

Unit Strategic Fire Plan
Tulare Unit



Table of Contents

SIGNATURE PAGE	3
EXECUTIVE SUMMARY	4
SECTION I: UNIT OVERVIEW	
UNIT DESCRIPTION	5
UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES.....	6
SECTION II: COLLABORATION	
DEVELOPMENT TEAM.....	7
SECTION III: VALUES AT RISK	
IDENTIFICATION OF ASSETS AT RISK	8
COMMUNITIES AT RISK	10
SECTION IV: PRE FIRE MANAGEMENT STRATEGIES	
FIRE PREVENTION	11
❖ ENGINEERING & STRUCTURE IGNITABILITY.....	12
❖ INFORMATION AND EDUCATION	13
VEGETATION MANAGEMENT	14
SECTION V: PRE FIRE MANAGEMENT TACTICS	
DIVISION / BATTALION / PROGRAM PLANS.....	15
APPENDIX A: HIGH PRIORITY PRE FIRE PROJECTS	16
APPENDIX B: AMENDMENTS TABLE	31
APPENDIX C: ANNUAL PRIORITY GOALS AND OBJECTIVES	33
APPENDICES D-Z: OPTIONAL	40
EXHIBITS: MAPS	48
ADDENDUM: 2012	49

SIGNATURES

Unit Strategic Fire Plan developed for Tulare Unit:

This Plan:

- Was collaboratively developed. Interested parties, Federal, State, City, and County agencies within the Unit have been consulted and are listed in the plan.
- Identifies and prioritizes pre fire and post fire management strategies and tactics meant to reduce the loss of values at risk within the Unit.
- Is intended for use as a planning and assessment tool only. It is the responsibility of those implementing the projects to ensure that all environmental compliance and permitting processes are met as necessary.

DA
Kirk
DA

Unit Chief
Kirk Swartzlander

Date

Pre-Fire Engineer
Aldo Gonzalez

Date

EXECUTIVE SUMMARY

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 the 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. The Unit will work with Sacramento to implement the plan and insure it meets the states MISSION and VALUES. Changes are continually being made to the Fire Plan. The Fire Plan will be a tool to assist the Unit with pre-suppression projects which exist within each Battalion.

A: UNIT DESCRIPTION

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 combined 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.

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, 2010 Department of Finances estimates Tulare County's population at 429,668. 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.

B: UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

TULARE UNIT Facilities and Recourses

- Eight (8) CAL FIRE stations
- Mountain Home Conservation Camp
- Porterville Air Attack Base
- Fire Prevention/Protection/Planning Bureau
- Training Bureau

Peak Fire Season Staffing

- Eleven (11) CAL FIRE Schedule “B” engines
- Two (2) CAL FIRE Bulldozers
- One (1) Air Attack
- One (1) Air Tanker
- Five (5) Inmate hand crews

Tulare Unit has MUTUAL AID AGREEMENTS with the following Departments:

- Tulare County Fire Department (TCFD)
- United States Forest Service (SQF)
- National Park Service (Sequoia & Kings)
- Kern County Fire Department (KRN)
- Tule Indian Reservation (TIA)
- Visalia City Fire Department (VFD)

SECTION II: COLLABORATION

A: COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

Representatives involved in the development of the Unit Strategic Fire Plan are included in the following table. Their organization and title are indicated below:

Plan Development Team:

Organization	Representative (title)
Tulare County Recourse Conservation Dist	Tom Daley
The Sequoia Fire Safe Council	Robert Puls
Alder Creek Fire Safe Council	Harry Love

A: ASSETS AT RISK**Life and Safety**

The loss of life and disregard for safety is the ultimate price paid. One ounce of prevention is little compared the any injury or life lost. This is based on population density and make up of the community. The size of fire, location, and rate of spread could prove deadly. The Non-economic values are not quantified but the level of value will have an effected at the Local, State, and National level.

Air Quality

The potential damages to heath, materials, vegetation, and visibility. The rank based on vegetation type and the air movement in our air basin. The impact will affect both the Local and state Levels.

Range Productivity

The dollar cost to replace feed per acre will very depending on the regions, owners, and feed. This will have impact at both the Local and state level.

Recreation on public Wildlands

Unique areas with potential damage could happen to the facilities and soundings. This would depend on the fuels in the area and the susceptibility of fire. This would have an effect at the Local, State and National Levels.

Structures

The effect of fire would depend on the housing density and the exposure (potential for structure loss in a large fire event). The cost would not only be to the average dollar lost per home but the non commodity assets as well. The effects of this type of incident would be felt at the local and state level.

Timber

The average loss per acre burned would depend on the region and owner. The effect of a wildland fire would affect local, state, national levels.

Water and water sheds

The range of economic impacts per acre value is dependent on the location and potential fire. A fire would increase water yields but could cause significant damage to the echo system and water ways. The cost alone of sediment removal would be a major impact. Vegetation Management Plans are the key to water shed management. VMP`s planned and coordinated are the best why to avoid major damage to our water shed.

Life and Safety

The loss of life and disregard for safety is the ultimate price paid. One ounce of prevention is little compared the any injury or life lost. This is based on population density and make up of the community. The size of fire, location, and rate of spread could prove deadly. The Non-economic values are not quantified but the level of value will have an effected at the Local, State, and National level.

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Structures

The effect of fire would depend on the housing density and the exposure (potential for structure loss in a large fire event). The cost would not only be to the average dollar lost per home but the non commodity assets as well. The effects of this type of incident would be felt at the local and state level.

