

Unit Strategic Fire Plan

Lassen-Modoc-Plumas



(Lake Almanor in Plumas County)

Table of Contents

SIGNATURE PAGE2

EXECUTIVE SUMMARY3

SECTION I: UNIT OVERVIEW

 UNIT DESCRIPTION4

 UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES.....5

SECTION II: COLLABORATION

 DEVELOPMENT TEAM6

SECTION III: VALUES AT RISK

 IDENTIFICATION OF ASSETS AT RISK10

 COMMUNITIES AT RISK.....12

SECTION IV: PRE FIRE MANAGEMENT STRATEGIES

FIRE PREVENTION.....14

 ❖ ENGINEERING & STRUCTURE IGNITABILITY.....16

 ❖ INFORMATION AND EDUCATION.....18

VEGETATION MANAGEMENT.....19

SECTION V: PRE FIRE MANAGEMENT TACTICS

 DIVISION / BATTALION / PROGRAM PLANS.....21

APPENDIX A: HIGH PRIORITY PRE FIRE PROJECTS26

APPENDIX B: AMENDMENTS TABLE27

APPENDIX C: ANNUAL PRIORITY GOALS AND OBJECTIVES28

APPENDIX D: BATTALION RESPONSE REPORT35

APPENDIX E: BATTALION IGNITIONS REPORT37

APPENDIX F: STATION RAINFALL REPORT39

APPENDIX G: UNIT LIGHTNING PLAN40

EXHIBIT A: UNIT MAP46

EXHIBIT B: BATTALION MAPS.....47

EXHIBIT C: UNIT FIRE HISTORY MAP51

ADDENDUM: 2012 52

SIGNATURES

Unit Strategic Fire Plan developed for: Lassen-Modoc-Plumas

This Plan:

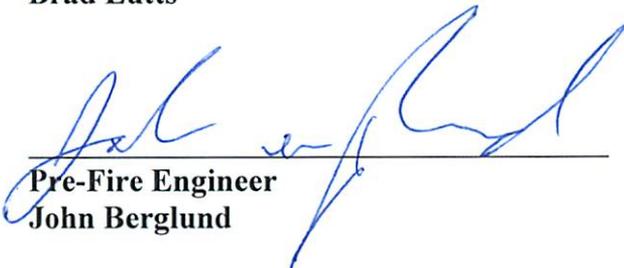
- Was collaboratively developed. Interested parties, Federal, State, City, and County agencies within the Unit have been consulted and are listed in the plan.
- Identifies and prioritizes pre fire and post fire management strategies and tactics meant to reduce the loss of values at risk within the Unit.
- 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.



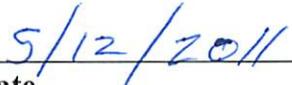
Unit Chief
Brad Lutts



Date



Pre-Fire Engineer
John Berglund



Date

EXECUTIVE SUMMARY

The Lassen Modoc Plumas Unit includes Lassen, Modoc and Plumas Counties and portions of Shasta and Siskiyou Counties. The Unit's Fire Management Plan is intended to provide information to Cal Fire personnel, various County Boards of Supervisors, Fire Safe Councils and other stakeholders focused on identifying specific problem areas and solving the mutually agreed upon fire issues.

The Lassen Modoc Plumas Unit Fire Management Plan documents the assessment of the fire situation in the Unit. It includes stakeholder contributions and priorities which identify strategic targets for proactive approaches and project based solutions.

While the Unit Fire Management Plan addresses local needs, the State Board of Forestry and Fire Protection also has legislative mandates dating back to 1945 requiring it to determine the "intensity" or appropriate level of fire protection for all state responsibility areas in California (*Public Resources Code §4130*). The Unit Fire Management Plan is the means of focusing efforts on local needs while working within the framework of the California Fire Plan as adopted by the Board of Forestry and Fire Protection.

It is intended to be an ever-evolving working document which can be used to identify potentially hazardous areas or communities at risk, provide guidelines for fire prevention and protection projects and to assist the Fire Safe Councils and community groups with useful information in making their communities fire safe. This document should be used as a guide that can be amended over the years as necessary and as the basic framework for fire prevention projects within the Lassen Modoc Plumas Unit.

The *California Fire Plan (1996)* is outlined within this document. It is the goal of the Unit to apply the California Fire Plan to accomplish a systematic assessment of the fire problem. Through this assessment, the Unit strives to develop "fire safe" communities and reduce the potential occurrence of devastating wildfires. In an effort to implement the California Fire Plan, the Lassen Modoc Plumas Unit utilizes computer-based data and Geographic Information System (GIS) to comprehensively analyze fire hazards, assets at risk and the level of service, all of which are included in the Unit Fire Management Plan.

The Unit Fire Management Plan systematically assesses the existing levels of wildland protection services, identifies high-risk and high value areas that are potential locations for costly and damaging wildfires, ranks the areas in terms of priority needs, and prescribes actions that can be taken to reduce future losses.

A: UNIT DESCRIPTION

Lassen-Modoc-Plumas Unit is located in the northeastern corner of the State. It consists of Lassen, Modoc, Plumas and portions of Shasta, Sierra and Siskiyou Counties.

The Cascade Mountain Range ends near the Almanor Basin. The Sierra Nevada Range begins and runs to the South along the Diamond Mountains on the Southwest edge of the Honey Lake Valley. The unit encompasses the Northeastern Plateau of California with an average elevation of 5000 feet above sea level.

Vegetation types range from mixed conifer, ponderosa and lodge pole pines along the West side of the Unit, to sagebrush, oaks, and annual grasses mixed with juniper in the desert to the East. The Eastern boundary of the Unit is the beginning of the Great Basin, which continues east to the Great Salt Lake of Utah.

The majority of the populated areas are located in the Honey Lake Valley, Lake Almanor Basin, Big Valley and Alturas. The Honey Lake Valley is home to the City of Susanville, and the communities of Janesville, Standish, Litchfield, Wendel, Milford, Herlong, and Doyle.

The Almanor Basin consists of the City of Chester, Almanor, Almanor West, Prattville, Peninsula, Hamilton Branch, Canyon Dam, Clear Creek and Westwood. The Big Valley area includes the communities of Bieber, Nubieber, Lookout, and Adin. The Alturas area consists of the City of Alturas and the towns of Likely, Canby, Cedarville, Davis Creek and the community of Cal Pines.

50-year fire history

The majority of fires in the Lassen Modoc Plumas Unit are due to Lightning. See Exhibit C for Unit fire history map. See Appendix G for Unit Lightning plan.

The recent California's Forests and Rangelands have identified priority landscapes and strategies:

<http://frap.cdf.ca.gov/assessment2010.html>



A total of 1.6 million acres are within the Direct Protection Area of the Unit

B: UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

U.S. Highway 395 runs North to South along the East side of the Unit, from Lakeview, Oregon to Reno, Nevada. State Highways 70, 139, 299, 44 and 36 transect the Unit West to East and State Highway 89 runs North to South along the West side of the Unit traveling through Lassen National Park. Numerous visitors travel these routes throughout the year, as well as interstate commerce from the Sacramento Valley and Oregon in search of a shorter way to the East bound interstate highways.

Logging, correctional institutions and recreation are the major industrial economic factors to the region. Over the past few years, logging has diminished due to environmental concerns and regulations from the Federal and State governments. Although very seasonal Recreation, flourishes during the spring and summer months. Watersheds from the Lassen Modoc Plumas Unit flow to the Feather and Sacramento River. Most of these watersheds are the headwaters to these two major rivers in the state.

The Lassen-Modoc-Plumas Unit resources and facilities include:

Susanville Interagency Fire Center
8 Fire Stations,
13 front line fire engines,
2 reserve fire engines,
5 Lookouts,
3 Conservation Camps,
14 Inmate Fire Crews
Susanville Inmate Training Center
3 medium fire bulldozers,
1 medium helicopter with crew.

The Susanville Interagency Fire Center provides emergency dispatch services for all of the Federal, State and local government fire agencies in Lassen County and the Almanor Basin. The Modoc County Sheriffs office dispatches the local government fire agencies in Modoc County. The Modoc County Sheriffs office dispatches the local government fire agencies in Modoc County.

Cooperating government agencies within the Lassen-Modoc-Plumas Unit include:

USDA - Lassen National Forest
USDA - Plumas National Forest
USDA - Modoc National Forest
USDI - Lassen Volcanic National Park
USDI - Lava Beds National Monument
USDI - Bureau of Land Management
USDI - Bureau of Indian Affairs
Natural Resource Conservation Service
California Department of Fish and Game
California Department of Transportation
California Highway Patrol
Department of Defense, Herlong Army Depot
Lassen County Sheriffs Office
Plumas County Sheriffs Office
Modoc County Sheriffs Office
Public Works and County offices of Lassen, Modoc and Plumas County

FIRE SAFE COUNCILS

www.firesafecouncil.org.

