes provide year round recreational activities - Hensley, Millerton, and Bass Lake. There are also several main travel routes through Battalion 5 -Highway 41 (south entrance to Yosemite), Road 200 and Road 400 which contributes to vehicle related wildland fires. The Chukchansi Gold Resort and Casino is located in the center of Battalion 5.

Like other battalion's in the Unit there exists a significant Wildland-Urban Interface problem within the Battalion. There are several large, well populated subdivisions that are at risk to large catastrophic fires. These areas include Coarsegold, O'Neal's, North Fork, Cascadel Woods, Bass Lake Annex, Yosemite Lakes Park, Quartz Mountain, Indian Lakes and Hidden Lakes Estates.



There are two CAL FIRE stations within the battalion. Coarsegold station staffs one engine during transition times and two engines during peak season staffing. A bulldozer is staffed year round with winter maintenance being done to all Madera Division CAL FIRE equipment. Rancheria station is staffed with one engine year round under an Amador contract with Madera County. During peak season staffing a second engine is also staffed. There is one staffed Madera County station in Indian Lakes which is the primary protection to the Chukchansi Casino. The station is staffed with 2 personnel who cross staff between a type 2 engine and a 75' Quint. There are also Madera County volunteer stations in North Fork, O'Neals, Yosemite Lakes Park, and Coarsegold which provide rescue squads, type 3, type 2 engines and water tenders.

The two main fire roads in Battalion 5 that connect State Highway 41 to Madera County Road 200 are the Waterloo Fire Road and the Quartz Mountain Fire Road. Unfortunately they have not been maintained for at least 10 years. With the development of the Indian Lakes subdivision, the Chukchansi Casino, and the Flying "O" subdivision, these fire roads have become a critical



holding point for fires that originate out of these three structurally dense areas. In 2005, the 550 acre Quartz Fire was the latest fire to threaten these communities. The need to reduce fuels on the ridge top behind Indian Lakes and the Flying "O" subdivisions are a high priority. Local land owners have taken some steps to reduce this fuel, but

a wildland fire that burns out of the Indian Lakes subdivision will need to be held to the West by State Highway 41, to the north and east by the Waterloo Fire Road, and the south by the Quartz Mountain Fire Road. The last place to stop a wild land fire before it burns to Thornberry Ridge, the Church Ranch, and Sierra Highlands subdivision, will be the Waterloo Fire Road. At that point Madera County Road 223 will be the next holding road to the east, and it has a much higher residential population. Madera County Road 420 (Thornberry Road) will be the next holding road to the north. The Eastern Madera County Fire Safe Council has received grant funding for both the Cascadel Woods Fuel Reduction and the Quartz Mountain Fuel Reduction projects. These two projects will help protect the communities of Cascadel Woods, Quartz Mountain and Indian Lakes.

2. Goals & Objective statement:

- a. Support the Eastern Madera County Fire Safe Council (EMCFSC), the Coarsegold Resource Conservation District (CRCD) with current and future fuel management projects.
- b. Facilitate fuel reduction projects that will widen and open up roads that affect ingress and egress for both the public and emergency equipment.
- c. Educate the public on fire safety and hazard reduction.
- d. Implement an aggressive LE-100 inspection program
- e. Support Unit and local fire prevention activities.

3. Measurement:

Designate personnel to provide winter-time support for ongoing fuel management projects being conducted within the Battalion.

4. Public Education

Battalion 5 will be working to educate the public through several avenues. Each station will be expected to attend community and public meeting in their areas to educate the public on fire safety and regulations. A key element of education is through the LE-100 inspection program where personnel have the opportunity to meet citizens and point out ways to improve hazard reduction on their property. Each station will work with the Unit Fire Prevention Bureau to request education materials are available at all stations of Battalion 5. This will provide for the ability of station and on duty personnel to participate in public events to promote fire education and safety. The stations will also provide the needed monthly stats to Fire Prevention for public education tracking. Battalion 5 will evaluate the location and types of fire prevention signs posted to ensure they are located in visible locations, they are rotated often enough for the public to notice, and that they are of quality for the public to easily read and understand the message being presented.