B: COMMUNITIES AT RISK

The communities that are a risk and are recognized at both the State and national levels are:

Badger	Camp Nelson	Exeter
East Porterville	Kennedy Meadows	Lindsay
Poso Park	Pine Flat	R Ranch
Tule River	Wilsonia	
Tule River Indian Reservation		

The communities that are not recognized at the state and national levels are:

Balance Rock	Blue Ridge	Elderwood
Campbell Creek	Fountain Springs	Hartland Camp
Hammond	Hot Springs	Jack Ranch
Kaweah	Lemon Cove	Mehrten Creek
Pine Flat	Poso Park	Posy
Sugar Loaf Village	Sierra Glen	Woodlake

http://www.cafirealliance.org/communities_at_risk/communities_at_risk_list

SECTION IV: PRE FIRE MANAGEMENT STRATEGIES

A: FIRE PREVENTION

Based on the previous identified information the Fire Prevention Bureau has adopted the following actions to provide efforts of ignition mitigation to protect property, natural resource loss, and loss of life or injuries.

- **Law Enforcement**

- The enforcement of forest and fire laws will continue to be proactive in efforts to pursue and prosecute violators of statute. Efforts to reduce the miscellaneous category on the ignition statistics has improved. Fires must continue to be investigated in more detail. This may require some additional education/training of our fire personnel to assist them in origin and cause investigation and report writing. Our efforts to collect suppression cost on fires of negligent or criminal nature has improved. Emergency incidents are costly and the ability to collect suppression cost and punitive damages will remain active.
- Lastly, the law enforcement staff is given the authority and responsibility to identify, investigate and arrest subjects involved in criminal related acts. These incidents will be investigated and documented through proper case management. The management of these cases will be conducted with detail of documentation and proper evidence security. Finally, given the correct legal circumstances the cases will be actively pursued and prosecuted. Efforts to improve our evidence collection procedures and proper evidence security are a priority in this unit, in conjunction with continued education for our law enforcement officers, related to fire investigation, interviewing, and case development.

- ENGINEERING & STRUCTURE IGNITABILITY

Through comprehensive engineering and the law enforcement programs are what the Tulare Unit strives to prevent fires. Reduction of loss from Tulare Units wildlands each year is the goal. Tulare Unit works with communities, and non-profit groups to educate the public and prevent wildland fires.

Tulare Unit also enforces the LE -100 program (Fire Hazard Inspections). All structures in the State Responsibility Area are inspected. Home owners who don't comply with the Public Resource Code (PRC) section 4290 are cited. The idea behind the program is not to issue a citation, but preventing the loss of structures when fire is moving through communities.

- INFORMATION AND EDUCATION

Information & Education is an integral part of the Fire Prevention Program. The focus is to reach out to the elementary school children with match & lighter safety education. In addition to the school programs, it is imperative to education the public on the importance of Defensible space clearance. The proper method to burn hazard reduction materials, and the correct times to use power equipment to achieve the code requirements.

The basis fire safety program that teaches children not to play with matches, lighters or fire is the "Team Teaching" program. Team Teaching targets Pre School through second grade.

Team Teaching is a highly professional program developed by teachers, CAL FIRE personnel and child psychologists. This program utilizes Smokey Bear an internationally recognized fire prevention symbol to teach children not to play with matches, lighters or fire. Pre-planning is the most important factor for a successful team teaching program. Historically, the program has been presented to school children in cooperation with local government and/or County Fire Departments, Fire Safe Councils and the United States Forest Service.

The first step in planning a fire prevention program is to identify what the Unit's priorities are. Review the Units fire plan to determine what fire causes occur in your target areas. For example child/match caused fires may have dropped in occurrence due to heavy saturation of schools with "Team Teaching" and other school education programs over the years, while "equipment use" or debris burning" caused fires have increased. This would indicate a change in priorities. The Unit could then choose to develop an annual maintenance program for "Team Teaching" and re direct emphasis on "equipment use" and "debris burning" programs or assign additional personnel to assist with the implement programs to meet those needs in targeted areas.

B: VEGETATION MANAGEMENT

Natural Resource Management is supporting the TUU Fire Plan through Forest Practice activities as well as Vegetation Management Programs and other fuel reducing grants. Through the Forest Practice Program we are encouraging healthy forest through out the unit. Landowners as well as local Registered Professional Foresters are currently reducing overcrowded timber stands. This is being Implemented by either Timber Harvest Plans (THPs) or 1 one the several other timber exemptions.

TUU currently has 2 Vegetation Management Programs (VMP) approved with at least 2 others in the process. The VMPs and other fuel reduction grants typically have the same desired outcome. Both of these look at reducing the amount of high fire vegetation and providing an opportunity to fight fire safely and aggressively. Both of these programs look at increasing the water table by reducing the amount of evapotranspiration in the watershed. Reducing the amount of hazardous brush will also help in the foraging of not only livestock, but wildlife as well. By doing these projects it also helps bring the natural mosaic back to the landscape.

A: DIVISION / BATTALION / PROGRAM PLANS

BADGER BATTALION

Fuels:

The fuels within the Badger Battalion are typical of those found in the Central California San Joaquin valley and Sierra Nevada. This area is influenced by a Mediterranean climate with warm, dry summers and cool moist winters. The climate, topography, geology and land use patterns within this region determine the vegetation patterns. Vegetation within the Badger Battalion varies from annual grasses and forbs on the valley floor to mixed conifer forest at the higher elevations. The lower elevations manifests annual grasses, including wild oats, and loading varies from year to year based on seasonal rainfall. Between 500'-1000' elevation this changes to a Woodland Oak fuel type with brush becoming more prevalent along with pockets of gray/bull pine starting around the 2000' level. The brush component is made up of several species, including, but not limited to; manzanita, chemise, ceanothus, scrub oak, live oak and poison-oak. The brush is interspersed with black oak and live oak, buckeye trees and sycamore (in drainages) with higher densities on the north and east aspects. This vegetation type continues to about 3500' where it blends into the Conifer Belt with scattered oaks, brush and conifer trees. At about 4500' conifers become the dominant fuel with such species as; cedar, pine, fir, live oak and black oak with a mixed brush understory which includes bear clover, lotus, chinquapin and whitethorn ceanothus.