Battalion 1

There are two active Fire Safe Councils: The Janesville Fire Safe Council and the Lassen County Fire Safe Council. Both of these councils are working on fuel reduction projects, education and outreach to the community. In 1997, the Honey Lake Valley Resource Conservation District (HLVRCD), Janesville Fire Protection District and Cal Fire applied for a Forest Stewardship Grant for the development of a fire hazard reduction and forest health project in and around the community of Janesville, California. The grant was approved and shortly thereafter, an advisory group made up of the HLVRCD, Janesville FPD, Cal Fire, Lassen County Sheriffs Office, Lassen National Forest, Plumas National Forest, and homeowners from the community formed a Fire Safe Council for this project.

The Council has taken the initiative to identify many potential projects for the Janesville area. These projects fit in to the Lassen County Fire Safe Council's project plan.

The Lassen County Fire Safe Council was formally developed during 2001-2002. The council assisted Lassen County and their consultant in the development of the Lassen County Fire Safe Plan. This plan is being funded by a grant from the National Fire Plan Grant and was completed in January 2004.

This fire plan identifies treatment areas in close proximity to twenty-two of the communities within Lassen County. The plan further identifies defensible measures that could improve the survivability of one's home or business in the various fuel types located within the Lassen Modoc Plumas Unit.

<http://www.lassenfiresafecouncil.org/>

Battalion 2

There is three active Fire Safe Councils: The Lassen County Fire Safe Council that was discussed above, the Almanor Fire Safe Council and the Plumas County Fire Safe Council. In November of 2000, the Almanor Basin Fire Safe Council was formed to deal with wildfire prevention and loss mitigation issues in the western portion of Battalion 2. This unincorporated group is actually an adjunct to the formal Plumas County Fire Safe Council, and focuses on approximately 600 square miles of public and private lands in northern Plumas County, western Lassen County and very small segments of Tehama and Shasta Counties. Principal stakeholders participating in the group include Cal Fire, USFS, National Park Service, local fire protection districts, timber industry and the general public.

<http://plumasfiresafe.org/>

Battalion 3

There are three Fire Safe Councils in the operating area of Battalion 3 the Modoc County Fire Safe Council, the Lassen County Fire Safe Council, and the Day Lassen Bench Fire Safe Council. Cal Fire personnel attend these council meetings and are active in assisting with the decision processes. Projects are being developed to create "fire safe" communities within this Battalion.

The Day Lassen Bench Fire Safe Council was formed in the summer of 2001. Cal Fire, The Bureau of Land Management and the Lassen National Forest developed this Council in conjunction with the grant application to the National Fire Plan. This council's area consists of Day Bench and Day Road area. The Day Road Community extends through Lassen, Modoc, Shasta, and Siskiyou Counties.

Day Road is administered by two Cal Fire administrative Units, The Shasta-Trinity Unit (SHU) and the Lassen-Modoc Unit (LMU). The east side of Day Road is in battalion 3 of LMU while the west side is Battalion 1 of SHU. The Day road area is within the Northwest Lassen Fire Protection District (LMU) as well as the McArthur Fire Protection District (SHU). This plan was developed to streamline any suppression effort in the Day Road area no matter the location of the incident origin.

CAL FIRE has primary suppression responsibility and authority for all State Responsibility Area lands (SRA) located in the Day Road area as well as all other state and federal lands within Cal Fire's Direct Protection Area (DPA) in that area. Local fire districts have statutory authority for all non-wild fire incidents and structure protection within their jurisdictions.

OBJECTIVES:

1. Fire fighter and public safety.
2. Orderly civilian evacuations or sheltering in place until the threat is mitigated.
3. A coordinated response utilizing the Incident Command System (ICS) establishing Unified Command when appropriate and establishing one central ordering point for all resources ordered for an incident.
4. For fires originating west of Day Road in SHU, keep the fire from crossing Day Road.
5. Keep the fire from spreading east to Widow Mountain and Big Valley Mountain.
6. Keep the fire south and west of the Whitehorse Mountains.
7. Keep the fire south of Modoc County Road 94.
8. Keep the fire north of State Highway 299.
9. Keep the fire east of the McArthur valley.
10. Protect structures located in the fire impact zone.
11. Establish perimeter control lines utilizing existing roadways and natural barriers where feasible and prudent.
12. Take aggressive action to stop fire spread utilizing engines, dozers, hand crews and fixed/rotary wing aircraft.

STAGING AREAS:

1. Oiler Staging: Located approximately 1 mile west of Day Road at the bottom of the Lassen Bench grade. Two turnout lanes are located off Highway 299. Oiler staging should be used by all resources arriving from the west.
2. Old Highway Staging: Located at the intersection of State Highway 299 and Old Highway Road approximately 1 mile east of Day Road. A large turnout is adjacent to Old Highway Road. Old Highway Staging should be used by all resources arriving from the east.

Every attempt will be made to provide a qualified Staging Area Manager at both staging areas in a timely manner. It is incumbent on all resources to contact the Incident Commander ***AS THEY APPROACH EITHER STAGING AREA*** to determine if they should stage or continue to the incident. Resources assigned to a staging area are on a 3-minute response timetable.

CONTACTS:

1. CHP – road closure
2. Lassen County Sheriff - evacuation
3. Modoc County Sheriff - evacuation
4. Cal Trans – traffic control and advisory signs
5. USFS Agency Representative – possible unified command
6. BLM Resource Adviser – sensitive cultural and resource values
7. PG&E
8. Surprise Valley Electrification Corporation
9. Mayers Hospital

Battalion 4

There is one Fire Safe Council within the Battalion 4 operating area. The Modoc Fire Safe Council (MFSC) was formed in October, 2000, in response to an identified need by residents who live in the Wildland Urban Interface (WUI) to be informed of the risk of potentially serious wildfires with tragic results including loss of lives and property.

The MFSC is a voluntary organization formed to enhance the effectiveness of fire prevention and protection. The cooperative nature and educational and outreach efforts of this group are critical components for wildland pre-fire planning and mitigation.

The MFSC adopted the Charter and Bylaws in July, 2001 setting forth the mission and guiding principles of the Council, establishing a grass roots problem-solving body committed to the needs of the region. In 2007, the MFSC acquired its 501(c) (3) non-profit organization status. The geographic area of the Council covers Modoc County. In addition, it covers adjacent areas extending into Shasta, Siskiyou, and Lassen Counties. Included are areas within the Joint Fire Protection Districts of Adin, Tulelake, Cedarville and Eagleville.

The Modoc Fire Safe Council consists of representatives from the town of Alturas and rural communities of Modoc County, as well as non-voting representatives from County, State and Federal agencies. The Council works closely with the County Board of Supervisors in meetings and planning sessions as well as obtaining grant funding.

The MISSION of the Modoc Fire Safe Council is to bring together the resources of private and public sector elements and organizations in the interests of wildfire prevention and loss mitigation.

In 2005, the first Community Wildfire Protection Plan (CWPP) was completed, and was approved by the Modoc County Board of Supervisors in 2006. The CWPP was the result of the collaborative efforts of the MFSC, BLM, USFS, North Cal-Neva R.C. & D, OES and CDF representatives, who organized a series of information gathering meetings for the residents, agency representatives and the general public. A series of meetings in a period of two months were held at four locations in the county: Surprise Valley, Alturas, Adin, and Lookout. The purpose of the meetings was to identify Values at Risk and Natural Resources and adjust Wildland Urban Interface (WUI) boundaries based on local knowledge. Comments were documented and maps showing the modified WUI areas were developed. In the spring of 2008, major revisions to the CWPP were completed and presented to the Modoc County Board of Supervisors for approval.

A: ASSETS AT RISK

The primary goal of wildland fire protection in the Lassen-Modoc-Plumas Unit is to safeguard the wide range of assets found within the unit from the effects of wildfire. The assets at risk, both public and private, are to be protected. The following have been identified as assets at risk to wildfires and include both economic and non-economic assets: people, structures, timber, watershed, wildlife, unique scenic and recreation areas, range, and air quality. The table below provides a description of the evaluated assets.

