



CAL FIRE

Tulare Unit

Fire Management Plan

2009

CAL FIRE Tulare Unit Fire Management Plan

2009



Approved by:

Kirk Swartzlander, Tulare Unit Chief

Kirk Swartzlander

Department of Forestry & Fire Protection

Aldo Gonzalez, Captain – Pre Fire Engineer

Aldo Gonzalez

California Department of Forestry & Fire Protection

June 1, 2009

State of California
The Resources Agency

Memorandum

To: Candace Gregory, Region Chief
California Department of Forestry & Fire Protection
Southern Region

Date June 1, 2009
Phone (559) 732-5954
www.fire.ca.gov

From: Kirk Swartzlander, Chief
California Department of Forestry & Fire Protection
Southern Region- Tulare

Subject: 2009 Cal Fire / Tulare Unit Fire Management Plan

Tulare Unit has completed the Fire Management Plan for 2009. We are using the plan as our guide to reduce the risk of large damaging fires within the Unit, as well as catalog past, present, and future projects that not only look towards long range planning, but also act as a reminder to maintain pre-suppression infrastructure that has been in place for almost sixty years. This memorandum provides the status on where TUU is in terms of Fire Plan assessments, data validation, and its integration into daily operations. The following identifies the current status of Fire Management Plan issues:

- **Status of Fire Plan data layer validations and Assessments**

- * Fuels: *Not complete*
 - * Ignition Workload Analysis: *Need to update 2006-2009*
 - * Severe Fire Weather: *Not completed*, need RAWS adjustment to accurately validate.
 - * Assets at Risk: *Completed*
- Fire Plan Assessment outputs are consistent with Unit Fire Plan staffs assessment of the priority areas.

- **Fire Plan Integration into Daily Operations**

Projects identified in previous Fire Plans have cataloged projects completed and identified future projects. Our goal is to have an identified project being worked on within the field every day. The most affected areas include:

- Camp Operations:

- Fire Management Plan activities account for less than ¼ of camp project work.
- * Field Battalion Operations: - Generate GPS data for pre-attack maps & accurate fire history.
 - Identify areas for fuel reduction projects.
 - Post education / information signs to get our message out.
 - Maintain TUU's Fire Control Road system which covers 176 miles.
- **Notable successes include:**
 - * Lake Kaweah, Lake Success, and North Fork Drive "Rat Trail" Project(s)
 - These fuel breaks contain road side ignitions annually.
 - * Mt. Home State Forest Fuel Break.
- **Notable hindrances include:**
 - * Delays in contract support
 - Difficult to coordinate project start dates
 - Cooperators lose interest and confidence
 - Opportunities and momentum are lost
 - Funding only available through Non Profit agencies
 - * Change of ownership and property splits on established and projected fuel reductions sites
 - * San Joaquin Valley Air Pollution Control District
 - \$5.40 per acre smoke mitigation fee discourages perspective participants
 - Lack of adequate burn windows when project is in prescription
 - * Staff support for current and prospective projects
 - GIS specialist
- **Key Fire Plan Players include:**
 - * Chief, CAL FIRE Tulare Unit
 - * Pre-Fire Engineer
 - * VMP Forester I
- **Field Support**
 - * Division Chief, Mountain Division
 - * Division Chief, Mt. Home CC
 - * Field Battalion, Chiefs
 - * Station Captains
- **Staff Support**
 - * Division Chief, Administrative Officer
 - * Region Pre-Fire Battalion Chief
 - * Region Contracts staff
 - * Sacramento Business Services

The goal of the Tulare Unit is to make the Fire Plan a relevant document while utilizing it to prevent large and damaging fires. A key element in the plans success will be to streamline the contract process to take advantage of cooperators interest, momentum, and on the ground opportunities. While we plan for and develop new projects, our primary focus will be to obtain funding for the maintenance of existing projects and pre-suppression infrastructure that is in place.

The Fire Plan is in the process of undergoing a change to make this a working document that is useful to field personnel while incorporating data and technology that was previously unavailable. This transformation will require buy in and input from the field Battalions, but should make the Units Fire Plan goals and priorities clearly understood at all levels. Changes are continually being made to make The Fire Plan a tool which will assist the newer employees in becoming familiar with pre-suppression projects which exist within each Battalion.

Kirk Swartzlander

Kirk Swartzlander
Chief, Cal Fire Tulare Unit
DH; rps



TABLE OF CONTENTS

Memorandum	3
Executive Summary	8
Major Stakeholders Review	10
Sequoia Fire Safe Council	11
Assets at Risk	13
Flooding/ Soil Erosion.....	13
Timber.....	13
Fire History	14
Current Projects	15
Projects by Battalion	15
Badger Battalion (11)	15
<i>Badger / Miramonte Fuel Break:</i>	15
<i>Mankin Flat Fuel Break:</i>	15
<i>Shadequarter to Mankin VMP:</i>	15
<i>Buzzard Roost suppression tank</i>	15
Kaweah Battalion (12)	16
<i>Pre-Attack plans:</i>	16
<i>North Fork “Rat Trail”:</i>	16
<i>Kaweah Lake “Rat Trail”:</i>	16
<i>Grouse Valley FCR Fuel Break:</i>	16
<i>Grouse Valley VMP:</i>	18
<i>Three Rivers FFS Demo Project</i>	19
<i>Sheep Creek Suppression Tank</i>	19
<i>Salt Creek Suppression Pond</i>	20
<i>Blue Ridge Fuel Break</i>	20
Tule Battalion (13)	21
<i>Cow Mountain Fuel Break</i>	21
<i>Rancheria Suppression Tank</i>	21
<i>Wishon Suppression Tank</i>	21
<i>Success Lake Rat Trail</i>	21
<i>Rancheria Fuel Break</i>	21
<i>Pierpoint Fuel Break</i>	22
<i>Camp Nelson Fuel Break</i>	22
<i>Battle Mountain VMP</i>	22
<i>Cow Mountain Suppression Tank</i>	22
<i>Mossy Rock VMP</i>	23
<i>Balch Park Road Suppression Tank</i>	24
Fountain Springs Battalion (14)	25
<i>Poso Fuel Break</i>	25
<i>Uhl Pocket Fuel Break</i>	25
<i>Pine Mt. Fuel Break</i>	25
<i>Pine Mt. VMP</i>	25