Topography:

The Badger Battalion is typical of most of the foothill areas in the Southern Sierra Nevada Range and encompasses a large portion of the Dry Creek drainage and the Cottonwood Creek drainage. The Topography ranges from gentle rolling foothills above the Central Valley floor at 400' elevation to steep river drainage along Dry Creek. Major ridges and mountains are separated by small ravines, rugged canyons, and a few gentle valleys with elevations within the State responsibility area topping out near the 5000' elevation range.

Weather:

Typical summer weather patterns consist of 90 – 105 degree days with humidity's in the upper teens to low 20's and nights in the upper 50's to near 70 degrees with humidity's in the high 30's to low 50's. Winds are generally light and diurnal, up slope, up canyon in the day time and down slope, down canyon at night.

Fire History:

The Badger Battalion averages approximately 5-10 fire starts annually, with the majority of those starts occurring in the lower grass lands. Although rare, starts in the upper elevations within the Battalion do pose a significant potential for a large extended attack fire.

Large extended attack fires have occurred in the Battalion over the years with several fires in the 500 – 1000 acre range, there is no known history of major fires in the Battalion.

Battalion Priority

Updating and maintaining our fire road system is a top priority in the Badger Battalion. By ensuring these road systems are well maintained allows us to access areas within the Battalion that would otherwise be difficult to access.

Proposed fuels reduction projects in the Battalion have been identified. Some are in the process of nearing completion, while other proposed projects are still waiting for final approval. Current projects are; working in coordination with USFS and Hartland Christian Camp, a fuel break along the ridge top, west of the Hartland Christian Camp, this project is about 90 percent complete. Working with the Fire Safe Council, a fuel break along Ridge, west of Badger, has been identified and is in the works with projected completion within the next 2 years. The fuel break will start of Miramonte Fire Control Road, head south and end at Mountain House, located at Hwy 245 and Dry Creek Road. Also in preliminary stages is the Eshom Valley VMP project, which will reduce fuel loading along Shadequarter Ridge. This project will involve mechanical brushing, pile burning and a broadcast burn. This project is anticipated to be completed in the next 2 years.

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. 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.

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

Fuels:

The fuels within the Kaweah Battalion are typical of those found in the Central California San Joaquin Valley and Sierra Nevada. This area is influenced by a Mediterranean climate with warm, dry summers and cool moist winters. The climate, topography, geology and land use patterns within this region determine the vegetation patterns. Vegetation within the Kaweah Battalion varies from annual grasses and forbs on the valley floor to mixed conifer forest at the higher elevations. The lower elevations manifests annual grasses, including wild oats, and loading varies from year to year based on seasonal rainfall. Between 500'-1000' elevation this changes to a Woodland Oak fuel type with brush becoming more prevalent along with pockets of gray/bull pine starting around the 2000' level. The brush component is made up of several species, including, but not limited to; manzanita, chemise, ceanothus, scrub oak, live oak and poison-oak. The brush is interspersed with black oak and live oak, buckeye trees and sycamore (in drainages) with higher densities on the north and east aspects. This vegetation type continues to about 3500' where it blends into the Conifer Belt with scattered oaks, brush and conifer trees. At about 4500' conifers become the dominant fuel with such species as; cedar, pine, fir, live oak and black oak with a mixed brush understory which includes bear clover, lotus, chinquapin and whitethorn ceanothus.

Topography:

The Kaweah Battalion is typical of most of the foothill areas in the Southern Sierra Nevada Range and encompasses a large portion of the Kaweah drainage and the Cottonwood Creek drainage. The Topography ranges from gentle rolling foothills above the Central Valley floor at 400' elevation to steep river drainage along Kaweah River. Major ridges and mountains are separated by small ravines, rugged canyons, and a few gentle valleys with elevations within the State responsibility area toping out near the 5000' elevation range.

Weather:

Typical summer weather patterns consist of 90 – 105 degree days with humidity's in the upper teens to low 20's and nights in the upper 50's to near 70 degrees with humidity's in the high 30's to low 50's. Winds are generally light and diurnal, up slope, up canyon in the day time and down slope, down canyon at night.

Fire History:

The Kaweah Battalion averages approximately 8-15 fire starts annually, with the majority of those starts occurring in the lower grass lands. Although rare, starts in the upper elevations within the Battalion do pose a significant potential for a large extended attack fire.

Large extended attack fires have occurred in the Battalion over the years with several fires in the 500 – 1000 acre range.

Battalion Priority

Updating and maintaining our fire road system is a top priority in the Kaweah Battalion. By ensuring these road systems are well maintained allows us to access areas within the Battalion that would otherwise be difficult to access.

Proposed fuels reduction projects in the Battalion have been identified. Some are in the process of nearing completion, while other proposed projects are still waiting for final approval. Current projects are; updating Pre-attack plans, the Rat Trail projects on the North Fork Drainage and around Kaweah Lake, Grouse Valley FCR fuel Break, Grouse Valley VMP, Three Rivers FFS Demo project and the Sheep Creek Suppression Tank and Pond maintenance.

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. Funding for this project is through acquired available grant funding via the Sequoia Fire Safe Council.

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.

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 tanks 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

Fuels:

The fuels within the Tule Battalion are typical of those found in the Central California San Joaquin valley and Sierra Nevada. This area is influenced by a Mediterranean climate with warm, dry summers and cool moist winters. The climate, topography, geology and land use patterns within this region determine the vegetation patterns. Vegetation within the Tule Battalion varies from annual grasses and forbs on the valley floor to old growth sequoia redwood/mixed conifer forest at the higher elevations. The lower elevations manifests annual grasses, including wild oats, and loading varies from year to year based on seasonal rainfall. Between 500'-1000' elevation this changes to a Woodland Oak fuel type with brush becoming more prevalent. The brush component is made up of several species, including, but not limited to; manzanita, chemise, ceanothus, scrub oak, live oak and poison-oak. The brush is interspersed with black oak and live oak, buckeye trees and sycamore (in drainages) with higher densities on the north and east aspects. This vegetation type continues to about 3000' where it blends into the Conifer Belt with scattered oaks, brush and conifer trees. At about 4000' conifers become the dominant fuel with such species as; cedar, pine, fir, live oak and black oak with a mixed brush understory which includes bear clover, lotus, chinquapin and whitethorn ceanothus. This continues up to about the 5500' elevation where it transitions to a Timber fuel type dominated by fir, pine and sequoia. This type generally manifests areas of heavy down and dead fuels.