Asset at Risk	Public Issue Category	Location and Ranking Methodology
Hydroelectric power	Public welfare	1) Watersheds that feed into river power plants ranked based on plant capacity; 2) Cells adjacent to reservoir based plants (Low rank); 3) Cells containing canals and flumes (High rank).
Fire-flood watersheds	Public safety Public welfare	Watersheds with a history of problems or potential for future problems, ranked based on downstream Population.
Soil erosion	Environment	Watersheds ranked based on erosion potential
Water storage	Public welfare	Watershed area up to 20 miles upstream from water storage facility, ranked based on water value and dead Storage capacity of facility.
Water supply	Public health	1) Watershed area up to 20 miles upstream from water supply facility (High rank) 2) Grid cells containing domestic water diversions, ranked based on number of connections; 3) Cells containing ditches that contribute to water supply system (High rank)
Scenic	Public welfare	Four mile view-shed around Scenic Highways and ¼ view-shed around Wild and Scenic Rivers, ranked based on potential impacts to vegetation types (tree versus non-tree types)
Timber	Public welfare	Timberlands ranked based on value and susceptibility to damage
Range	Public welfare	Rangeland ranked based on potential replacement feed cost by region/owner and vegetation type.
Air quality	Public health / Public welfare Environment	Potential damages to heath, materials, vegetation, and visibility; ranked based on vegetation type and air basin
Historic buildings	Public welfare	Historic building ranked based on fire susceptibility
Recreation	Public welfare	Unique recreation area or areas with potential damage to facilities, ranked based on fire susceptibly
Structures	Public safety / Public welfare	Ranked based on housing density and fire susceptibly

Asset at Risk	Public Issue Category	Location and Ranking Methodology
Non-game wildlife	Environment Public welfare	Critical habitats and species locations based on input from California Department of Fish and Game and other stakeholders
Game wildlife	Public welfare Environment	Critical habitats and species locations based on input from California Department of Fish and Game and other stakeholders
Infrastructure	Public safety Public welfare	Infrastructure for delivery of emergency and other critical services (e.g. repeater sites, transmission lines)
Ecosystem Health	Environment	Ranking based on vegetation type/fuel characteristics

The assets at risk are evaluated to the 450 acre scale within the Lassen-Modoc-Plumas Unit. This scale has been designated by the Department for purposes of manageability. These 450 acre cells have been designated as Quad 81st. This designation is based on the sectioning of a USGS 7.5 minute quadrangle map broken down into a 9x9 grid pattern; this process results in squares of 450 acres. Fire plan assessments have been made at the Q81st level. For instance, each Q81st in LMU has a ranking applied to it for Level of Service (LOS), Assets at Risk (AAR), fuel hazards, etc.

Each asset is validated by the unit personnel, stakeholders and interested parties, as to the weight and value placed on the Q81 for that asset. Once this process is completed, the LOS calculation is run and the value for that cell is applied, thus giving that cell its weighted value, and producing the aggregated relationship for that area. (For more information regarding the evaluation of asset susceptibility, refer to the California Fire Plan.)

<http://www.fire.ca.gov/FireEmergencyReponse/FirePlan/FirePlan.asp>

The ranking is scaled to the Q81st and transferred to GIS maps. Map overlays will be evaluated by unit staff for identification of the areas with the highest combined asset values and fire risk to be targeted for fire management activities. The scores for the various assets at risk are given a 1 (low) score out of a possible 9.999 (high). Infrastructure, non-game wildlife, and range scores were given a score of 2. Timber was given a 3 and structures were given a 5. Many factors are involved in target area identification, including political climate of the region and suppression cost reductions.

The process of explicitly enumerating assets at risk also helps to identify who benefits from those assets. It is a premise of the California Fire Plan, on which this plan is structured, that those who benefit from the protection of an asset should pay for that protection. The Lassen-Modoc-Plumas Unit personnel will continuously evaluate these assets during planning stages.

B: COMMUNITIES AT RISK

Place Name	County Name	Federal Threat	Federally Regulated
Bieber	Lassen	✓	✓
Clear Creek	Lassen		
Doyle	Lassen	✓	✓
Hallelujah Junction	Lassen	✓	✓
Hurlong	Lassen	✓	✓
Janesville	Lassen	✓	✓
Johnstonville	Lassen		✓
Levitt	Lassen		✓
Litchfield	Lassen	✓	✓
Little Valley	Lassen	✓	✓
Madeline	Lassen	✓	✓
Milford	Lassen	✓	✓
Nubieber	Lassen		
Pine Town	Lassen		
Ravendale	Lassen	✓	✓
Spaulding	Lassen	✓	✓
Standish	Lassen	✓	✓
Stones Landing	Lassen	✓	✓
Susanville	Lassen	✓	✓
Wendel	Lassen	✓	✓

Place Name	County Name	Federal Threat	Federally Regulated
Adin	Modoc	✓	✓
Alturas	Modoc	✓	✓
Cal Pines Lower Units	Modoc	✓	✓
Cal Pines Upper Units	Modoc	✓	✓
Canby	Modoc		✓
Cedarville	Modoc	✓	✓
Copic	Modoc	✓	✓
Davis Creek	Modoc	✓	✓
Day	Modoc	✓	✓
Eagleville	Modoc	✓	✓
Fort Bidwell	Modoc	✓	✓
Likely	Modoc	✓	✓
Lookout	Modoc	✓	✓
New Pine Creek	Modoc	✓	✓
Newell	Modoc	✓	✓
Willow Ranch	Modoc	✓	✓

Place Name	County Name	Federal Threat	Federally Regulated
Almanor	Plumas	✓	✓
Beckwourth	Plumas	✓	✓
Belden	Plumas	✓	✓
Blairsdan	Plumas	✓	✓
Bucks Lake	Plumas	✓	✓
Canyon Dam	Plumas	✓	✓
Caribou	Plumas	✓	✓
Chester	Plumas	✓	✓
Clio	Plumas	✓	✓
Crescent Mills	Plumas	✓	✓
Cromberg	Plumas	✓	✓
Delleker	Plumas	✓	✓
Genesee	Plumas	✓	✓
Graegle	Plumas	✓	✓
Greenville	Plumas	✓	✓
Hamilton Branch	Plumas	✓	✓
Indian Falls	Plumas	✓	✓
Johnsville	Plumas	✓	✓
Keddie	Plumas	✓	✓
La Porte	Plumas	✓	✓
Meadow Valley	Plumas	✓	✓
Mohawk	Plumas	✓	✓
Paxton	Plumas	✓	✓
Portola	Plumas	✓	✓
Prattville	Plumas	✓	✓
Quincy-East Quincy	Plumas	✓	✓
Seneca	Plumas	✓	✓
Taylorville	Plumas	✓	✓
Twain	Plumas	✓	✓

1. Federal Threat code of x indicates some or all of the wildland fire threat to that community comes from federal (e.g., US Forest Service, BLM, Dept. of Defense) lands.

2. Hazard Level code indicates the fire threat level, where two denotes moderate threat and three denotes high threat

The “Communities at Risk” in Lassen, Modoc and Plumas Counties listed in the table above are on the National Registry available at the following site:

[Http://cafirealliance.org/communities_at_risk_a-d.php](http://cafirealliance.org/communities_at_risk_a-d.php)

A: FIRE PREVENTION

Fire History

Wildfire history is a significant factor of the pre-fire management planning process. The fire plan assessment framework incorporates detailed information for determining the most beneficial locations for pre-fire management projects, an idea of the level of service in SRA for the unit, and various assets at risk information. Fire history is a piece of the puzzle that allows unit personnel to learn from our past and make an attempt to prepare for future fire behavior. Having knowledge of fire history provides an account of historic fire travel in a particular area. Armed with knowledge of historic fire spreads, fire suppression forces are better equipped to predict fire spread potentials. Identifying where the largest and most damaging fires have occurred is a necessary step in preparing for future wildfire. The most significant aspect of fire history in Lassen-Modoc-Plumas Unit is that personnel are able to compare the relationship between identified assets at risk and the historic burning patterns of wildfire that allows for more informed decision making processes when preparing fire planning documents and procedures.

Ignition Workload Assessment (Level of Service)

The legislature has charged the Board of Forestry and Cal Fire with delivering a fire protection system that provides an equal level of protection to lands of similar type and is based in *Public Resources Code 4130*. In order to do this, Cal Fire needed an analysis process that would define a level of service rating that could be applied to the wildland areas in California to provide a comparison of the level of fire protection being provided. The rating is expressed as the percentage of fires that are successfully attacked.

California has a complex fire environment, and Cal Fire data on assets at risk to damage from wildfire is incomplete. These factors combine to make it very difficult to develop a true performance-based fire protection planning system. Cal Fire has resorted to prescription-based fire protection planning (travel times of firefighting resources to incidents, report times for the detection system, the same acreage goal statewide, etc.) as a way to overcome the complexity of the issues. Prescription-based planning is possible but tends to oversimplify some issues. Prescription standards also make it difficult to integrate the interrelationships of various fire protection programs, such as the value of fuel-reduction programs in reducing the level of fire protection effort required.