<i>Gibbons Peak VMP</i>	25
Mt. Home Demonstration State Forest	26
<i>Mountain Home State Forest</i>	26
<i>Deep Fuel Break</i>	26
Unit Projects	27
<i>Battalion Fire Prevention Signs</i>	27

MAPS

Figure 1 Tulare Unit Fuels Map.....	28
Figure 3 Tulare Unit Fuel Ranking Map.....	29
Figure 4 Tulare Unit Fire History.....	30

Executive Summary

Tulare Unit is located in Central California and makes up part of the San Joaquin Valley. It consists of 793,716 acres of state responsibility land under direct CAL FIRE protection, and 1,429,881 acres of lands under Federal Government Protection. The total of 2,224,697 acres, .The Unit is bordered on the east by Sequoia and Kings Canyon National Parks, and the Sequoia National Forest. The counties of Kern, Kings and Fresno border to the South, West, and North respectively. Tulare Unit has one Division and four Battalions. There are eight state funded fire stations; one air attack base, one 120-man conservation camp, and Mountain Home Demonstration State Forest.

The elevation of Tulare Unit land receiving direct protection by CAL FIRE ranges from 200 feet along the county's western boundary to a highest point of 9,300 feet on Moses Mountain to the East. The entire county elevations range from 200 feet on the West Side to the highest point in the contiguous United States, Mt. Whitney at 14,495 on the eastern boundary. This wide range of elevation supports many areas of vegetation consisting of grass, oak deciduous, oak persistent, brush, and timber.

The January 1, 2007 Department of Finances estimates Tulare County's population at 421,553. The majority of the population in the state responsibility area is located along two east-west highways. Highway 198 which leads to the Sequoia / Kings Canyon National Parks and Highway 190 which accesses a significant portion of the Sequoia National Forest / Giant Sequoia National Monument. Tulare Unit continues to experience a population growth rate of approximately 1 percent annually. Fire occurrence spot maps indicate a direct relationship between use areas and fire occurrence. Along with the population increase, mountain areas have increased wildland urban intermix problems. Structures are being built throughout wildland areas wherein vegetation fires can spread. Providing adequate fire protection to those structures has become a major undertaking.

Tulare Unit's Fire Management Plan is our mechanism to catalog potential hazard areas and develop prescriptions to begin mitigating them based upon assessed priorities.

Pre-Fire Management: History indicates that it's not of matter of "if" we have a fire, but rather "when" we will have a fire. A good Pre-Fire Management Plan will allow us to prevent those fire starts from becoming large damaging fires. The common denominators for large wildfires are fuel, slope, weather, and assets at risk. We cannot change slope or weather but we can modify fuels and ensure that the individual homes and communities have a defensible space. All new homes being built are subject to PRC 4290 regulations which assist us in the defense of these newest additions to the watershed.

Pre- fire Management continued

The first step is to identify the areas with the highest potential for a fire start to become a large fire (over 300 acres). Fire history in this Unit shows that many of the large fires occur in the same areas. Therefore, it would seem obvious that if all factors remain the same, the greatest potential for a large fire will be in the areas where they have burned before. By using the fire history map and overlying the assets at risk, we can determine priorities for projects. After identifying the high risk areas, it is time to develop fire management projects to provide solutions to the problem areas. Some examples are:

1. Modifying the fuels in these areas for easier fire containment.
2. Maintain fire breaks from previous fires.
3. Maintain fuel breaks.
4. Look for areas to construct new firebreaks where frequent ignitions occur.
5. Insure that homeowners create a defendable space around their homes and communities.
 - a. Use Fire Safe Council's to conduct community presentations in an effort to assist in developing solutions for area specific problems.
 - b. Create community action groups to be proactive in fire safe projects and work with the Fire Safe Councils.
 - c. Increase PRC 4291 compliance and educate homeowners on the need to transition from the 30' to 100' clearance requirements. .
 - d. Work with local cooperating agencies to accomplish fuel reduction projects, watershed enhancement, range improvement, and pre-suppression projects that benefit all agencies.

Pre-Fire Management Staff's goal is to minimize the threat of a fire from becoming a large and damaging wildfire. To attain that goal, we must reduce the amount of brush covered lands. We must also develop fuel modification projects in the populated areas to create better defendable spaces and limit the potential for fires to spread from a populated area into the wildland.

Pre-Fire Management's focus will continue to solicit local ranchers to participate in VMP projects to reduce the fuel loading, and reestablish water generation. Fire Safe Councils will be a key partner to determine successful strategies in minimizing our threat to key assets at risk. The success of these projects will depend on support from willing stakeholders, motivated field personnel, and supportive administrative staff. New projects promoting our goals must be developed at the Battalion level. Pre-Fire Management Staff will support these new projects and assist in its implementation. When the number of projects becomes greater than the resources or budget allows, projects will be prioritized based upon their level of threat, stakeholder cooperation, and the realistic ability for the project to make it to completion.

Major Stakeholders Review

The following pages list the vested stakeholders in the Tulare Unit. Each stakeholder has their own reasons for wanting fuel reduction projects. It may be to increase grazing capacity, make their land more usable for other reasons, or to protect their investments from an uncontrolled fire.

Nature used to keep the forests and rangelands in check with fire. But for over 130 years we have actively suppressed and extinguished these wildfires. This has consequently increased the accumulation of fuels and gradually replaced the once grasslands with brush fields. San Joaquin Valley Air Pollution District has levied a \$5.40 an acre smoke mitigation fee that make VMP burns very expensive, and has hindered current fuel reduction projects. Proposition 40 funds added to the VMP program should allow VMP projects to progress again. We are hoping to try some mastication, and mechanical fuels treatments which traditionally have been under utilized in the Tulare Unit.