Topography:

The Tule Battalion is typical of most river drainages found in the Southern Sierra Nevada Range and encompasses a large portion of the Tule river drainage and spills over into the Deer Creek drainage on its southern border. The Topography ranges from gentle rolling foothills where it leaves the Central Valley floor at 500' elevation to sheer granite monoliths at the 8000' elevation. The Tule river drainage consists of three major forks; North, Middle, and South forks and is further made up by numerous feeder creeks and seasonal streams. Major ridges and mountains are separated by small ravines, deep rugged canyons, and a few gentle valleys. Due to Glacial activity thousands of years ago large granite boulders, rocky escarpments and sheer rock faces can be found on most ridges and mountains.

Weather:

The Tule Battalion like Tulare County is influenced by a Mediterranean climate with cool moist winters and warm dry summers. Average annual temperatures range from 49.6 to 76.6 however it is not uncommon to have temperatures in the low 20s during the winter months and highs exceeding 100 for extended periods during the summer months. The rainy season is October through April and annual rainfall average is 11.03 inches . Summers can be hot as stated earlier with extremely warm temperatures and dry relative humidity lasting for weeks. During the North American Monsoonal season thunderstorms are not uncommon over the higher elevations with some extending out over the Sierra Foothills and valley floor. Some years a Monsoonal push will work from the southwest driving northeast causing thunderstorms with associated lightning and scattered precipitation on the valley floor and foothill region.

Fire History:

The Tule Battalion includes the Hwy 190 corridor which accesses numerous recreation areas such as; Lake Success, Balch Park, Mountain Home Demonstration State Forest, Sequoia National Forest, Eagle Mountain Casino and Giant Sequoia National Monument. The battalion traditionally experiences the majority of the fire activity in the Tulare Unit. Although recreationist contributes to some of the fire causes, a majority of the activity is attributable to arson caused fires. The proximity of the Tule River Indian Reservation which has a decade's long arson history contributes heavily to the battalion's fire responses. Sometimes these are a single fire to a series of fires being set on SRA lands adjacent to the reservation. Large fire history has been primarily in the grass and oak woodland fuel types. There have been a couple fires in the Brush/Timber fuels that originated in the Middle Fork of the Tule River that burned onto or threatened SRA lands; these were the "Coffee" and "Deep" fires. Both fires did pose a threat to Mountain Home Demonstration State Forest.

Battalion Priority:

Fire roads and their maintenance are a high priority they provide access and fire control opportunities to many areas of the Battalion. Many of these fire roads also access ranch roads that local ranchers have put in which provide even greater access and fire control opportunities. Without the fire road maintenance many areas would be inaccessible to ground equipment and would require time consuming walk in or costly fly in access by ground resources. Another priority is the PC 4291 inspection program which provides defensible space around the numerous structures in the Battalion. This program has a successful history with improved compliance and the need for citations diminishing each year.

Fire Defense Projects:

There are currently three major projects underway in the Battalion, one is the “Mossy Rock” VMP which is a fuels modification project that when completed will complement the “Battle Mountain” VMP that was completed in 2001. The “Happy Camp” project which started in 2010 is a fuel break below the community of Happy Camp which resides in the timber belt with extremely high fuel loading, completion of this project is anticipated in 2012. The Mountain Home Demonstration State Forest Evacuation Plan is currently in process with completion expected by May of 2011 this is a project that involves different cooperators from different agencies that have vested interest in the affected area.

Collaborators:

Sequoia Fire safe Council; refer to Tulare Unit Forester Dave Shy and Pre-Fire Engineer Aldo Gonzalez for further information on this subject.

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. 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 tanks 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.

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 tanks maintenance costs are negligible and require little effort.

FOUNTAIN SPRINGS BATTALION

Fuels:

The fuels within the Fountain Springs Battalion are typical of those found in the Central California San Joaquin valley and Sierra Nevada. This area is influenced by a Mediterranean climate with warm, dry summers and cool moist winters. The climate, topography, geology and land use patterns within this region determine the vegetation patterns. Vegetation within the Fountain Springs Battalion varies from annual grasses and forbs on the valley floor to mixed conifer forest at the higher elevations. The lower elevations manifests annual grasses, including wild oats, and loading varies from year to year based on seasonal rainfall. Between 500'-1000' elevation this changes to a Woodland Oak fuel type with brush becoming more prevalent along with pockets of gray/bull pine starting around the 2000' level. The brush component is made up of several species, including, but not limited to; manzanita, chemise, ceanothus, scrub oak, live oak and poison-oak. The brush is interspersed with black oak and live oak, buckeye trees and sycamore (in drainages) with higher densities on the north and east aspects. This vegetation type continues to about 3500' where it blends into the Conifer Belt with scattered oaks, brush and conifer trees. At about 4500' conifers become the dominant fuel with such species as; cedar, pine, fir, live oak and black oak with a mixed brush understory which includes bear clover, lotus, chinquapin and whitethorn ceanothus.

Topography:

The Fountain Springs Battalion is typical of most of the foothill areas in the Southern Sierra Nevada Range and encompasses a large portion of the Deer creek drainage, White river drainage and the upper portions of the Poso creek drainage on its southeastern border. The Topography ranges from gentle rolling foothills above the Central Valley floor at 400' elevation to steep river drainages. Major ridges and mountains are separated by small ravines, deep rugged canyons, and a few gentle valleys with elevations within the State responsibility area toping out near the 5000' elevation range.