5. Planning, Engineering & Structure Ignitability

a. Heavy Forestry Equipment Operations Training

The VMP Coordinator gets into contact with landowners who control strategically significant land and coordinates a mutually beneficial brush removal. The land placed under contact is primarily owned by cattle ranchers desiring to convert their brush covered lands to grazing lands. To enhance the effectiveness of this project CAL FIRE burns the resulting piles and the ranchers seed the treated land each fall. This provides a mutual benefit to the ranchers, in the form of additional/improved grazing land, and the Department, in the form of trained and tested operators. A collateral benefit to CAL FIRE is significant fuels reduction within the training areas which are located primarily in Madera County.

b. Cascadel Woods Fuel Reduction / Shaded Fuel Break

This is an Eastern Madera County Fire Safe Council Project. Phase 1 – Reduce fuel loading on 160 acres located strategically around the community of Cascadel Woods. Phase 2 – Install and maintain a 300 foot shaded fuel break on Cascadel Road (Madera County Road 233) from the Mammoth Pool Road (Madera County Road 225) to the community of Cascadel Woods. This fuel break will be on State Responsibility Area



(SRA) and enhance existing United States Forest Service fuel reduction projects in the Cascadel Woods area. Fuel treatments will include mechanical mastication, hand brushing and tree limbing. Fuel reduction will be accomplished through mechanized equipment, hand crews, and winter time pile burning. Environmental Compliance review was conducted in the fall of 2009.

c. Quartz Mountain Fuel Break

A nine mile long, 300 foot wide shaded fuel break below Pacific, Gas and Electric (PG&E) high voltage power lines was completed in 2010. The project has increased the previous 90 foot wide fuel break to a 300 foot wide fuel break. Project starts west of the Indian Lakes Subdivision and ends at State Highway 41 and the Deadwood Fuel Break. This project was facilitated by the Eastern Madera County Fire Safe Council and funded by a Prop 40 Community Action Grant.

d. Waterloo Fire Road

The Waterloo Fire Road (Veater Ranch Road) is paved from State Highway 41 to the Veater Ranch. Once you pass the Veater Ranch, the road changes to Arena Way and runs across the top of the ridge on the east side of the Indian Lakes Subdivision. The Waterloo Fire Road takes off of Arena Way and goes into the north fork of Fine Gold Creek before going midslope on the north side. It crosses the north fork of Fine Gold Creek again on the south end of the Veater Ranch. Fuel treatments can include hand brushing and tree limbing. Agreements need to be updated with current property owners to ensure access to CAL FIRE resources.

e. CAL FIRE Fire Road 20 and CAL FIRE Fire Road 21 (AKA Fish Creek Fire Road)

f. CAL FIRE Fire Road 20 and CAL FIRE Fire Road 21 (AKA Fish Creek Fire Road)

Were established to contain a fire that comes out of the San Joaquin River drainage and threatens the town of North Fork, the residents of Leisure Acres, and the many homes that sit on the south side of Madera County Road 200. Historically these two fire roads ran through large ranches and were maintained annually. Today these fire roads have either grown over, been abandoned, or are on smaller parcels that belong to several different landowners. Work needs to be done to obtain landowner support for the projects. Fuel reduction will be accomplished through the use of mechanized equipment, hand crews, and winter time pile burning. CAL FIRE engine crews, hand crews, and dozers (where applicable) will be utilized to reduce fuels along the fire road. This project will require funding for gates, culverts, and gravel. CAL FIRE dozer, backhoe, dump trucks, and graders will be utilized to repair and maintain the fire roads. Environmental Compliance review will be conducted in the winter of 2012/2013.

Battalion 16: Battalion Fire Management Plan

Battalion Overview:

1. Battalion Overview:

Communities within Battalion 16 include the communities of McSwain, Beachwood, Franklin, Castle AFB, Winton, Cressey, and Snelling. The area around the City of Atwater is within Battalion 16 and includes the McSwain area and Castle AFB. The Beachwood/Franklin area makes up the east side of Battalion 16 near the city of Merced. Battalion 16 also incorporates SRA (State Responsibility Area) within its boundaries near the community of Snelling and on the eastside of Snelling Highway. The areas surrounding the communities of Snelling and Merced Falls have the highest fire risk within the Battalion and have a history of significant wildland fires with structures being lost.

Battalion 16 is unique in that it has five fire stations and three major programs within its jurisdiction. Fire stations are located in the towns of Winton, Cressey, Snelling, Castle AFB area, and Atwater. Castle Station, located at the old Castle Air Force Base, houses two important county programs - the Airport Rescue Fire Fighting (ARFF) program and the Hazardous Materials Team. The third major program is the Fire Equipment Repair Facility located at Castle Park.