There are several ways we can balance the needs for an ecological environment and improve fire safety. Listed below are some of the ways we can obtain our objectives.

- Work with Fish and Game, U.S. Forest Service, BLM and other stakeholders in implementing fuel modification projects, and to keep fire/ flooding damages to a minimum.
- Continue with VMP projects for fuel reduction in the larger areas.
- Use chippers in residential areas and roadside brushing projects. This method is quicker than burning, and reduces the smoke irritants in the air.
- Encourage the local landowner to do preventative maintenance by cleaning their property of the excess fuels, limbing trees, and developing greenbelts as described in PRC 4290.
- Use CAL FIRE Tulare Unit, Forest Service, and BLM inspectors to continue to insure PRC 4291 compliance.
- Utilize local Fire Safe Councils and other local entities to educate homeowners on how they can create a defensible space. This can be accomplished through demonstration projects.
- Use the local newspapers and media to inform the public on fire safety and upcoming events.
- Utilize CAL FIRE's Team Teaching program and VIP's to teach fire safety in the local schools and at community events.
- Maintain our massive pre-suppression project inventory. These mainly consist of suppression tanks, fire control roads, and fire safe areas. Maintaining existing infrastructure should be the first priority, before development of new projects occurs.



Sequoia Fire Safe Council

The Sequoia Fire Safe Council was established in June of 2005 to facilitate fuels treatment and large vegetation management projects. Their goal is to obtain funding and treat fuels. They are currently working under Tulare County Resource Conservation Districts non profit status pending their own 501 (c) 3.

Mission Statement

Sequoia Fire Safe Council is dedicated to increasing community awareness of “High Fire Threat” danger. We will provide property and business owners with the resources needed to decrease the threat of wildland fires. The council brings together public and private partners to accomplish common objectives.

Projects in Progress

Fuel reduction on the Pot Holes fire control road is completed. The priority has now shifted to the Grouse Valley, Blue Ridge and Rancheria Fire Control Roads.

Project Description

A Wildfire defense zone will be maintained along existing CAL FIRE control road located on private property. Surface vegetation and lower branches of trees will be manually removed for a maximum distance of 50 feet on either side of the road. Treated vegetation will be disposed by piling and burning or chipping.

Participants of the Sequoia Fire Safe Council

Bobby Kamansky
Brent Huntington, D-K Ranch
California Department of Forestry
Carri Diaz
David Witt
Elizabeth Palmer
Everett Welch
Jim Burr
Jim Sullins
Joe Williams
Joel Hayden
John Shannon
John Vincent Jr., Sequoia Ranch
Kyle Loveall, Elliott Land & Cattle Co.
Megan Bidart
National Park Service, Sequoia / Kings National Park
Ron Frazier
Southern California Edison
Tom Daly,
Tulare County Cattlemen’s Association
UC Cooperative Extension
United States Forest Service, Sequoia National Forest
Warren Hutchings

Assets at Risk

Protecting our local assets remains a concern whether they are man-made such as our communities, or natural like the giant sequoia redwood trees. One way to protect our assets is to plan projects where our fire occurrences are high and the reasons for these starts are known. The State maintains a GPS coordinate (lat. & long.) for all fire ignitions, and maps fires that burn 10 acres of timber, 50 acres of brush, 300 acres of grass, three or more structures, or cause more than \$300,000 damage in the SRA protection area. The Tulare unit requires all fires will be GPS coordinate (lat. & long.). The waypoints and track files are collected and used to create a data layer. At the end of each calendar year SRA ignition points and shape files are used to maintain accurate fire history and ignition location. Historically our fire starts occurred along the Highway 198 corridor and Highway 190 corridor. The GIS data collected is beneficial to determine specific fire cause locations and can direct prevention / education efforts to match historic ignitions.

Flooding / Soil Erosion

Another concern in the event of a large and devastating fire such as the Mc Nalley and Manter Fires is the aftermath. Analysis of the topsoil after these types of large fires shows a transformation from good topsoil to a hydrophobic soil. Hydrophobic soil happens when a large fire consumes the brush that has a natural protective wax on the leaves, leaving a waxy residue on the ground. The waxy residue left on the ground can be approximately 2” to 3” in depth and prevents the soil from absorbing moisture. This in turn creates flooding, mudslides and threatens other assets such as animal habitat, fisheries, and our communities. Extensive soil erosion can occur and replace our water supplies with silt, mud, and rocks. Disturbing the topsoil is a good way to disperse the waxy buildup and allow moisture to penetrate the soil. After the fire has passed, timber salvage operations is one way to reduce the fuel loading, help restore the land, and disperse the hydrophobic soil.

Timber

Timber is another important asset in Tulare County, especially to the small community of Terra Bella. Home to the Sierra Forest Products, this is one of the few major sawmills left in California. Logging has been a major part of Tulare County since the late 1880's. Redwood, pine, cedar, and oak have been sawed and lumbered to help supply the nation's lumber needs.

Fire History

Generally Tulare Unit's Fire History consists of several small fires and on a rare occasion, a large and damaging fire. Tulare Unit's last large and damaging fires were the Kaweah fire (1996) and the Case Mt. fire (1987). It should be noted that Sequoia / Kings National Park had the Buckeye Fire (1988), and Sequoia National Forest had the Stormy Complex (1990), the Manter Fire (2000), Mc Nalley Fire (2002), and the Deep Fire (2004) which were all considered large and damaging fires. In 2004 the Tulare Unit had four fires that were considered large and damaging. This was about average. With most of the fires occurring in grass covered rangeland. The Deep Fire occurred on the Sequoia National Forest directly adjacent to State Responsibility Area land and the Mountain Home Demonstration Forest. Secondary containment lines were created on the State Forest but the fire did not actually burn in Mountain Home State Forest.