The following approximation method is proposed to overcome these shortcomings and allow the Unit to proceed with a damage-plus-cost analysis of fire protection performance. This is a relative system, attempting to measure the impact of fire on the various assets at risk. At the same time, this process produces a level of service rating (LOS). The rating can be used to describe fire protection services to civilian stakeholders. The level of service rating also provides a way to integrate the contribution of various program components (fire prevention, fuels management, engineering and suppression) toward the goal of keeping damage and cost within acceptable limits. It is important to reiterate that this system is a relative system and that the ratings are only approximations. In this system, a fire may be considered a failure, based on the firefighting resource draw and size of fire; however, the final fire size and assets protected may have been a true success based on firefighting activities in extreme fire weather conditions.

The Level of Service (LOS) rating is a ratio of successful fire suppression efforts to the total fire starts, a method to measure initial attack success and failure rates throughout the Unit and is based on fire sizes. The LOS uses a Geographic Information System (GIS) that overlays a 10 year history of wildfires onto a map and derives the average annual number of fires by size, severity of burning and assets lost. This data provides an LOS rating, in terms of a success and failure calculation.

$$\text{Success Rate} = \frac{\text{Annual number of fires that was small and extinguished by initial attack}}{\text{total number of fires}} \times 100 = \text{Success rate in percent}$$

The result is an initial attack success rate in percentage of fires by vegetation type and area. "Success" is defined as those fires that are controlled before unacceptable damage and cost are incurred and where initial attack resources are sufficient to control wildfires. "Failure" is not meant pejoratively; it just means that, for whatever reasons (access, lack of resources, etc.) the ignition was not contained before it became a more dangerous and damaging fire.

The Fire Plan Ignition Workload Assessment is designed to show effectiveness of the suppression organization in meeting the initial attack fire workload. The attempt at controlling fires before they become large and costly is evaluated in this assessment. The underlying assumption is that fires, successfully contained in the initial attack stages, are not the primary problem. Problem fires are the few that are costly to control or exceed suppression organization capabilities and cause damage.

Fires are grouped into "success" and "failure" categories based on various factors. The assessment groups fires by general vegetation or fuel types (planning belts). Within the fuel type, fires are further classified based on final fire size and weather conditions at the time of ignition. Each fire is classified and labeled as either a successful initial attack or a failure.

Initial attack Success and Failures:

Represents a ten year period for analyses May thru September 2005; planning belt vegetation types were analyzed.

<u>Planning</u>	<u>Belt Success Rate</u>	<u>Successful I.A.</u>	<u>I.A. Failure</u>
Grass	100%	54	0
Brush	95%	370	20
Interior	98%	1920	34
Woodland	98%	3523	80
Agricultural or Urban	96%	248	9

Failures were defined as:

Grass: Fires = 10 acres and above

Brush: Fires = 5 acres and above

Interior: Fires = 3 acres and above

Woodland: Fires = 5 acres and above

Agricultural or Urban: Fires = 10 acres and above

ENGINEERING & STRUCTURE IGNITABILITY

Title 24 (addresses fire apparatus access, water requirements, building materials, and construction methods as of 2007)

The purpose of this code is to establish the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety and general welfare from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to fire fighters and emergency responders during emergency operations.

Title 19, PRC 4290 (addresses fire apparatus access and water requirements)

These regulations have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction and development in State Responsibility Areas (SRA). These regulations shall become effective September 1, 1991. The future design and construction of structures, subdivisions and developments in State Responsibility Area (SRA) shall provide for basic emergency access and perimeter wildfire protection measures as specified in PRC 4290. These measures shall provide for emergency access; signing and building numbering; and vegetation modification. The fire protection standards contained within PRC 4290 shall specify the minimums for such measures.

PRC 4291 (addresses defensible space around structures)

To ensure continued maintenance of properties in conformance with the defensible space requirements outlines in PRC 4290 and to assure continued availability, access, and utilization of the defensible space provided during a wildfire, provisions for annual maintenance shall be included in the development plans and/or shall be provided as a condition of the permit, parcel or map approval. PRC 4291 is the law requiring annual defensible space be provided around all structures in, upon, or adjoining any mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material.

This law was enacted to prevent fire that originates in structures or on premises to spread into forested areas. It was also created to minimize the chances of a forest fire entering into populated areas and destroying improved property and endangering human life. The history of damaging fires has shown the most devastating danger is the risk of fire originating in the wildland and transmitting itself into improved areas. Most statutory hazard reduction requirements and other hazard reduction measures are based upon this concept. However, the risk of wildfire originating on or about structures and their premises is great, and also causes historically damaging fires. The statutory hazard reduction requirements, and other hazard and risk measures, also mitigate the occurrence of structure and premise wildfire ignitions.

Protection Planning

(Fire Protection planning is reviewed at the subdivision and parcel map level and typically implemented at the development stages of a project.)

CAL FIRE is responsible for enforcing Public Resources Code 4290 (SRA only) and Public Resources Code 4291 within Lassen, Modoc and Plumas Counties. Lassen County has adopted CAL FIRE as the County Fire Warden. The Lassen County Fire Warden is responsible for enforcing Public Resources Code 4290 (SRA only), Public Resources 4291 and Lassen County Ordinance 502 in relation to improvement standards on all new building construction (commercial and residential), parcel splits, subdivisions and use permits within Lassen County.

Code enforcement

CAL FIRE enforces forest, state and county laws and regulations to include Public Resource Code, Health and Safety Code. CAL FIRE also enforces building standards adopted by the State Fire Marshall and published in the State Building Standards Code relating to fires or to fire prevention and protection.

Building inspections

The goal of the fire prevention program is to educate homeowners of measures to prevent the ignition and spread of unwanted human-caused fires. Emphasis should be placed on loss reduction and prevention of large and damaging fires and to provide firefighter safety. One of the necessary tools utilized to accomplish this goal is the structural fire prevention inspection. Inspections are a fire prevention engineering activity. Coordinated with other ignition management activities, the inspections are aimed at eliminating or reducing fire hazards and risks by changing the environment through removing or reducing the heat source, modifying or reducing the fuels, and modifying the act or omission, allowing the heat source to contact the ignitable fuels.

Pre - Plans

Battalion Chiefs have detailed information regarding pre-plans in their response areas.

INFORMATION AND EDUCATION

Education Program

The Unit's Education Program reaches people of all ages. The Unit's Fire Prevention Specialist teaches children from preschool through junior high school about 9-1-1, Stop, Drop and Roll, (EDITH) Exit Drills in the Home, the Consequences of Playing with Fire, etc. Education is delivered to the schools in Lassen, Modoc and Plumas counties through assemblies, class room training, field trips to CAL FIRE stations and more. In addition to school programs the Unit participates in a variety of other events where there is an opportunity to teach children and adults about fire safety, the requirements of PRC 4291, and the advantages of removing ignition sources from around their homes. Some of those events include:

The Fire Prevention Bureau of the Lassen-Modoc-Plumas Unit has a Juvenile Firesetter Program used to identify and educate youth ages 2-14 about the consequences of playing with fire. The program is two-pronged: it involves intervention with juveniles caught playing with fire and education for juveniles at risk of fire play behavior.

The Unit works with Fire Safe Councils and other local, state and federal agencies to educate the public about the importance of preparing for wildfires, encouraging homeowners to work together to protect their communities. CAL FIRE works with agencies to educate the public about the benefits of community fuel breaks and the advantages of reducing the fuels around their homes.

Information Program

The Unit provides information to the public through the Fire Prevention Specialist who acts as the Unit's Public Information Officer (PIO). The PIO prepares news releases for the newspapers and radio regarding burning restrictions, burn permit requirements, tips about burning safely, information on creating defensible space, etc. The Unit provides information to the public through its website that contains current burn information and news releases.

During emergency incidents the PIO provides the public with information about the incident; location, acreage, road closures, evacuations, etc. This is accomplished through news releases and radio announcements and via public meetings, information centers and call centers.

It is through education and information that the Unit reduces ignitions. This is accomplished by educating children when they first enter school and continuing that education through adulthood.

B: VEGETATION MANAGEMENT

Attainment of the fuel reduction goals of the Lassen–Modoc–Plumas Unit Fire Plan will require on-the-ground effort. The use of Cal Fire and CDCR crews and equipment will continue to be necessary in many areas where stakeholders do not have the finances or resources to do an effective job individually or as a group. The Vegetation Management program (VMP) is currently a vehicle which Cal Fire may use resources on privately owned lands. Recently the local Fire Safe Councils have utilized grant funding to promote fuel reduction in high fire danger areas adjacent to communities using a combination of paid Licensed Timber Operator contractors on larger areas and use of CDCR crews for smaller areas near sensitive locations that do not lend well to mechanical equipment. The Unit continues to participate in a joint effort to target at-risk communities and high fire danger areas in the wildland urban interface (WUI) areas in cooperation with the US Forest Service, BLM, Industrial timberland owners and the local Fire Safe Councils.