Weather:

Typical summer weather patterns consist of 90 – 105 degree days with humidity's in the upper teens to low 20's and nights in the upper 50's to near 70 degrees with humidity's in the high 30's to low 50's. Winds are generally light and diurnal, up slope, up canyon in the day time and down slope, down canyon at night.

Fire History:

The Fountain Springs Battalion averages approximately 7-10 fire starts annually, with the majority of those starts occurring in the lower grass lands. Each year however you can expect a least a couple of starts in the upper elevations within the Battalion where there is significant potential for a large extended attack fire.

Large extended attack fires have occurred in the Battalion over the years with several fires in the 500 – 1500 acre range, there is no known history of major fires in the Battalion.

Battalion Priority

Updating and maintaining our fire road system is a top priority in the Battalion. By ensuring these road systems are well maintained allows us to access areas within the Battalion that would otherwise be difficult to access.

Proposed fuels reduction projects in the Battalion have been identified and the proposed projects are still waiting for final approval. The number one priority is to reduce fuel loading in and around the communities of Pine Flat and California Hot Springs. In 1997 a fuel break was begun around Pine Flat using Mountain Home crews, this fuel break was never completed or maintained. Working with the Fire Safe council this project will hopefully be a reality again within the next 2 – 3 years.

My second priority is to gain approval for a mechanical VMP on King George Mountain. This project would reduce fuel loading as well as improve grazing land and wildlife habitat. It is also my desire to identify ways of reducing fuels in and around the Poso, Jack ranch areas.

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.

MHCC Program Information

Mountain Home Conservation Camp is currently working on a number of grant funded prefire projects. Among them are the Mossy Rock Fuel Break, Rancheria Fuel Break, Happy Camp Fuel Break, and Mountain Home Demonstration State Forest roadside fuel break and thinning projects. The camp has also done considerable work over the last two years on the Grouse Vegetation Management Project which is a prescribed burn designed to modify fuels on a large scale north of Blue Ridge. All of these projects will provide either enhanced defensible space, fuel bed modification, or fuel breaks to protect lives, property, and resources from the threat of a catastrophic wildfire.

The camp also has a sign shop which produces fire prevention signs which are intended to heighten fire safety awareness of the public. Additionally, the camp performs much community and public service work throughout the county. Examples of cooperators are the Tulare County Resource Conservation District, various Fire Safe Councils, Tulare County Road Department, U.S. Army Corps of Engineers at Lakes Kaweah and Success, City of Porterville, City of Exeter, City of Visalia, City of Lindsay, CalTrans, and a number of private landowners and citizens.

At full staffing the camp has five 17 man crews which can respond to emergencies and perform public service. We perform thousands of man hours each year and support each field battalion in supporting its individual prefire projects and goals.

APPENDIX A: HIGH PRIORITY PRE FIRE PROJECTS

Batt	Project Number	Project Name	Status	Estimated Completion Year	Project Type	Net Acres
11	1101	Badger / Miramonte Fuel Break	P	2011	FR	
11	1102	Shadequarter to Mankin VMP	P	2012	VMP	
11	1103	Buzzard Rust Suppression Tank	P	2012	PA	
12	1201	Pre- Attack Plans	M	2011	PA	
12	1202	North Fork Rat Trail	M	2011	PA	
12	1203	Kaweah Lake Rat Trail	M	2011	PA	
12	1204	Grouse Valley Fire Control Road Fuel Break	M	2011	FR	
12	1205	Grouse VMP	O	2011	VMP	1500
12	1206	Three Rivers FFS Demo Project	M	2011	PA	
12	1207	Sheep Creek Fire Suppression Tank	M	2011	PA	
12	1208	Salt Creek Fire Suppression Pond	M	2011	PA	
12	1209	Blue Ridge Fuel Break	O	2011	PA	
13	1301	Cow Mountain Fuel Break	P	2013	FR	
13	1302	Rancheria Suppression Tank	M	2011	PA	
13	1303	Wishon Suppression Tank	M	2011	PA	
13	1304	Success Lake Rat Trail	O	2011	PA	
13	1305	Rancheria Fuel Break	M	2012	FR	

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

APPENDIX C: PRIORITY GOALS AND OBJECTIVES FOR 2010-2012

CAL FIRE Units were asked to identify two or more priority objectives under each goal in the 2010 Strategic Fire Plan for California. The Units' priorities are identified in bold and a measurement criteria are provided for each of the identified objectives. Throughout the next year, the Units will implement the identified priorities and report on the measurement criteria by June 2012. The priority objectives are displayed under three headings:

A. SACRAMENTO PROGRAMS OR COMMITTEE ONLY

B. SACRAMENTO PROGRAMS AND STAFF OR COMMITTEE, REGIONS AND UNITS

C. UNITS ONLY

These categories are not intended to exclude Units from addressing priority objectives in any of the three categories, they are only recommendations.

A. SACRAMENTO PROGRAMS OR COMMITTEE ONLY

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

Objectives:

- a) **Identify and provide appropriate automated tools to facilitate the collection, analysis and consistent presentation of datasets.**

Measurement Criteria: *CAL FIRE shall establish policy that specifies spatial databases covering all forest and rangeland to not be older than 10 years. Include minimum requirements for spatial databases. Follow the coordinated work schedule with the USDA Forest Service to maintain cost effective collection and processing of data.*

Goal 2: Articulate and promote the concept of land use planning as it relates to fire risk and individual landowner objectives and responsibilities.

Objectives:

- a) **Identify the minimum key elements necessary to achieve a fire safe community, and incorporate these elements into land use planning, CWPPs and regional, county and Unit fire plans.**

Measurement Criteria: *CAL FIRE to create a working committee with CAL Chiefs, USDA Forest Service and other key organizations to develop, monitor and refine elements of fire safe community, including evacuation plans. The Committee shall review existing templates for FIREWISE Assessments, CWPPs, fire plans and land use plans; identify the common elements and approaches for better integration. Utilize fire protection, planning and engineering expertise to identify the key elements (from existing templates) necessary for fire safe communities. Once agreed upon, these key elements will then be used as a checklist to guide consistency in fire safe planning efforts across jurisdictions. At a minimum, annually report to the Board on results.*

Goal 3: Support and participate in the collaborative development and implementation of wildland fire protection plans and other local, county and regional plans that address fire protection and landowner objectives.