Fuels

The fuels in Tulare County range from light grasses in the western end of the county, to Sequoia redwoods in the center portion of the county, to a high desert on the eastern end of the county. Most of the SRA lands protected by CAL FIRE are grasslands, type four brush, and areas of timber starting around the 4,000' elevation (see Fuels Map in Appendix). Prescribe fire has been a useful tool in reducing the accumulation of fuels in the unit. There is one burn well into the planning process moving towards implementation. We are looking into re-treatment of projects that we have completed in the past.

Weather

The weather during the fire season is generally hot, with temperatures between 85°-103°, humidity in the low teen's and a light wind about 3-5 mph from the NW. The light wind and somewhat higher humidity has helped in suppressing fires in the unit. The topography of the land is generally flat to the west and becomes steep very quickly from the center of the county to the east.

Projects by Battalion

Badger Battalion (11)

Badger / Miramonte Fuel Break:

- Build a shaded fuel break along the Badger / Miramonte Fire Control Road to provide an area to stop an established wildfire spreading from the Drum Valley / Highway 245 corridor. The Badger / Miramonte FCR is located on advantageous topography to provide a suitable control point to limit a fires spread into populated areas of Tulare and Fresno counties. The fuel break should be void of any continuous chaparral for twenty feet on either side of the road. Trees should be limbed up and thinned to limit spacing as needed. Funding for this project will be minimal and can be absorbed by the unit(s) for regular fire control road maintenance if there is no available grant funding sources.

Mankin Flat Fuel Break:

- Engineer the fuels along the Mankin Flat Fire Control Road starting at the point where the Davis Spur and Mankin Flat Fire Control Roads intersect. The road is strategically positioned along the ridge which separates the Dry Creek and Sheep Creek drainages. This location would be a valuable control point in containing wildfires which start on either side of it. The fuel break should be void of chaparral for twenty feet on either side of the road, and trees should be limbed up and thinned to limit spacing as needed. This project due to its size, may take several years to implement. Funding for this project to could be acquired through available grant programs.

Shadequarter to Mankin VMP:

- The object of this project is to create a series of burns along the ridgeline that connects Shadequarter Mountain to Mankin Flat. The most important aspect of this project is that it would engineer a significant age class reduction of fuels from Eshom Valley at the edge of our DPA to where the fuels transition to grass / oak woodland. These projects should be completed sequentially from north to south to minimize control difficulties and to limit the amount preparation needed. A maintenance cycle should be established to insure the effectiveness. Funding to be provided through Local, State, and Federal grants, as well as Department funds specifically allocated for this type of project.

Buzzard Roost suppression tank

- Build a 5,000 gallon suppression tank on Buzzard Rust Fire Control Road at the intersection of Dry Creek Dr. This critical piece of infrastructure lies in a remote area where suppression water is difficult to acquire. This tank requires development of a nearby spring to be able to maintain the tanks capacity. Once this has been accomplished, maintenance requirements should be minimal.

Kaweah Battalion (12)

Pre-Attack plans:

- Develop updated maps utilizing GIS technology to capture all roads, fuel breaks, water locations, staging locations, and plot probable control lines. Possible strategies for fire suppression could be pre-determined utilizing fire history, typical fire weather and fire behavior models. Distribute the maps so equipment from other stations / areas can efficiently function within the Kaweah Battalion.

North Fork "Rat Trail":

- Construct a 4-6 foot by 4.3 mile long fuel break along the county road right-of-way along the East side of North Fork Drive. This fuel break begins ¼ mile south of the Sheep Creek Fire Control Road and proceeds north to the Cherry Falls recreation area. The fuel break is intended to stop or slow accidental or incendiary road side ignitions, which it has historically done with much success. Funding to be absorbed through normal unit operating funds due to its minimal expense.

Kaweah Lake "Rat Trail":

- Construct a 4-6 foot by 6.7 mile long fuel break along the state highway right-of-way, on the East side of Highway 198. This fuel break begins at the bottom of "Lemon Hill" at the end of the citrus grove and proceeds east / northeast and terminates at the Slick Rock recreation area. This fuel break is intended to stop accidental or incendiary road side ignitions, which it has historically done with much success. This annual project should be completed before Memorial Day.

Grouse Valley FCR Fuel Break:

- Engineer the fuels along the Grouse Valley Fire Control Road to create a shaded fuel break, creating an advantageous control point for fire suppression. The Grouse Valley FCR is located along the east side of our unit near the SRA boundary. The topography is much more suitable than anything to the east for establishing control lines to protect the homes along South Fork Drive from wildfire established in the confluence of this drainage. The fuel break should be void of any chaparral for 100-150 feet on the downhill side of the road and 50 feet on the uphill side. Trees should be limbed and thinned to limit spacing as needed. Funding for this project is through acquired available grant funding via the Sequoia Fire Safe Council.