In place since 1981, the VMP program has been an effective fuels reduction / rangeland improvement tool. Because of increasing competition for smoke allotments, Cal Fire's use of fire to reduce fuel load is in jeopardy and because of this, chipping will likely become the primary disposal method in the future. VMP is a cost-share program; the State's share of a project's cost may range from zero to ninety percent. This is based on a public benefits formula --the greater the benefit to the public, the greater the share of the cost of the project Cal Fire may assume. Fuels reduction projects in critical areas within the Unit as identified in this plan have a high public to private benefits ratio therefore the unit's efforts should be concentrated in these areas. For example, a project in the Janesville area that reduced fuels around the community would have a high public/private benefit ratio and lower landowner participation is then justified. Conversely, potential projects that are essentially range improvement burns that are not near population concentrations will require a higher degree of landowner effort and proportional costs.

This is not to say that rangeland burning is of minor importance. Through this century, range improvement burns have been vital in managing wildland fuels on a landscape basis. However, increasing population in the rural areas has brought constraints such as smoke management and liability concerns. Such constraints have made the LE-7, range improvement project less attractive and has put VMP projects in higher demand with managers from the timber industry and ranchers.

The unit has experienced a sharp decline in VMP projects due to a series of factors including a very narrow burn window for large acreage projects and a lack of available resources during the appropriate window. Staffing levels have been reduced where only the resources required to staff a shift are on at a given time and must be immediately available for emergency.

The Units Willow VMP project expired in April 2011 and was located northeast of Susanville in Willow Creek Valley. This was a dozer pile and burn project that the Unit started but could not complete due to difficulty in scheduling dozer time in the project where roads are only passable during fire season after roads are dry. Burning of piles that were completed could not be carried out until snow was on site and which then resulted in hike-in burning of the piles. A portion of the Willow project was set aside where it was determined that the States involvement would result in use of herbicides on the site. Herbicide use at the time of initial project preparation was not fully covered under the Chaparral Management Program EIR. The Unit has had to reconsider other proposed projects where herbicide use could be an associated result of our actions.

Unit emphasis continues to be placed on community fire protection projects. Focus is also being directed at potentially under burning of eastside pine stands that have been biomass thinned over the last 10 years.

Battalion 1

Willow VMP (Expired 2011)

This approximate 50-acre project was largely a reforestation project on SPI property. The method of treatment largely involved utilizing dozer(s) to pile and/or windrow brush fields present in the project area and then burn the piles. The area completed will be planted with a mixture of conifer tree species in an attempt to get the land back into productive timberland. As described above, the entire project was not completed. Future VMP projects may take place in the immediate area in an effort to get the land back into productive timberland.

Battalion 2

Hog Flat Fuel Break

This approximate 490-acre project is a roadside shaded fuel brake located along both sides of Highway 44 between Gomez Road and the old Goat Fire. Cal Trans and SPI are the project participants. The method of treatment has largely involved the use of Cal Fire inmate crews to hand cut and pile burn the treated material. Work on the project is nearly complete with pile burning as the only remaining activity.

Battalion 3 and Battalion 4

Both Intermountain and Devils Garden Crews have continued to work on CAL-TRANS right of way roadside thinning projects under the direction of CAL-TRANS where visibility is being improved along the roadway and fuel reduction for fire safety is being achieved.

The Unit is also participating in the Federally grant funded Hazardous Fuels Reduction program. Projects have been approved near the communities of Janesville, Hamilton Branch, Bieber at Intermountain Camp and Fort Bidwell. The projects involve use of crews to maintain and improve existing fuel breaks that have grown back in with brush and small saplings and reduce the dead and down fuel, loading that is present. Pruning to lift the live fuel canopy off the forest floor is also being carried out. Where piles cannot be burned, a chipper will be utilized to treat slash generated in the thinning and treatment areas.

Industrial timberland managers are also actively working on fuel reduction through biomass thinning adjacent to communities in a number of locations in the Unit. This is in an effort to both protect the residential areas from any fire originating in the wildland and also to protect the valuable timber resources from any fire started in areas near a community, burning into the timber. The Units Resource Management Staff and Fire Prevention Bureau coordinate regularly to discuss areas of high fire danger and where possible, facilitate a means to obtain fuel reduction in locations of greater threat.

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

The Lassen Modoc Plumas Unit Pre Fire Management Program has been in place since 1997. During the past eleven years, data has been validated and processed in order to assess vegetative fuels, assets at risk, fire weather, and level of service calculations. The assessments now include changes in the dynamics of the actual on-the-ground work that has been accomplished. This is an ongoing process.

The development of a method for incorporating the current and past Timber Harvest Plans, Emergency Notices, Exemptions, and Non-Industrial Timber Management Plans into a GIS format are under way. The data to be collected and utilized will include the locations and types of fuels treatments in areas containing assets having the greatest value. This information can be utilized in many aspects by the unit and cooperating agencies.

Unit Fire Plan Data Layers

The Unit Fire Management Plan Data layers, which consist of fuels, weather, fire history, emergency activity reporting, assets at risk and level of service have been completed to date, however, conditions are dynamic in nature and must be re-validated on a regular basis.

Unit Fire Management Plan Integration into Daily Operations

Over the years, many of our managers and supervisors have had priorities and goals to reduce fuels around many of the communities within the Unit. The development of the Unit Fire Management Plan was based on the strong support and assistance from the Fire Safe Councils. Many of the ideas from these collective influences are now coming to fruition.

THE CALIFORNIA FIRE PLAN (1996)

The *State Board of Forestry (BOF)* and the *California Department of Forestry and Fire Protection (Cal Fire)* drafted the *California Fire Plan (1996)*. This document is a comprehensive fire plan for the wildland fire protection in California. The fire plan consists of a planning process that considers: level of service measurements, assets at risk assessments, incorporates the cooperative interdependent relationships of wildland fire protection providers, provides for public stakeholder involvement, and creates a fiscal framework for policy analysis.

Goals and Objectives

The overall goal of the *California Fire Plan* is to reduce the total losses and ever increasing costs from wildland fires in California by protecting the assets at risk through focused pre-fire management prescriptions and improving the potential of initial attack success.

http://webfp1/fpfsweb/documents/cafireplan/2010_Strategic_Fire_Plan_For_California.pdf

BATTALION 1

Battalion 1 (Susanville Battalion) is located in the central and southeastern portion of Lassen County, with the communities of Susanville, Johnstonville, Janesville, Standish, Litchfield, Lake Forest Estates, Stones Landing and Spaulding. The City of Susanville an incorporated City, lays is in the center of the Battalion.

U. S. Highway 395 travels through the Battalion on its east side. State Highways 44, 139 and 36 also travel through the Battalion and intersect with U.S. 395. The elevation of the Battalion is approximately 4500' in the Honey Lake Valley to 7700' on Diamond Mountain, with an average elevation of approximately 5800' on the northeastern plateau of California.

Approximately 32,000 acres of this Battalion are State Responsibility Lands; the only Local Responsibility Land is located within the Honey Lake Valley area, in Susanville City, and portions of the communities of Standish, Janesville and Johnstonville. The highest housing and population concentration in the Unit is located in Battalion 1.

Fuels

The vegetative cover in Battalion 1 is comprised of standing timber on the west and northwest sides of the Battalion and high desert sage, bitterbrush and juniper on the mid and east side of the Battalion. Most of the large fires in Lassen-Modoc-Plumas Unit over the years have occurred in Battalion 1 in the timbered areas.

Fire Weather

Fire weather in Battalion 1 can be extreme because of its location and elevation. Most of the 32,000 acres are in a very dry climate due to being in the rain shadow of the Sierra Nevada/Cascade Range. Single digit relative humidity during the summer months is not uncommon and many of the forest fuels remain ready to burn in the late spring to early summer, prior to the finer fuels drying.

Battalion 1 Resources

Susanville Station

2- Fire Engines
1- Bull Dozer
1- Reserve Fire Engine
Landon Lookout

Grasshopper Station

2- Fire Engines
Fredonyer Lookout

Fire Protection Districts and Volunteer Departments include:

California Correctional Center
Susanville City Fire Department
Susan River Fire Protection District
Janesville Fire Protection District
Standish-Litchfield Fire Protection District
Doyle Fire Protection District
Eagle Lake Fire Protection District
Stones-Bengard Fire Protection District
Lake Forest Fire Protection District
Milford Fire Protection District
Sierra Army Depot Fire Department
Spaulding Volunteer Fire Department
Herlong Volunteer Fire Department

BATTALION 2

Battalion 2 (Westwood Battalion) is located on the west side of Lassen County and includes the Almanor Basin, in Plumas County. The communities of Westwood, Pinetown, Clear Creek, Hamilton Branch, Canyon Dam, Prattville, Almanor West and Chester are all within this Battalion. State Highways 36, 147, 89 and 44 traverses through Battalion 2.