Objectives:

- a) **Establish a working group, consisting of Board members and Departmental staff, to develop minimum standard elements for inclusion in Unit fire plans.**
- b) **Emphasize coordination of Unit fire plans with community wildfire protection plans to encourage and support one consistent approach. Develop county or regional fire plans by bringing together community-based groups, such as fire safe councils and affected fire and land management agencies.**

Measurement Criteria: *These measurement criteria meets objectives a and b. CAL FIRE to revise the template for the Unit fire plans to incorporate the goals and objectives of the 2010 Strategic Fire Plan. During the revision, the template for a CWPP will be jointly reviewed in order to reduce duplication of fire planning efforts. The key elements identified through the process identified in Goal 2, Objective b will also be incorporated into the Unit fire plan/CWPP.*

- c) **Create and support venues in which individual community members can be actively involved in local fire safe councils, community emergency response teams, FIREWISE and other community-based efforts to develop readiness plans and educate landowners to mitigate the risks and effects of wildland fire.**

Measurement Criteria: *The California Fire Alliance to work with the California and local FSCs to develop venues (e.g., workshops) that assist landowners with readiness planning and education. CAL FIRE, California Fire Alliance Liaison to report to the Board annually on Alliance activities.*

Goal 4: Increase awareness, knowledge and actions implemented by individuals and communities to reduce human loss and property damage from wildland fires, such as defensible space and other fuels reduction activities, fire prevention and fire safe building standards.

Objectives:

- a) **Educate landowners, residents and business owners about the risks and their incumbent responsibilities of living in the wildlands, including applicable regulations, prevention measures and replanning activities.**

Measurement Criteria: *In coordination with the CAL FIRE Communications Program, the USDA Forest Service and local fire agencies, University of California and county cooperative extension offices, CAL FIRE to collect information on methods and effectiveness of existing outreach. Complete the information collection within year one of adoption of the 2010 Strategic Fire Plan. Develop a common set of measures to assess CAL FIRE efforts, build those into Unit fire plans and report to the Board. Report the progress of implementation at the end of year two.*

Goal 5: Develop a method to integrate fire and fuels management practices with landowner priorities and multiple jurisdictional efforts within local, state and federal responsibility areas.

Objectives:

- b) **Work to remove regulatory barriers that limit hazardous fuels reduction activities.**

Measurement Criteria: *In conjunction with the Resource Protection Committee, CAL FIRE will develop an approach to identifying and recommending ways to address regulatory and other barriers that limit hazardous fuels reduction activities. This approach should include consultation with the Board's Interagency Forestry Working Group and with other agencies, such as the USDA Forest Service, the US Fish and Wildlife Service, the California Energy Commission, the Department of Fish and Game, regional water quality control boards, local government and the public. Finish this compilation within the first year of adoption of the 2010 Strategic Fire Plan. Based on barriers identified and recommendations for change, report to the Board starting in the second year.*

Goal 6: Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.

Objectives:

- e) **Initiate and maintain cooperative fire protection agreements with local, state and federal partners that value the importance of an integrated, cooperative, regional fire protection system and deliver efficient and cost effective emergency response capabilities beneficial to all stakeholders.**

Measurement Criteria: *CAL FIRE to identify the number and effectiveness of agreements and partnerships. In conjunction with the Board's Resource Protection Committee, CAL FIRE will develop suggested measures of effectiveness of cooperative agreements. This should be in collaboration with its partners, completed within 18 months of adoption of the 2010 Strategic Fire Plan and reported to the Board.*

- i) **Provide for succession planning and employee development at all levels within CAL FIRE to maintain emergency response leadership capabilities, administrative management skills and pre-fire planning expertise.**

Measurement Criteria: *CAL FIRE to revise and update the information developed in the 2005 Succession Planning meetings. This work should be completed within two years of the adoption of the 2010 Strategic Fire Plan, with annual reporting to the Board based on issues raised, including identification of key training needs, funding available and expenditures on the training program, content of Academy curricula, number of students requesting and/or able to take classes at the Academy, local community college or other educational outlets.*

B. SACRAMENTO PROGRAMS AND STAFF OR COMMITTEE, REGIONS AND UNITS

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

Objectives:

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

Measurement Criteria: *CAL FIRE shall designate personnel as advisors/liaisons to the California Fire Safe Council (CFSC) and to each county or regional FSC. The advisors will be responsible for reporting activities to the Unit and Region. The advisor to the CFSC will report to the Board. Annual reporting of time-spent working will be displayed in hours at the Unit, Region and Headquarters level. Reporting will include activities with local FSCs, communities, watershed groups or others defining hazards and risk of wildfire and documenting these in a CWPP or Unit fire plan. Emphasize the products developed in Goal 3, Objective b. Advisors will emphasize using standard guidelines and templates for consistency throughout the state.*

Goal 2: Articulate and promote the concept of land use planning as it relates to fire risk and individual landowner objectives and responsibilities.

Objectives:

- b) Assist the appropriate governmental bodies in the development of a comprehensive set of wildland and wildland urban interface (WUI) protection policies for inclusion in each county general plan or other appropriate local land use planning documents.**

Measurement Criteria: *CAL FIRE to appoint a committee including Unit, Region, Headquarters and Contract County representatives. Develop a work plan that identifies key elements of improving WUI strategies, including planning. Reporting should be based on elements identified and priorities for addressing them.*

Under the Board's Resource Protection Committee, review existing Board policies as they relate to wildland fire and the relevance (ease of use, applicability) to incorporation in local general plans. Identify areas of possible improvement and update policies.