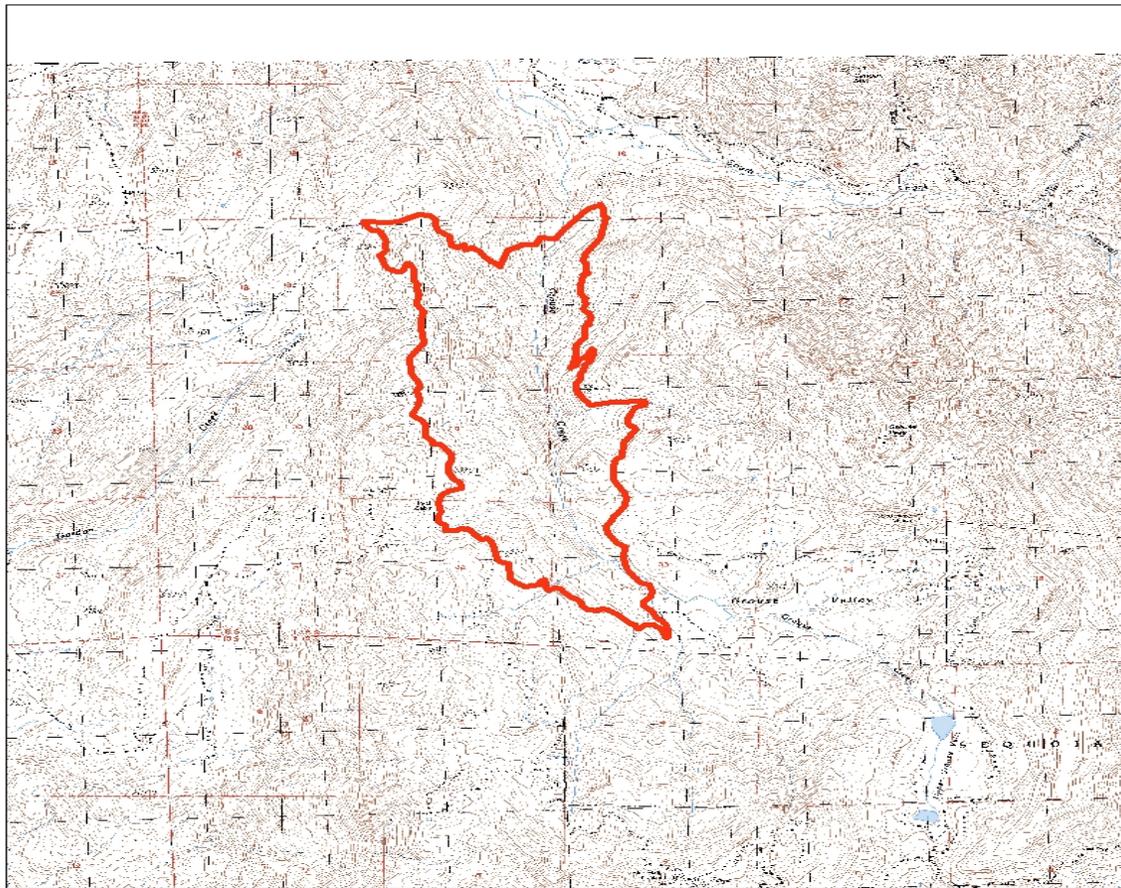
Grouse Valley before and after



Grouse Valley VMP:

- This is a 1500 acre VMP located in the upper reaches of the Grouse Creek Watershed. Grouse Creek is a tributary to the South Fork of the Kaweah River. The objectives are to reduce hazardous fuel buildup of 50 year old chaparral, improve grazing conditions, and improve wildlife habitat. The cooperators in this project would be; California Department of Fish & Game, and two private cattle ranches. The main environmental issue is air quality to the adjacent community which lies in area considered to be smoke sensitive. Work is in progress and is scheduled to be completed as soon as Department funding, and Air Pollution Control District fee assessments are exempted for this type project.

Grouse_VMP



DLS
1-23-09

Three Rivers FFS Demo Project

- Maintain the “Fire Safe” landscape area that is visible to all residents and visitors to the Three Rivers Forest Fire Station which will demonstrate the “ideal” fire safe landscaped home. Maintain and publicize this project annually to use as the local model.



Sheep Creek Suppression Tank

- Maintain the 5,000 gallon tank built by CAL FIRE in the 1950's. This critical piece of infrastructure lies in a remote area where suppression water is difficult to acquire. The tank's maintenance costs are negligible and requires little effort. Maintain the spring box and plumbing to insure the unrestricted flow of water into the tank and stock trough.

Salt Creek Suppression Pond

- Maintain the 5,000-10,000 gallon reservoir built by CAL FIRE in the 1950's. This reservoir requires annual brush removal and opening / closing of the head gate to allow filling of water, and removal of sediment. This reservoir is adjacent to the Salt Creek Fire Control Road and provides critical water storage in an very remote area.

Blue Ridge Fuel Break

- Maintain the pre-existing shaded fuel break that runs from Blue Ridge road This break requires annual to semi annual removal of new shrubs, and dead / dying trees brush. The road serves as a wild fire defense zone that primarily follows a north-south oriented ridgeline. Fuels reduction is proposed along 9 miles of the fire control road for a maximum distance of 150 feet. Funding for this project is available grant funding via Sequoia Fire Safe Council.

Tule Battalion (13)

Cow Mountain Fuel Break

- Maintain the pre-engineered fuels along the Cow Mountain Fire Control Road to create / maintain a shaded fuel break, creating an advantageous control point for fire suppression. The Cow Mountain Fire Control Road lies on the east side of the unit near the SRA / FRA boundary. The fuel break should be void of any chaparral for 100-150 feet on the downhill side of the road and 50 feet on the uphill side. Trees should be limbed and thinned to limit spacing as needed. This project to be funded through unit funds and available acquired grant funding.

Rancheria Suppression Tank

- Maintain the 5,000 gallon suppression tank built by CAL FIRE in the 1970s adjacent to the Rancheria Fire Control Road. This critical piece of infrastructure lies in a remote area where suppression water is difficult to acquire. This tank requires development of a nearby spring to be able to maintain the tanks capacity. Once this has been accomplished, maintenance requirements should be minimal.

Wishon Suppression Tank

- Maintain the 10,000 gallon suppression tank along Wishon Road. below the community of Doyle Springs which was built by CAL FIRE in the 1990s. This piece of infrastructure is critical in the support and protection of the Doyle Springs cabins. This tank requires minimal annual maintenance.

Success Lake Rat Trail

- Construct a 4-6 foot by 3 mile long fuel break along the state highway right-of-way, on the east side of Highway 190. This fuel break begins at the point where Highway 190 meets the hill near Success Market and proceeds east / north east and terminates at the Success Lake Bridge. This fuel break is intended to stop or slow accidental or incendiary road side ignitions, which it successfully did twice in 2003. Funding to be absorbed through normal Unit operating funds due to its minimal expense.

Rancheria Fuel Break

- Maintain the pre-existing shaded fuel break that runs from Balch Park Road., east to the Rancheria Fire Control Road. This break requires annual to semi annual removal of new shrubs, and dead / dying trees brush. Funding to be through available acquired grant funding. Funding for this project is through available grant funding via Sequoia Fire Safe Council.