2. Goals & Objective statement:
 - a. Support Unit and local fire prevention activities.
 - b. Aggressively pursue 100% compliance on LE-100 inspections within Battalion 16 SRA areas and pursue annual weed abatement compliance within LRA.
 - c. Strategically place Fire Prevention signs throughout Battalion 16 to educate the public on fire safety.
 - d. Support the area with current and future fuel treatment projects.
 - e. Improve access to all SRA areas within Battalion 16 to include the Snelling Highway, La Paloma Road, La Grange Road, Robinson Road, the Merced River and Merced Falls Road.
 - f. Network with property owners, Merced Irrigation District (MID), and Pacific Gas & Electric (PG&E) to establish and maintain these fuel breaks

3. Measurement:
 - a. Educate the community within the Battalion on proper fire hazard reduction through face-to-face contact during annual LE-100 inspections.
 - b. Participate with local stakeholders in annual meetings and community public education events.
 - c. Provide monthly statistics to fire prevention on activities.

4. Information & Education

Station tours are conducted regularly during Fire Prevention Week with local schools to discuss fire prevention. “No campfire” signs are posted along the Merced River fishing access points. Currently a roadside fire prevention sign is being built to install on the corner of Merced Falls Road and Hornitos Road to educate the public about fire safety.



5. Planning, Engineering & Structure Ignitability

- a. Snelling Highway (G Grade) Rangelands Fuel Break

The Snelling Highway Fuel Break is a twenty foot fuel break that parallels both sides of the Snelling Highway from the intersection of Snelling Highway and La Paloma Road to Robinson Road near the community of Snelling. The fuel break protects grasslands on both sides of the highway from fires caused by vehicle traffic. The fuel break helps keep roadside vegetation fires small, giving fire personnel time to reach the scene and extinguish the fire. The firebreak protects SRA lands to the east and LRA lands to the west. Completion of the fuel break will require Battalion 16 personnel to network with property owners to establish and maintain it.

b. Projects

i. Merced River Fuel Break

The Proposed Merced River Fuel Break is a thirty foot fuel break that follows the Merced River from Highway 59 passing over the Snelling Highway and ending at Hornitos Road in Mariposa County. The fuel break protects SRA grasslands from problematic fires that routinely occur in the Snelling rock tailings. The fuel break helps keep a large rangeland fire from entering the heavy fuels of the Merced River. The firebreak protects the community of Snelling and SRA lands to the south of the Merced River. Completion of

these fuel breaks will require Battalion 16 personnel to network with property owners to establish and maintain these fuel breaks.

- ii. Snelling/Rock Tailings Fuel Breaks
The Proposed Snelling/Rock Tailings Fuel Breaks is a series of thirty foot fuel breaks that dissect the Merced River rock tailings area on the north side



start routinely along the Merced River by hikers or fishermen. The area accessing the Merced River. The fuel breaks help keep a large rangeland fire from entering the heavy fuels of the Merced River. The firebreak protects the community of Snelling and SRA lands to the south of the Merced River. Completion of these fuel breaks will require Battalion 16 personnel to network with property owners to establish and maintain these fuel breaks.

6. Fire Prevention

Conduct annual weed abatement inspections in the LRA. Merced County Roads Dept. sprays/mows the weeds on the roadside shoulders on Snelling Road, Hwy 59, Merced Falls Road, and La Grange Road to prevent roadside starts.

Battalion 17: Battalion Fire Management Plan

Battalion Overview:

1. Battalion 17 is located on the west side of the Madera-Mariposa-Merced Unit. Battalion 17's fire problem areas are located along the Interstate 5 and Highway 152 corridors. The priority areas that we have been dealing with are the Highway 152 corridor between Basalt Road and Dinosaur Point Road. This section of Highway produces numerous starts annually from mechanical issues related to vehicles. We have addressed this issue through the Department of Fish and Game by putting in a fire break on the north side of the highway which has substantially reduced our larger scale incidents. The second priority area is Interstate 5 between Arburua Road and Nees Avenue. As with our Highway 152 area, our main ignition source is mechanical issues with vehicles. We have addressed this issue with the local property owner who now puts in his own fire break along the west side of the highway which has been instrumental in holding most fires to 10 acres or less. Our fuels in the area are mostly grass and oak woodland with a small component of brush up near the Dinosaur Point area. The topography in the area is mostly rolling foothills with steeper terrain up near the peak areas near the Merced/San



Benito/Santa Clara County lines. Weather for the area within the battalion predominantly sees temperatures ranging from 90-105 degrees with strong northwest winds in the afternoon. Our fire history shows that we have most of our significant fires in the months of May, June, and July. In

the months following, the potential is still high, but we tend to get much more of a marine influence coming in which raises our humidity level.

Battalion 17 personnel regularly conduct inspections and requests land use agreements from the large acreage owners in the area. Through these efforts Battalion 17 has established fire breaks which are maintained on a regular basis.

Our LE-100 program is completed in a timely manner each year and the relationship with the local cooperators is strong.