In Battalion 2 approximately 13,000 acres are State Responsibility Lands; Local Responsibility Land is located in the town of Chester and the community of Westwood. The population is concentrated in Westwood and all around the Lake Almanor Basin. Battalion 2 is home to approximately 3600 people.

Fuels

The vegetative cover in Battalion 2 is predominately standing timber, grass, and sage cover.

Fire Weather

Fire weather in Battalion 2 is typically wetter than that of Battalions 1 and 4, which are both located on the eastern slopes of the Sierra/Cascade mountain range.

Battalion 2 Resources

Westwood Station

2- Fire Engines
Peg Leg Lookout
Dyer Mountain Lookout

Eagle Lake Station

1 – Fire Engine

Fire Protection Districts and Volunteer Departments include:

Westwood Community Services District and Volunteer Fire Department
Chester Fire Department
Almanor West Fire Department
Hamilton Branch Fire Department
Clear Creek Volunteer Fire Department
Prattville Fire Protection District
Peninsula Fire Protection District

BATTALION 3

Battalion 3 (Bieber Battalion) is located in the northwest portion of Lassen County, southwest corner of Modoc County and borders to the west along Shasta – Trinity and Siskiyou Units. The communities of Bieber, Nubieber, Day, Lookout, Little Valley and Adin are located within its boundaries.

State Highway 299 and 139 traverses through the Battalion. Approximately 17,260 acres of this Battalion are State Responsibility Lands; Local Responsibility Land is located in the Big Valley area around the towns of Bieber, Nubieber, and Pittville. The population within the Battalion is found in Bieber, Nubieber, Lookout, Day, Little Valley and Adin. Battalion 3 is home to approximately 1400 people.

Fuels

The vegetative cover in the Battalion 3 is predominately standing timber with grass/sage cover. The Big Valley area of the Battalion is agricultural with much of the land committed to the production of hay. Many fires in this Battalion grow quite quickly, due to its remoteness of and the lack of roads.

Fire Weather

Fire weather in Battalion 3 is typically wetter than that of Battalions 1 and 4 that are located in the rain shadow of the Sierra/Cascade Mountains.

Battalion 3 Resources

Bieber Station

2- Fire Engines
1- Helicopter and crew
Snag Hill Lookout

Happy Camp Station

1 – Fire Engine

Intermountain Conservation Camp is located just outside of Nubieber and has 4 Fire Crews, one Dozer and one Camp Fire Protection Engine.

Fire Protection Districts and Volunteer Departments include:

Big Valley Fire Protection District
Lookout Volunteer Fire Department
Adin Volunteer Fire Department
McArthur Volunteer Fire Department (Day Bench)
Little Valley Community Services District

BATTALION 4

Battalion 4(Alturas Battalion) is located in the northeastern portion of the Lassen – Modoc - Plumas Unit. It is located on the east half of Modoc County with Oregon to the north and Nevada to the east. The southern end of the Battalion is within the northeastern part of Lassen County. The communities of Alturas, Canby, Likely, and Madeline are located within its boundaries. Battalion 4 also services the communities of Davis Creek, New Pine Creek, Willow Ranch, Cedarville, Eagleville, Lake City and Fort Bidwell.

U. S. Highways 395, 299 and State Highway 139 traverse through the Battalion. Approximately 21,500 acres of this Battalion are State Responsibility Lands; Local Responsibility Land surrounds the community of Alturas and extends south to Likely. Battalion 4 is home to approximately 1800 people.

Fuels

The vegetative cover in the Battalion is predominately standing timber in the mountains, with juniper grass/sage cover in the eastern half of the battalion where the terrain is at a lower elevation. Many fires in this Battalion grow quite quickly due to the remoteness of the area and lack of roads.

Fire Weather

Fire weather in Battalion 4 is drier on average than Battalion 2 and 3 with Battalion 4 being in the rain shadow of the Sierra Cascade/Mountains.

Battalion 4 Resources

Alturas Station	Deer Springs Station
2- Fire Engines	1 – Fire Engine
Likely Mountain. Lookout	

Devils Garden Conservation Camp is located west of Alturas and has 5 Fire Crews, one Dozer and one Camp Fire Protection Engine.

Fire Protection Districts and Volunteer Departments include:

Alturas City Fire Department
Alturas Rural Fire Protection District
Cal Pines Community Service District
Canby Fire Protection District
Cedarville Fire Protection District
Davis Creek Fire Protection District
Eagleville Fire Protection District
Fort Bidwell Fire Protection District
Lake City Fire Protection District
Likely Fire Protection District
Madeline Fire Protection District
Willow Ranch Fire Protection District
New Pine Fire Protection District

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 preplanning 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: *CAL FIRE will report to the Board on the number of crews available each year with a description of projects, including acres treated, completed by each Unit. Report the number of agreements and/or amount of funding and acres treated that involve grants or partnerships with federal agencies, resource conservation districts, local FSCs, fire districts, watershed groups or other non-profit or community groups that support the ability to carry out fuels reduction projects.*

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.*

APPENDIX D: BATTALION RESPONSE REPORT**Battalion 1 Response Report (2010)**

State Responsibility Area (SRA) - Local Responsibility Area (LRA)

	Wildland	Structure	Other / False Alarms	TCs	Medicals	Hazards	Public Assists	Others	Total
LRA	14	8	36	23	35	6	2	17	141
SRA	22	0	4	0	0	0	0	0	26
Total	36	8	40	23	35	6	2	17	167

Battalion 2 Response Report (2010)

State Responsibility Area (SRA) - Local Responsibility Area (LRA)

	Wildland	Structure	Other / False Alarms	TCs	Medicals	Hazards	Public Assists	Others	Total
LRA	3	12	23	27	112	17	6	8	208
SRA	9	0	6	0	0	0	0	0	15
Total	12	12	29	27	112	17	6	8	223

Battalion 3 Response Report (2010)

State Responsibility Area (SRA) - Local Responsibility Area (LRA)

	Wildland	Structure	Other / False Alarms	TCs	Medicals	Hazards	Public Assists	Others	Total
LRA	5	2	10	6	33	0	1	11	68
SRA	19	0	0	0	0	0	0	0	19
Total	24	2	10	6	33	0	1	11	87

Battalion 4 Response Report (2010)

State Responsibility Area-SRA Local Responsibility Area- LRA

	Wildland	Structure	Other / False Alarms	TCs	Medicals	Hazards	Public Assists	Others	Total
LRA	0	3	8	13	79	0	0	10	113
SRA	17	0	0	0	0	0	0	0	17
Total	17	3	8	13	79	0	0	10	130

Battalion 1 Ignitions Report (2010)

The largest cause of these fires was lightning for a total of 7 fires. The following is a break down of the ignitions within the Battalion:

UNDETERMINED	4
LIGHTNING	7
CAMP FIRE	1
SMOKING	1
DEBRIS BURN	6
ARSON	1
EQUIPMENT	1
RAILROAD	0
PLAYING WITH FIRE	3
OTHER/MISC	2

Battalion 2 Ignitions Report (2010)

The largest cause of these fires was undetermined for a total of 5 fires. The following is a break down of the ignitions within the Battalion:

UNDETERMINED	5
LIGHTNING	2
CAMP FIRE	3
SMOKING	0
DEBRIS BURN	2
ARSON	1
EQUIPMENT	2
RAILROAD	0
PLAYING WITH FIRE	2
OTHER/MISC	1

Battalion 3 Ignitions Report (2010)

The leading cause of these fires was lightning for a total of 28 fires. The following is a break down of the ignitions within the:

UNDETERMINED	1
LIGHTNING	28
CAMP FIRE	0
SMOKING	0
DEBRIS BURN	0
ARSON	0
EQUIPMENT	1
RAILROAD	0
PLAYING WITH FIRE	0
OTHER/MISC	1

4 Ignitions Report (2010)

The leading cause of these fires was debris burns for a total of 5 fires. The following is a break down of the ignitions within the Battalion:

UNDETERMINED	2
LIGHTNING	3
CAMP FIRE	0
SMOKING	1
DEBRIS BURN	5
ARSON	0
EQUIPMENT	0
RAILROAD	0
PLAYING WITH FIRE	0
OTHER/MISC	0

Rainfall (2010)

SUSANVILLE	10.97 in
GRASSHOPPER	19.47 in
WESTWOOD	21.85 in
EAGLE LAKE	N/A
BIEBER	10.77 in
HAPPY CAMP	11.22 in
ALTURAS	15.30 in
DEER SPRINGS	8.45 in

(Rainfall data from CA RAWS station.)

Expiration: None

Revision Date: 4 October 2010

INTENT:

The intent of this policy is to guide Unit personnel on the purpose and implementation of the SIFC lightning plan

POLICY:

The Lassen-Modoc-Plumas Unit, in conjunction with the USFS, BLM, USNPS and SIFC will develop and implement a Unit wide lightning plan including Lightning Coordination Areas (LCA) to facilitate the management of multiple lightning caused fires within the Unit, on the National Forest, within Resource Areas and within Park boundaries. The following procedures shall be followed when SIFC activates the plan.