Pierpoint Fuel Break

- Create a shaded fuel break that will be 100 to 300 feet wide and 1 ½ miles long forming a protective ring around the community of Pierpoint Springs and the western side of Camp Nelson. The United States Forest Service is establishing a fuel break on their jurisdictional ground to tie in with our jurisdictions. The break will utilize existing roads, natural openings, and clearance around structures to form an effective control point / belt of engineered fuels. CAL FIRE was awarded a grant to accomplish this project.

Camp Nelson Fuel Break

- Create a shaded fuel break that will be constructed 200 feet wide and 1 ½ miles long around the eastern and southern perimeter of the community of Camp Nelson. This project would be in cooperation with the United States Forest Service and multiple private landowners. This project will create a needed buffer between the community and the wildland.

Battle Mountain VMP

- Reintroduce fire to the area previously burned utilizing our Vegetation Management Program Burn. This will be phase two of the 2001 burn to treat the regeneration of chaparral and try and convert the fuel type. Scheduled for 2009 / 2012.

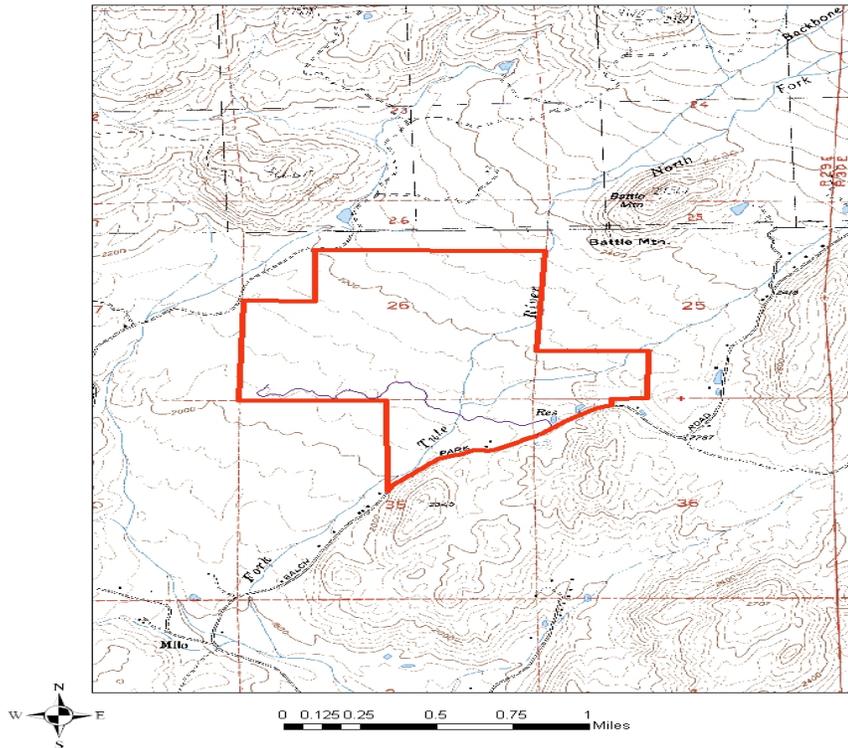
Cow Mountain Suppression Tank

- Maintain the 10,000 gallon suppression tank built by CAL FIRE in the 1970's. This piece of infrastructure lies in a remote area where suppression water is difficult to obtain. The tank's maintenance costs are negligible and require little effort.

Mossy Rock VMP

- This 580 acre VMP is located seven miles north of the town of Springville adjacent to Balch Park Road. The objectives are to reduce the fuel loading by chipping, piling, and broad casting the fifty to sixty year old chaparral, Live Oak and brush. This would establish an age class change in the fuel to be utilized as a wildfire control point, improve wildlife habitat, and improve livestock grazing conditions. This project would be in cooperation with local rancher. This project poses some challenges due to the location of the proposed site in proximity to areas within the same drainage in respect to air quality issues.

Mossy Rock VMP





Mossy Rock VMP fuel reduction right side of photo treated left not treated

Balch Park Road Suppression Tank

- Maintain the 10,000 gallon suppression tank built by CAL FIRE in the 1970's. This piece of infrastructure lies in a remote area where suppression water is difficult to obtain. The tank's maintenance costs are negligible and require little effort.



Fountain Springs Battalion (14)

Posey Fuel Break

- Create a shaded fuel break near the communities of Panorama Heights and Poso Park. The fuel break is a joint venture between the U.S. Forest Service, CAL FIRE Tulare Unit and the local residents requiring little cost to those involved. The project consists of limbing trees, removing excess brush, restrict mistletoe spread and disposing of the excess waste by burning or chipping. Most of the treated lands is on federal land next to the Tulare County Posey Fire Station.

Uhl Pocket Fuel Break

- Maintain the Uhl Pocket fuel break that was created in the late 1990's. This fuel break lies on USFS and CAL FIRE jurisdictions. Major treatments have been completed and require 10-20 days of cutting and burning / chipping per year to maintain it in a useable condition.

Pine Mt. Fuel Break

- Maintain the Pine Mt. fuel break that was created in the late 1990's. This fuel break protects the community of Pine Flat and lies on USFS land. Major treatments have been completed and require 10-25 days of cutting and burning / chipping per year to maintain it in a useable condition.

Pine Mt. VMP

- This proposed project is a 1600 acre VMP 2-3 miles southwest of the community of Pine Flat. This is mostly on National Forest / Monument lands that lie within CAL FIRE's DPA. The objective of this burn is to reduce fuel load, improve wildlife habitat, and improve grazing. The effects of the burn should create a protection zone for the communities of Pine Flat and California Hot Springs.

Sandy Creek Fuel Break

- Construct a shaded fuel break along the Sandy Creek Fire Control Road to the forest boundary. This will provide a control point for the protection of Poso and Panorama Heights. The fuel break is to be constructed 200' x 1 mile. The Project is still in planning stages.