Track and report hours at the Unit, Region and Headquarters level spent in reviewing plans and projects; number of local Board/Council, Planning Commission meetings and/or meetings with other cooperators.

Goal 4: Increase awareness, knowledge and actions implemented by individuals and communities to reduce human loss and property damage from wildland fires, such as defensible space and other fuels reduction activities, fire prevention and fire safe building standards.

Objectives:

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

Measurement Criteria: *CAL FIRE to form an advisory committee to review PRC §4291 regulations and make recommendations to the Board that will provide for consistency, streamlining and clarification of existing regulations. The Committee shall develop criteria to increase the number and effectiveness of defensible space inspections. The Committee will develop an implementation plan for the recommendations and report on progress to the Board*

Goal 7: Address post-fire responsibilities for natural resource recovery, including watershed protection reforestation, and ecosystem restoration.

Objectives:

- a) **Encourage rapid post-fire assessment, as appropriate, and project implementation to minimize flooding, protect water quality, limit sediment flows and reduce other risks on all land ownerships impacted by wildland fire.**

Measurement Criteria: *Provide training for CAL FIRE personnel on suppression repair and damage assessment procedures. Develop standard formats and documentation templates for these assessments. Identify and use the findings to reduce the impacts of fire suppression on the landscape and improve resiliency of assets at risk from wildfire.*

C. UNITS ONLY

Goal 5: Develop a method to integrate fire and fuels management practices with landowner priorities and multiple jurisdictional efforts within local, state and federal responsibility areas.

Objectives:

- h) Support the availability and utilization of CAL FIRE hand crews and other CAL FIRE resources, as well as public and private sector resources, for fuels management activities, including ongoing maintenance.**

Measurement Criteria: *Tulare Unit utilized 194 crew days on fuel reduction projects that are identified in the fire plan. Tulare Unit has agreements with Sequoia Fire Safe Council, the Resource Conservation District, and United States Forest Service. Sequoia Fire safe council and the Unit Forester work together to obtain grant funds to get projects started and finished in a timely manner. The Unit priorities the number one goal identified in the fire plan and will be treated as such.*

Goal 7: Address post-fire responsibilities for natural resource recovery, including watershed protection reforestation, and ecosystem restoration.

Objectives:

- e) Assist landowners and local government in the evaluation of the need to retain and utilize features (e.g., roads, firelines, water sources) developed during a fire suppression effort, taking into consideration those identified in previous planning efforts.**

Measurement Criteria: *CAL FIRE (utilizing Incident Command Teams) to schedule a post-fire review of the planning documents that cover the area affected by the fire. Review the goals, objectives and projects (implemented and planned) to identify successes and failures. Review the features developed during the fire and incorporate them into the existing Unit fire plan documents. This objective will only be reported when a fire occurs in an area with an existing Unit fire plan document. Incident command teams may conduct this post fire assessment under the direction of the Unit Chief.*

D. ADDITIONAL UNIT SPECIFIC GOALS AND OBJECTIVES

Lightning Plan

- I. General**
- II. Objectives**
- III. Plan Activation**
- IV. Detection**
- V. Communication**
- VI. Air Branch**
- VII. Ordering & Logistics**
- VIII. Resource Staging & Allocation**
- IX. Incident Dispatchers**
- X. Thunderstorm Safety**
- XI. FMAG Eligibility Criteria Checklist**

I. General

The TUU Lightning Plan is a component of the Tulare Unit Multiple Incident Preparedness Plan. The purpose of this Multi Incident Plan is to facilitate the management of resources to all types of incidents or disasters including multiple lightning caused fires within the Tulare Unit. A three stage response plan is identified in order to meet different levels of hazard severity and Multiple Incident intensity. Each Branch will staff positions as needed to meet the present and expected size and/or complexity of their incident.

II. Objectives

The purpose of the TUU Multi Incident Preparedness Plan is to organize suppression and support functions during multiple incidents in a timely manner. The plan specifically addresses the following:

- Prompt activation of the plan.
- An appropriate response to current and expected activity.
- Prompt detection and reporting of fires.
- Clear, effective, and organized communications.
- Appropriate use of aircraft.
- Initiation of resource orders for additional equipment and support for changing circumstances.
- Initiation of suppression actions on all fires within the capabilities of the available resources.
- Pre-positioning of resources in affected area.
- Establishment of procedures for documentation of resource orders, fire organization, planning, mapping, and chronology of suppression actions.
- Prompt and appropriate allocation of resources.
- Ensuring cost effective use of available resources.
- Maintaining safe and efficient use of available resources.

III. Plan Activation

The Unit Duty Chief in conjunction with the Emergency Command Center and on duty Battalion Chiefs will authorize the activation of the TUU Multi-Incident Preparedness Plan. The ECC will alert the Unit by radio and email, that the TUU Multi-Incident Plan has been activated and which Battalions are affected.

The Unit will be divided into one of the three following options as needed.

- ◆ Option "1" - **Modified Response Plan A**
 - Keep Unit as a whole
 - Utilize command frequencies as needed
 - Reduce response to appropriate levels based on Reports on Conditions at each incident with the concurrence of the Duty Officer and Field BC's.

- ◆ Option “2” - **Modified Response Plan B**
 - Fires associated within a single geographical area.
 - Establish staging location in affected area
 - Utilize command frequencies as needed

Reduce response to appropriate levels based on Reports on Conditions at each incident with the concurrence of the Duty Officer and Field BC's.

- ◆ Option “3” - **Enhanced Response Plan C**
 - The Unit will be divided into two Branches, North and South.
 - North Division-Branch I
 - Battalions 11 and 12
 - Tactical Frequencies – TAC 3 & VTAC 11

 - South Division-Branch II
 - Battalions 13 and 14
 - Tactical Frequencies – TAC 8 & VTAC 13

IV. Detection

- Supplemental Detection
 - Unit personnel will provide supplemental detection in assigned areas. Personnel will report storm activity and new fire information.
 - All aerial recon will be requested through the ECC. Depending on lightning activity, pre-planned flights will be scheduled as needed.