Quick Reference Guide

1. Lightning Plan – The Lightning Plan has nothing to do with LCAs. When SIFC announces they are activating the Lightning Plan, it means they are using a modified dispatch plan, instead of normal wildland fire dispatches using response plans. Fewer than normal numbers of resources are sent to each fire due to multiple starts.

2. Lightning Coordination Area – LMU Battalions/BLM Field Offices/LNF Districts/LVNP set up lightning coordination areas, LCA's, as sub-units within their agency organizations for dispatching purposes. The HQs of these sub-units become Command & Control (dispatch) centers for their area (Ex: Alturas Station for the Alturas Battalion), with resources assigned directly to them from SIFC.

A. LCA activation is usually initiated by the supervisors of the affected areas (for LMU, the B.C.s with north/south coverage), but SIFC may request a Battalion go into LCA mode due to a heavy dispatch load developing within their IA area.

B. All new fires/smokes within an LCA are reported to SIFC, not the LCA. This includes reports from lookouts, recons, neighboring fire agencies, & law enforcement agencies.

C. The LCA's will receive reports of new fires within their areas from SIFC. The LCA's will prioritize new reports & dispatch the resources assigned to them as appropriate.

D. Resources dispatched by LCA's will communicate directly with the LCA command centers using pre-designated command frequencies.

Susanville: Command 1 – Tone 1, or tone 5 if the portable repeater on Landon is in use

Westwood: Command 10 – Tone 7 (Roop)

Bieber: Command 2 – Tone 5 (Widow)

Alturas: Command 1 – Tone 14 (Likely)

Tactical frequencies will be Tac 3 and Tac 10 at the discretion of the LCA coordinator. Additional tactical frequencies shall be coordinated through SIFC on an "as needed" basis.

E. Region controlled resources (agency aircraft & CAL FIRE crews) will not be "officially assigned" to a LCA, however, once these resources are dispatched by SIFC to a LCA's incident, they are effectively under the LCA's control. The resource will communicate directly with the LCA command center and can be moved by the LCA to various fires within their area, until:

1. The LCA no longer has a need for them & turns them back to SIFC, or
2. SIFC reassigns them to a higher priority mission, or
3. Region (NOPS) reassigns them to a higher priority mission.

F. LCAs will order all additional resources from SIFC. SIFC will issue the request numbers for those additional resources and order or hire them as appropriate.

G. LCA administration - LCA ICs will ensure that all fire, timekeeping, & daily cost estimate reports are completed. SIFC issues incident numbers and makes a CAD entry for each fire.

PROCEDURE:

SIFC Lightning Plan

I. INTRODUCTION

Lightning is the major source of fire activity processed through SIFC. With four agencies operating out of the same office, the impact of lightning caused fires is even more critical. This plan was developed to handle the multiple fires that normally occur within a very short time frame. The total number of lightning fires that may occur in any given year may vary greatly. There have been as many as 108 lightning caused fires in one day on a single agency. There have been situations where several major fires have been burning simultaneously. This plan has been developed to manage resources in a safe, efficient manner when the Central Dispatch System cannot handle the complexity of the situation.

II. PLAN DEVELOPMENT

This plan is developed to standardize the procedures used by the agencies within the SIFC area during Incidents. The lightning plans from the CAL FIRE Lassen-Modoc-Plumas Unit, Lassen National Forest, BLM Nor-Cal, and Lassen Volcanic National Park were combined into one plan.

The plan is designed to handle multiple incidents as a result of lightning. It does not include what is considered fire operational procedures. A lightning fire that develops beyond initial attack will be removed from the lightning plan procedures and treated as a separate incident.

III. ACTIVATION OF THE PLAN

Activation will occur when one or more of the following conditions exist, keeping in mind there could be outside influences or local conditions that will call for plan activation. SIFC will notify all field units by radio broadcast of activation of lightning plan.

1. Down strikes on SIFC direct protection areas.
2. Lightning eminent on SIFC DPA.
3. One (1) or more fires existing in SIFC direct protection areas resulting in resource shortages.

IV. MODIFIED DISPATCHING

Normal fire dispatching is done by agency response plans. When activation of the SIFC Lightning Plan occurs, SIFC will be in a modified dispatch situation, consisting of single resource response, one engine and/or air attack/helitack if available. This may be modified by the affected field Battalion Chief, SIFC, or responding unit based on fire weather conditions.

V. OPERATING PROCEDURES

1. LIGHTNING COORDINATION-AREA (LCA)

SIFC is divided into LCAs to facilitate management of the fire situation. The intent is to maintain an effective span of control through adjustment in workload.

AREAS:

LASSEN-MODOC-PLUMAS UNIT: These Areas will conform to existing Battalion boundaries and will be numbered Area I, Area II, Area III, and Area IV to correspond with the respective Battalions.

LASSEN NATIONAL FOREST: These areas will conform to existing Ranger District Fire Protection boundaries and will be named Area "L" Almanor, Area "E" Eagle Lake, Area "H" Hat Creek, to correspond with the respective Ranger Districts.

BUREAU OF LAND MANAGEMENT (BLM): These areas will conform to existing Field Office Fire Protection boundaries and will be named Area "R" Eagle Lake, Area "S" Surprise Valley, Area "W" Alturas, to correspond with the respective Field Offices.

LASSEN NATIONAL PARK (LNP): Lassen National Park will be one area and named Area "P".

2. LCA OPERATIONS

LCA activation must occur early during a thunder storm through communication with the affected agency (s), LCA (s) and SIFC. The decision to activate individual LCA Lightning Plans will be made with a definite time established to go into LCA dispatching so that the affected LCA has time to take over the operation and put their LCA lightning plan into effect.

3. DETECTION

A. Lookouts will report all smokes to SIFC in degrees, miles out, landmarks, and legal location if it can be determined. If lookouts spot a smoke outside of SIFC Protection Area, they will report the smoke to the responsible Unit ECC if known by the lookout. If the smoke is close to the SIFC protection area, they will report to both Units' EECs.

B. Aerial recon will be activated and will be used in conjunction with fixed detection, suppression, and air tanker operations.

(1). Aerial recon will locate and report all fires to SIFC.

(2). SIFC will advise aircraft of areas to recon after checking with districts/area or lookouts for areas hit by lightning.

(3). SIFC will order additional recon aircraft for expanded areas of lightning concentration as needed.

(4). When AA06 is used for recon, this aircraft could be reassigned immediately for air tanker coordination.

C. Fires reported directly to LCAs will be processed through SIFC and assigned area numbers.

4. SIFC AREA LIGHTNING FIRE NUMBERING SYSTEM BY AGENCY

CAL FIRE

Batt. I,	SUSANVILLE	I-1,	I-2 ETC.
Batt. II,	WESTWOOD	II-1,	II-2 ETC.
Batt. III,	BIEBER	III-1,	III-2 ETC.
Batt. IV,	ALTURAS	IV-1,	IV-2 ETC.

USFS

ALMANOR DISTRICT	L-1, L-2, ETC.
EAGLE LAKE DISTRICT	E-1, E-2, ETC.
HAT CREEK DISTRICT	H-1, H-2, ETC.

BLM

EAGLE LAKE FIELD OFFICE	R-1, R-2, ETC.
ALTURAS FIELD OFFICE	W-1, W-2, ETC.
SURPRISE FIELD OFFICE	S-1, S-2, ETC.

LVNP

LASSEN VOLCANIC NATIONAL PARK	P-1, P-2, ETC.
-------------------------------	----------------

The dispatch of personnel and equipment will be by the area number, the legal description and a landmark. From that time on, a fire should be referred to by the Area Number such as "three dash one". These Area Numbers will be assigned regular incident numbers and fire names at a time when conditions have stabilized.

5. COMMUNICATIONS

Initial attack units should use normal agency frequencies for fire assignments. Tactical/Command frequencies are available for LCAs and SIFC will be responsible for assigning communications frequencies as needed. Recon/Air Attack aircraft will use Air to Ground frequencies to keep the agency frequency available for normal use.

6. LCA DISPATCHING

LCA Coordinators will be responsible for all emergency incidents and resources in their area. They must maintain records on each fire and resource assignment; maintain current personnel, equipment and fire status. Plans and resource needs must be coordinated with SIFC. Contact between the LCA and SIFC must occur daily to reconcile incident information. This normally occurs in the evening when activity moderates

All fire suppression crews while assigned to an LCA will maintain communications through that LCA, i.e. "Bieber command, E2280 at scene fire three dash three". Resource needs, reports on conditions and any other pertinent information will be communicated to the LCA. LCA organizations should keep in mind the closest forces concept for Initial Attack with districts and other agencies next to their area and request these forces through SIFC when appropriate. As personnel and equipment become excess to an LCA they will be released to SIFC for reassignment.