The past year brought limited fire activity to the area. However, five fires were held by fire breaks and extinguished by responding units before they could spread to the wildland.

The Battalion personnel conduct regular visits to local schools and community events to promote fire prevention to the public.

2. Goals & Objective statement:

Communities at risk in Battalion 17 include the areas of Santa Nella and San Luis Hills. The influencing factors involved in identifying fuel reduction projects include: fire history, housing density, fuel hazard, and range value. Fire ignitions have traditionally been an issue near roadways and campgrounds in the area and fast moving grass fires have threatened these communities, or their interests in the past.

Additional communities at risk in Battalion 17 include Dos Palos, Dos Palos "Y", Gustine, Los Banos, and Volta. These areas were identified as having moderate to significant asset values with light to medium fuel hazards. Fire prevention efforts will emphasize structure clearance and fuel management to mitigate the wildfire hazard in the area.

- a. Support the area with current and future fuel treatment projects.
- b. Educate the public on fire safety and hazard reduction.
- c. Implement an aggressive LE-100 inspection program.
- d. Support Unit and local fire prevention activities.

3. Measurement:

- a. Agreements have been made with local landowners and cooperating agencies to establish and maintain fire breaks along the I-5 and Hwy 152 corridors.
- b. The LE-100 program covers 100% of the known structures in the battalion.
- c. Battalion personnel logged over 100 hours of time spent on prevention-related activities.

4. Information & Education

Battalion 17 stations participate in numerous community events to promote fire prevention and awareness. Some of these programs are:

- a. Los Banos fair
- b. Gustine city's fiesta
- c. Lowe's Career Day
- d. Fireworks displays
- e. Christmas parades
- f. Pancake breakfasts and tri-tip dinners

5. Planning, Engineering & Structure Ignitability

- a. Projects
- b. I-5 Corridor Fuel Break
 1. A thirty two mile long, 15' wide, disked fuel break on the west side of I-5
 2. Facilitated and paid for by landowners to protect range land
 3. Fuels reduction to be accomplished through the use of mechanized equipment
- c. 152 Corridor Fuel Break
 1. A ten mile long, 15' wide, disked fuel break on the north and south sides of Highway 152 from San Luis Creek to Dinosaur Point Road
 2. Facilitated by State Parks

3. Fuels reduction to be accomplished through the use of mechanized equipment
- d. San Luis Creek Fuel Break
 1. A four mile long, 15' wide, disked fuel break from the north side of Highway 152 at the Romero's Visitor Center to the north access to San Luis Creek Recreational area
 2. Facilitated by State Parks
 3. Fuels reduction to be accomplished through the use of mechanized equipment
- e. San Luis Hills Fuel Break
 1. A one and one half mile long, 15' wide, disked fuel break from the south side of Highway 152, around the San Luis Hills subdivision, to San Luis Drive
 2. Facilitated and paid for by landowners to protect range land
 3. Fuels reduction to be accomplished through the use of mechanized equipment
- f. Langdon Canyon Fire Road
 1. A seventeen mile long fire road from Arburua Road to Paul Negra Road
 2. Facilitated by CAL FIRE Fire roads to be maintained through the use of mechanized equipment
- g. Laguna Seca Fire Road
 1. A seven mile long fire road from I-5 to Langdon Canyon Road
 2. Facilitated by CAL FIRE
 3. Fire roads to be maintained through the use of mechanized equipment
- h. Billy Wright Fire Road
 1. A fourteen and one half mile long fire road from Jasper Sears Road to Burch Haven
 2. Facilitated by CAL FIRE
 3. Fire roads to be maintained through the use of mechanized equipment
- i. Sweeny Fire Road
 1. A thirteen and one half mile long fire road from Billy Wright Road to Arburua Road
 2. Facilitated by CAL FIRE
 3. Fire roads to be maintained through the use of mechanized equipment
- j. VIP/ Co-op/Stakeholders

Annual meetings are held with all of the known agencies in the area to promote and foster good working relationships and collaboration within the battalion. Stakeholders within the Battalion:

 - a. Department of Fish and Game
 - b. Department of Fish and Wildlife
 - c. California Highway Patrol
 - d. Caltrans
 - e. Bureau of Land Management
 - f. Local Property Owners
- k. Plans are being discussed to set up Auto Aid agreements with agencies both within and outside of the battalion.
 1. Newman City Fire Department
 2. West Stanislaus Consolidated Fire Protection District
 3. South Santa Clara County Fire Protection District
- l. Current Auto Aid Agreements

Fresno County Fire Department



6. Fire Prevention

To reduce ignitions with the battalion we are aggressively working with the public through education programs to educate them on the potential causes of fires and working diligently with our stakeholders to reduce fuels along roadsides. We are also working on placing road signs along the Highway 152 and Interstate 5 corridors to raise awareness of the fire danger.