V. Communication

- Branch Directors will utilize the appropriate TUU frequencies for communication with the Divisions and ECC.
- Divisions will use assigned Command and Tactical frequencies
- Divisions will use Tactical frequencies for primary communication between resources and Branch.
- Branch I and Division Communications
 - See attached organization chart
- Branch II and Division Communications
 - See attached organization chart

- Reporting new fires
 - Divisions will contact Branch to report new fires and provide updated information
 - Prior to notifying the ECC of a new fire, the following information will be recorded.
 - Location of incident address or Latitude and Longitude (degrees, min format when possible).
 - Time of incident
 - Cause
 - Resources assigned
 - Size
 - Jurisdiction
 - Company Officer responsible for report
 - The ECC will build incidents for each fire and assign an incident number.
- Significant new fires
 - Branch will immediately notify ECC of all significant fires that will require additional resources and or require a separate command structure. The ECC will process requests for additional needs.
- It is imperative that an updated Report on Conditions including acreage on each fire gets reported to the ECC daily prior to 0600 hrs, and again at 1800 hrs. This information is critical for the completion of the Intel Report and 209 that goes to the Region Duty Chief and South Ops.
- A determination of DPA is imperative in order to assign the appropriate ECC and ordering point.

VI. Air Branch

- All aircraft will be requested through the ECC.
- Aircraft utilization will be determined by the ECC and prioritized based on fire status.

VII. Ordering & Logistics

- Resource Ordering
 - The ECC will call back personnel to meet expected needs.
 - All additional resource needs will be requested through the ECC.
 - The ECC with concurrence of the Branches will determine the need for resources and configuration (single increment or strike team) based on current and expected needs of the Branches.
- Logistical Support
 - The ECC will activate the service center as needed.

Consider reflex time, assess resource and logistical needs and order early.

VIII. Resource Staging and Allocation

- Resources will be assigned to Branches based on current and expected needs.
- Staging areas will be determined by the appropriate IC/OPBD.

IX. Incident Dispatchers

- Each Branch or Division should assign personnel to communicate with assigned resources.
- Expanded Dispatch will be activated when it is anticipated that incidents will escalate beyond span of control of normal ECC operations.

X. Thunderstorm Safety

THUNDERSTORM SAFETY

Thunderstorms cause significant hazards for wildland firefighters, including downbursts that can cause extreme fire behavior and lightning. When thunderstorm development is likely, lookouts should be posted and aware of signs of a developing storm. A sudden reversal in wind direction, a noticeable rise in wind speed, and a sharp drop in temperature may note the mature stage of a storm. Heavy rain, hail and lightning occur only in the mature stage of a thunderstorm. During a storm, use the following guidelines:

- Do not lie down.

The best position is sitting on the pack or crouching with feet close together.

Avoid sitting directly on the ground, if possible; but, if necessary, keep feet and butt close together.

Avoid grouping together. Keep a minimum of 15 feet between people when possible.

Removing caulk boots will not provide safety if stocking covered or bare feet are then in contact with the ground--don't bother!

- "Stay out of dry creek beds" is correct for flash floods, but has nothing to do with lightning.
- Handheld radios (with short rubber antennas) or cell phones are safe to use. Communication is vital to crew safety. Do not use land line radios or radios with elevated antennas.
- Wide, open spaces are better than trees or clumps of trees in the vicinity. Ridge tops, etc., should be avoided.
- If you feel the hair on your arms or head "stand up," there is a high probability of a strike in the vicinity. Crouch or sit on a pack.
- Put down all tools.
- Take shelter in vehicles if possible.

XI. FMAG Eligibility Checklist

<input type="checkbox"/>	<u>Community Threatened/Population</u> : Articulate that this fire has the potential to threaten a large portion of a community. How many people are impacted?
<input type="checkbox"/>	<u>Persons Evacuated</u> : How many? Where were they evacuated to? If evacuations have not occurred yet, how soon do you anticipate it happening? What is the trigger point?
<input type="checkbox"/>	<u>Shelter Activations</u> : Have shelters been opened and if so, where?
<input type="checkbox"/>	<u>Significant Number of Structures Threatened</u> : There is no minimum number of structures threatened that dictates whether a fire will qualify or not. The number is used in relation to the rest of the information provided. A threat to 30 structures in a large subdivision does not carry the same weight as if the 30 structures threatened represents an entire community.
<input type="checkbox"/>	<u>Infrastructure/Facilities/Equipment/Threatened</u> : Power lines, water supply, businesses and government facilities are examples of infrastructure that constitute a threat. It is critical, however, that enough information is provided to articulate how the loss of any of this infrastructure will constitute a major disaster for the community, region or State. Will the loss of the power lines affect local or regional power distribution? Is this the only water supply for a large portion or all of a community? Will the loss of a local business such as a lumber mill create a significant impact on local employment?
<input type="checkbox"/>	<u>Close Proximity to Structures</u> : How far away is the fire from the structures and how long will it take before it gets there? Generally, fire damage to structures should be imminent, 1-2 hours at expected burning conditions.
<input type="checkbox"/>	<u>Significant Resource Drawdown</u> : Show that there is significant drawdown to local and regional resources and that there is multiple incident activity occurring around the region and State. What are the response times for the next available resources?
<input type="checkbox"/>	<u>County EOC Activation</u> : Is the County EOC activated and if so, to what level? If it is not activated, is there a trigger point that dictates when it will be?
<input type="checkbox"/>	<u>Other Critical Considerations</u> : Provide any additional information that will help paint the picture. Civilian/fire firefighter injuries or fatalities, Incident Command Team activation. Have there been prolonged drought conditions or extensive vegetation mortality that is contributing to fire behavior?
<input type="checkbox"/>	Attached Incident 209
<input type="checkbox"/>	Attached Resource Availability Information
<input type="checkbox"/>	Attached Local RAWS Data and/or Fire Weather Forecast