Gibbons Peak VMP

- This proposed project is an 1800 acre VMP 12 miles northwest of California Hot Springs. Roughly 1400 acres on SRA, and the remaining on BIA land. Contracts and agreements still need to be obtained for all of the cooperators involved. The objective of this burn is to reduce fuel load, improve wildlife habitat, and improve grazing.

Mt. Home Demonstration State Forest

- Continue fuel treatments within 100' of primary roads. Work involves pre-commercial thinning of conifers typically less than 8 inches DBH and full removal of woody brush species. Material generated from the uphill side of the road is either pulled to the road and chipped or piled for seasonal burning. Material generated from below the road is piled for seasonal burning. All cutting, piling and chipping is performed by MHCC crews, USFS "blue card" crews and/or MHDSF staff. Burning is performed by MHDSF staff on permissive burn days with a permit through the Tulare County APCD.
- Maintain a defensible fuel profile within and around day use areas and campgrounds. Saplings and small poles shall be marked by MHDSF staff for cutting and chipping. This work will take place within the common campground and day use facilities and shall extend for a distance of at least 100' from the campground improvements.
- Maintain 4291 clearance around all State owned and operated structures that are maintained for human habitation. This shall include the summer and winter headquarters, barracks, Jack's house and pack station. Similar maintenance shall be performed around the fuel tank, and warehouse as well.
- Continue fuel treatments in selected areas throughout the forest. Strategically located areas that are within close proximity to roads or trails shall be selected for treatment. These areas shall be treated by pre-commercial thinning of conifers typically less than 8 inches DBH and full removal of woody brush species. All cut vegetative matter shall be piled for seasonal burning. All cutting and piling shall be performed by MHCC crews, USFS "blue card" crews and/or MHDSF staff.

Deep Fuel Break

- Submit Timber Harvest Plan that will expand upon the dozer line that was constructed during the "Deep Fire" in 2004. The harvest area shall extend approximately 300 to 500 feet on both flanks of the ridge line that extends from the Copper Mine Road at the north end through the Methuselah Campground area, to the southern forest boundary. This harvest shall focus on leaving a residual stand that contains between 50 to 160 square feet of basal area per acre. Residual trees shall be the largest and most fire resistant specimens from the pre-harvest stand. The intent of the fuel break is to slow or stop a wildfire coming from the Wishon Fork of the Tule River before it enters the major land holdings of the State Forest. The harvest will further focus on disconnecting the horizontal and vertical fuel ladders creating a defensible fuel profile. Large trees shall be logged conventionally with ground-based heavy equipment while small trees generally less than 24" DBH shall be logged mechanically with feller bunchers. Utilizing mechanized harvest equipment will allow for "whole tree" harvest operations resulting in reduced slash accumulations post harvest. Sub-merchantable trees and brush shall be treated by either hand cutting and piling, hand cutting and broadcast burning, or mastication. All three methods could potentially be combined.

Deep Fuel Break cont.

This project is necessary to protect the public, infrastructure, State property and forest resources, watershed and habitat values, soil, and old-growth giant sequoia.

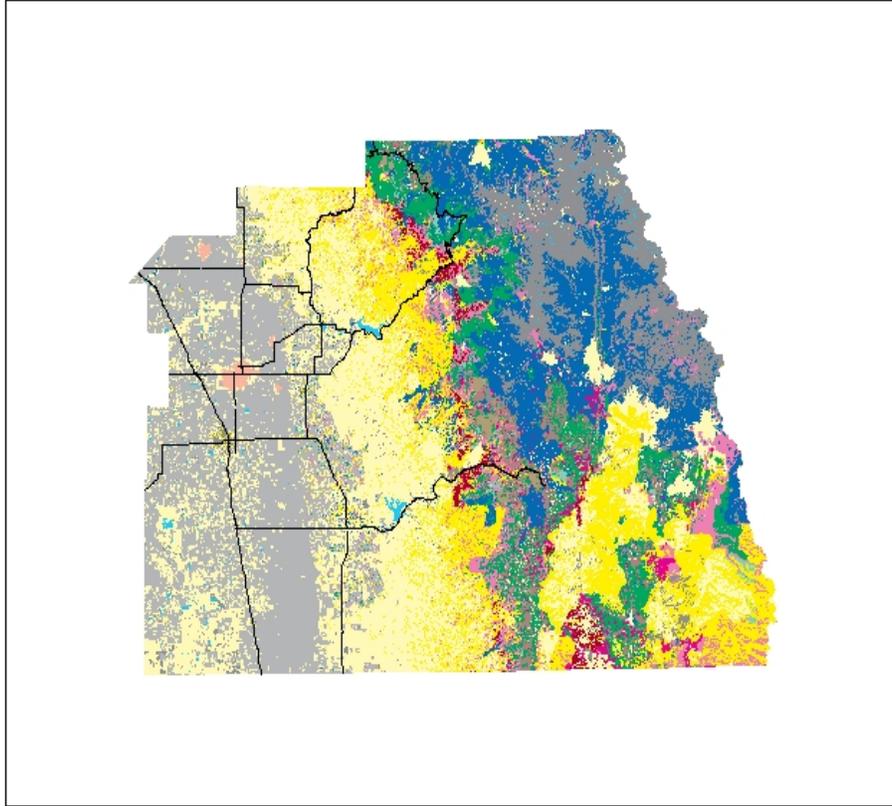
Unit Projects

Battalion Fire Prevention Signs

- Identify by Battalion sign locations and numbers of fire prevention signs. Work with field battalion staff to determine appropriate sign messages for the time of year. Seek out grant funding to maintain and replace dilapidated signs, and sign stands. Obtain a GPS coordinate for each sign location and create a data layer that can be used against our ignition data layer to develop prevention messages to meet the local ignitions.