Battalion 18: Battalion Fire Management Plan

Battalion Overview:

1. The Merced Battalion is located in the Merced area of Merced County. The eastern portion of Battalion 18 borders the Mariposa County line, with the southern portion of the battalion bordering the Madera County line. The State Responsibility Area (SRA) Portions of the Battalion are on the eastern portion. Fuel type is mainly annual grass and the topography is mainly rolling foothills.

The weather pattern in Battalion 18 during the summer months typically is hot and dry, with high temperatures ranging from 90s to 100s on a regular basis, with monsoonal moisture occasionally causing dry lightning a couple times throughout the summer.

Fire history in Battalion 18 is varied. Many of the fires have been started by lightning. Because this area is mainly used for cattle ranching the occasional fire is typically started by equipment. With rural roads in the area we have had fires start near roadways.



Assets at risk in Battalion 18 consist of mainly cattle ranches. The communities of LeGrand and Planada are located just to the west of the SRA boundaries and could be impacted.

Communities at risk in Battalion 18 include the areas of McKee, Planada, and Le Grand. The influencing factors involved in identifying fuel reduction projects include: fire history, housing density, fuel hazard, and range value. Fire ignitions have traditionally been an issue near roadways and throughout watershed areas due to lightning activity in the area. Fast moving grass fires have also threatened these communities, or their interests in the past.

Additional communities at risk in Battalion 18 include north Merced, east Merced, and El Nido. These areas were identified as having moderate to significant asset values with light to medium fuel hazards. Fire prevention efforts will emphasize structure clearance and fuel management to mitigate the wildfire hazard in the area.

2. Goals & Objectives

- a. Support the area with current and future fuel treatment projects.
 - b. Educate the public on fire safety and hazard reduction.
 - c. Implement an aggressive LE-100 inspection program.
 - d. Support Unit and local fire prevention activities.
 - e. Accomplishing the Objectives
 - i. Educate the community within the battalion on proper fire hazard reduction through face-to-face contact during annual LE-100 inspections.
 - ii. Participate with local stakeholders in annual meetings and community public education events.
 - iii. Provide monthly statistics to fire prevention on activities.
3. Measurement:
- a. The LE-100 program covers 100% of the known structures in the battalion.
 - b. Battalion personnel logged over 100 hours of time spent on prevention-related activities.
4. Information & Education:
- Battalion 18 stations participate in numerous community events to promote fire prevention and awareness. Some of these programs are:
- a. Merced County Fair
 - b. School presentations K-3 grades
5. Planning, Engineering, & Structure Ignitability
- a. Projects
 - i. State Highway 140 Fuel Break
 - 1. A twenty foot fuel break on both sides of State Highway 140 from Cunningham Road to the Merced / Mariposa county line
 - 2. Facilitated and paid for by landowners to protect range land
 - 3. Fuels reduction to be accomplished through the use of mechanized equipment
 - ii. Cunningham Road Fuel Break
 - 1. A twenty foot fuel break on the east side of Cunningham Road from South East Bear Creek to Mariposa Creek
 - 2. Facilitated and paid for by stakeholders to protect range land
 - 3. Fuel reduction to be accomplished through the use of mechanized equipment
 - 4. This is the separation between LRA and SRA along the Cunningham Road corridor
 - iii. White Rock Road Fuel Break
 - 1. A twenty foot fuel break along White Rock Road from Merced / Mariposa county line to Santa Fe Road, on the south and east side of the road
 - 2. Facilitated and paid for by stakeholders to protect range land
 - 3. Fuels reduction to be accomplished through the use of mechanized equipment
 - 4. This is as directed – some parcels are in agricultural crop production along the White Rock corridor.
 - b. Stakeholders in the area include:
 - i. Flying M Ranch
 - ii. Hewlett Packard
 - iii. Cunningham Ranch
 - iv. Merced County Parks and Recreation (Lake Yosemite)
 - 1. Annual meetings are held with all of the known agencies in the area to promote and foster good working relationships and collaboration within the Battalion.
 - 2. Plans are being discussed to set up Auto Aid agreements with agencies both within and outside of the battalion.
6. Fire Prevention:
- a. Conduct LE-100 inspections in the SRA to make sure all residents are in compliance with PRC-4291

- b. Work with Merced County Prevention to ensure that all residents are following the county weed abatement standards.