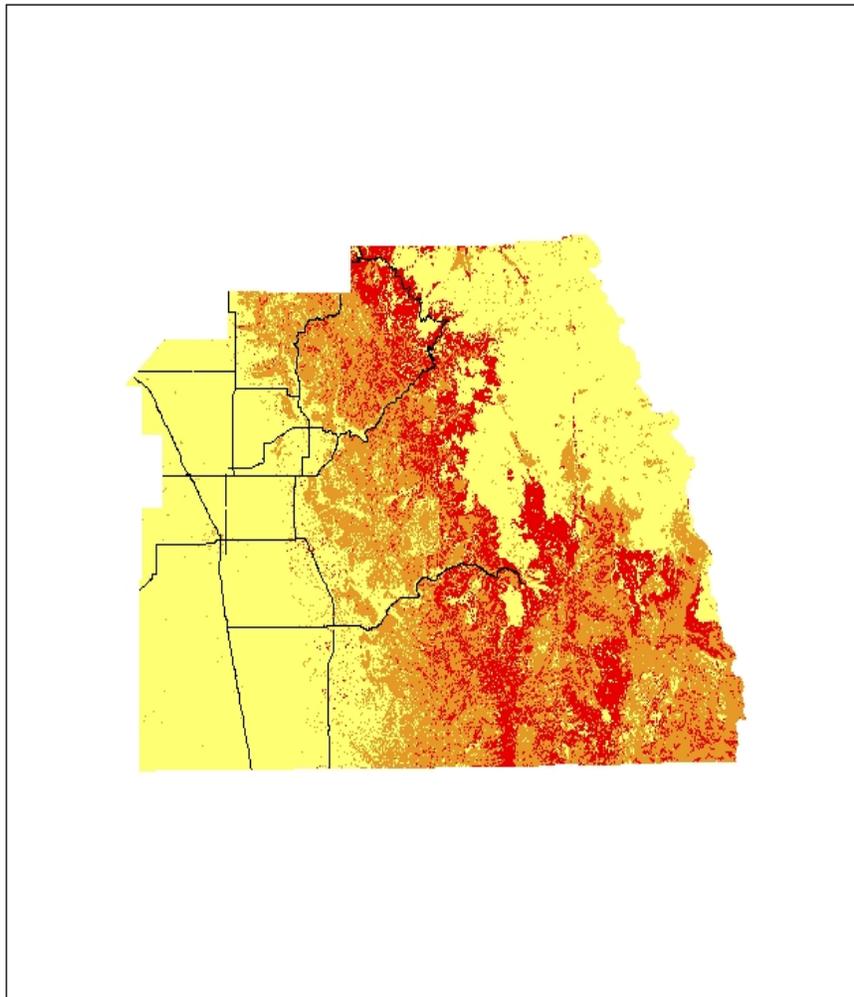
Tulare Unit Fuels Map



fmod05_1	 6 Dormant Brush	 15 Desert Fuel (Custom 15)
Fuel Model	 7 Southern Rough	 28 Urban Fuel (Custom 28)
 1 Grass	 8 Hardwood/Lodgepole Pine	 97 Agricultural Lands
 2 Pine/Grass	 9 Mixed Conifer Light	 98 Water
 3 Tall Grass	 10 Mixed Conifer Medium	 99 Barren/Rock/Other
 4 Tall Chaparral	 11 Light Logging Slash	
 5 Brush	 12 Medium Logging Slash	



Tulare Unit Fuel Rank Map

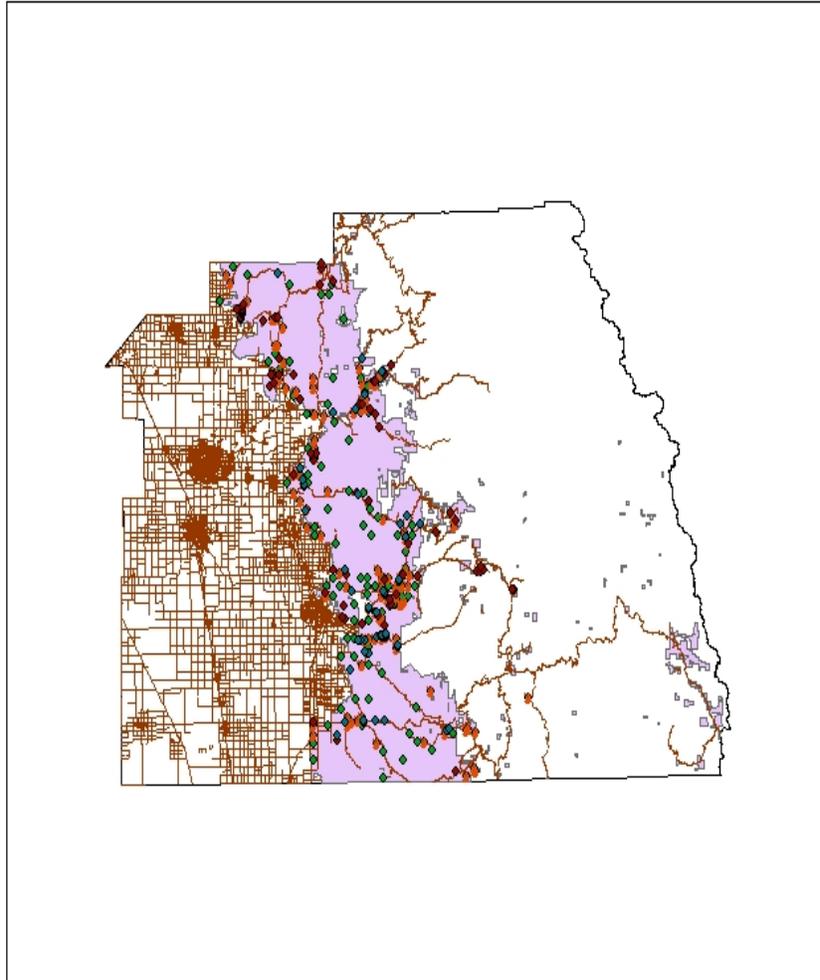


Fire Plan Fuel Rank

	Moderate		High
			Very High



Ingition Map



Legend

- ◆ 2005
- ◆ 2006
- ◆ 2007
- ◆ 2008
- streets