7. SUPPORT

LCA's will have a lightning plan for their area in the format shown in Exhibit 1, consisting of, but not limited to, Operations, LCA Dispatching, Finance, Logistics, etc. Additional resources will be coordinated through SIFC. SIFC will expand as needed to support LCAs and fire activity.

8. SIFC will provide the coordination to insure positive control in the detection, reporting, and dispatching of resources. All requests for additional resources will be placed with SIFC, and priorities will be set for these and other shared resources. When the emergency work has increased, an expanded dispatch organization will be put in place to handle the activity and resource ordering. These positions will be filled or released as the need dictates.

- A. SIFC will maintain close communications with Redding and Reno Fire Weather offices and adjoining fire protection agencies.

- B. SIFC will review the status of personnel and equipment to ensure maximum utilization of resources.
- C. SIFC will notify industry coordinators when LAL's of five (5) or six (6) are forecast.
- D. SIFC will check for availability of additional recon aircraft.
- E. SIFC will ensure on going coordination of LCA activation and deactivation.
- F. SIFC will notify each LCA of any new fires reported within their area along with its appropriate consecutive area number.
- G. SIFC is responsible for all dispatching outside the lightning plan area.
- H. SIFC will keep North Ops and adjacent agencies advised of the situation and of possible needs. SIFC will generate an ICS 209 twice daily.
- I. SIFC will dispatch air attack or helitack forces as requested. First priority use of helicopters will be for initial attack and to ferry personnel to going fires: Recon and logistical use by helicopters will be held to a minimum.
- J. SIFC will maintain the area wide map of fire locations and record of overall situations.
- K. SIFC will fill LCA requests for additional personnel, equipment, and special services.
- L. SIFC will dispatch all Inter-LCA movement of resources.
- M. SIFC will set priorities for aircraft with consideration to LCA needs and SIFC needs.

VI. ESCAPED FIRE

If one or more fires develop beyond initial attack capabilities they will be removed from the lightning plan with concurrence of SIFC and the LCA Coordinator. A separate fire organization will be established under ICS guidelines and operated through SIFC under normal dispatch procedures.

VII. DEACTIVATION OF THE LCA

To return to SIFC from LCA Dispatching the following guidelines should be met:

- A. All fires under LCA Dispatching will have been staffed, controlled, and be in mop-up status.
- B. Sufficient IA resources will be in place or available for SIFC dispatch.
- C. All information pertaining to any incident still in a mop-up stage will be given to SIFC Dispatch, i.e.: personnel, equipment, and expected needs.
- D. A joint decision will be made between LCA Coordinator and SIFC as to when to return to normal SIFC operations.
- E. Any out of area resources should be considered for release first and must go through SIFC for approval before being released.

EXHIBIT I

LCA LIGHTNING PLAN GUIDE

I. OBJECTIVE

The purpose of this document is to provide a standardized FORMAT for the LCA Lightning Plan.

The purpose of this Plan is to organize Battalion/District/Area personnel to facilitate dispatching at the LCA level for suppressing lightning fires on the

_____ Ranger District/Resource Area/Battalion

Organize to insure placement of resources and equipment to:

- A. Have Initial Attack capabilities to confine all fires to one burning period after discovery.
- B. Provide necessary follow-up forces to control all fires.
- C. To recognize and designate personnel, to fill support positions upon predicted lightning activity.
- D. Keep SIFC current on LCA activities and resources.

II. ORGANIZATION

The LCAs will operate in accordance with the Incident Command System.

A. LCA staffing/organization.

1. RECOMMENDED LCA RESPONSIBILITIES

- A. Incident Dispatching
- B. Resource Status Keeping
- C. Logistical Support

2. LCA's may meet the minimum responsibilities to the level of organization required meeting the needs of the LCA. Local station personnel may meet all LCA needs.

3. Insert an organizational chart.

B. LCA Incident Base/Staging area operations.

C. LCA Supply operation.

D. Fire Reports – Describe procedure for collecting & recording information needed to complete the fire reports.

III. MISCELLANEOUS

A. MAPS: LCAs will have prepared map packets to equip personnel going to lightning fires. Quantity of packets will be determined from experienced staffing of lightning fires at any one time for the past 10 years. These packets should consist of the type of maps, which would be most desirable for use during a lightning series. These maps generally cover only the respective LCA and portions of adjoining LCAs. The LCAs should also develop acetate overlay administrative maps with boundaries for use in plotting fires.

B. SPECIALIZED POSITIONS

1. GUIDES: The LCA coordinator and individual incident commanders should utilize locals (farmers, ranchers, retired personnel and timber industry personnel) for guiding crews to fires. Several timberland owners carry chainsaws and are readily available for tree falling and road clearing.

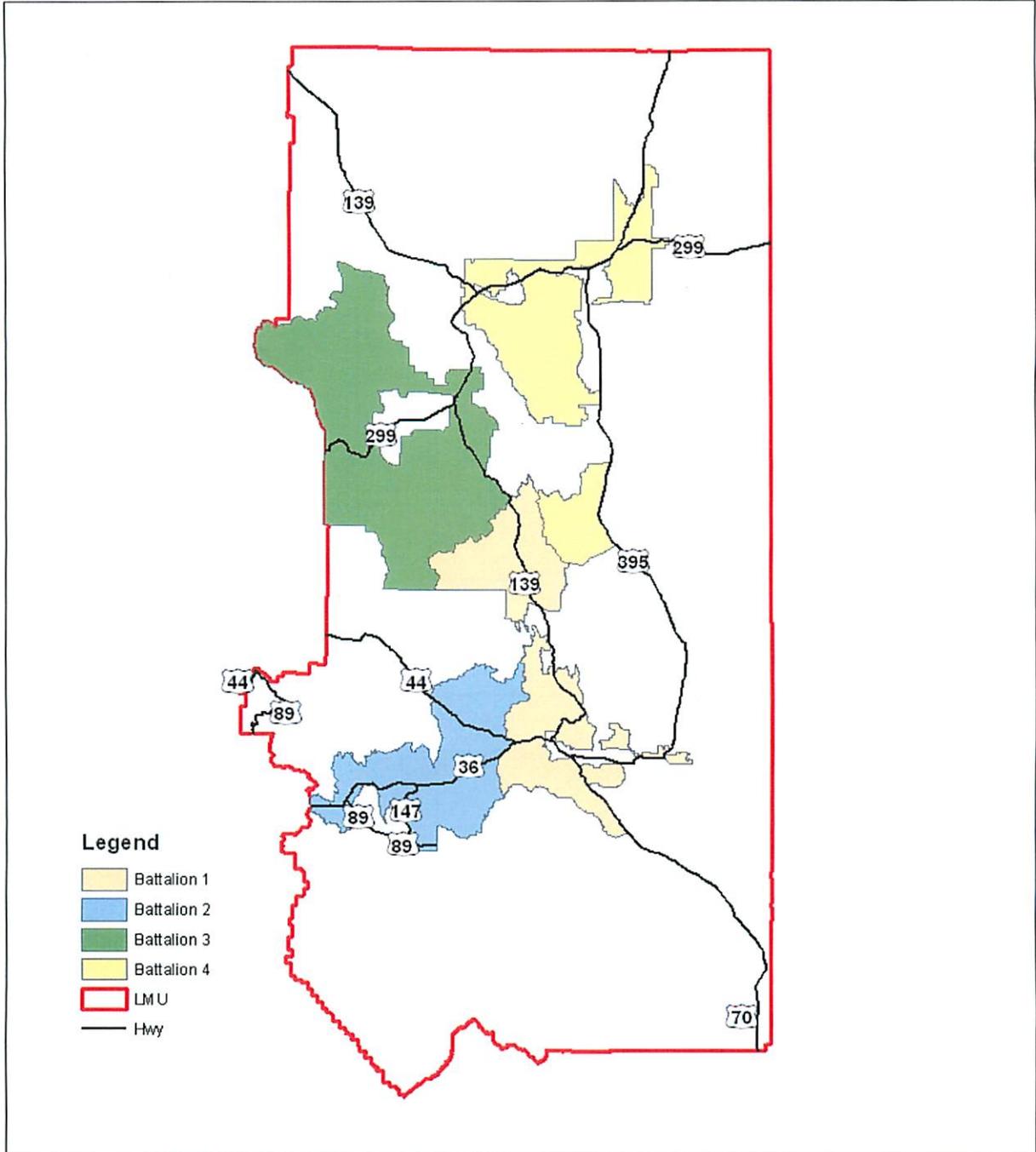
2. Fallers

3. Environmental Specialist/Resource Advisor

4. Staffing Lookouts

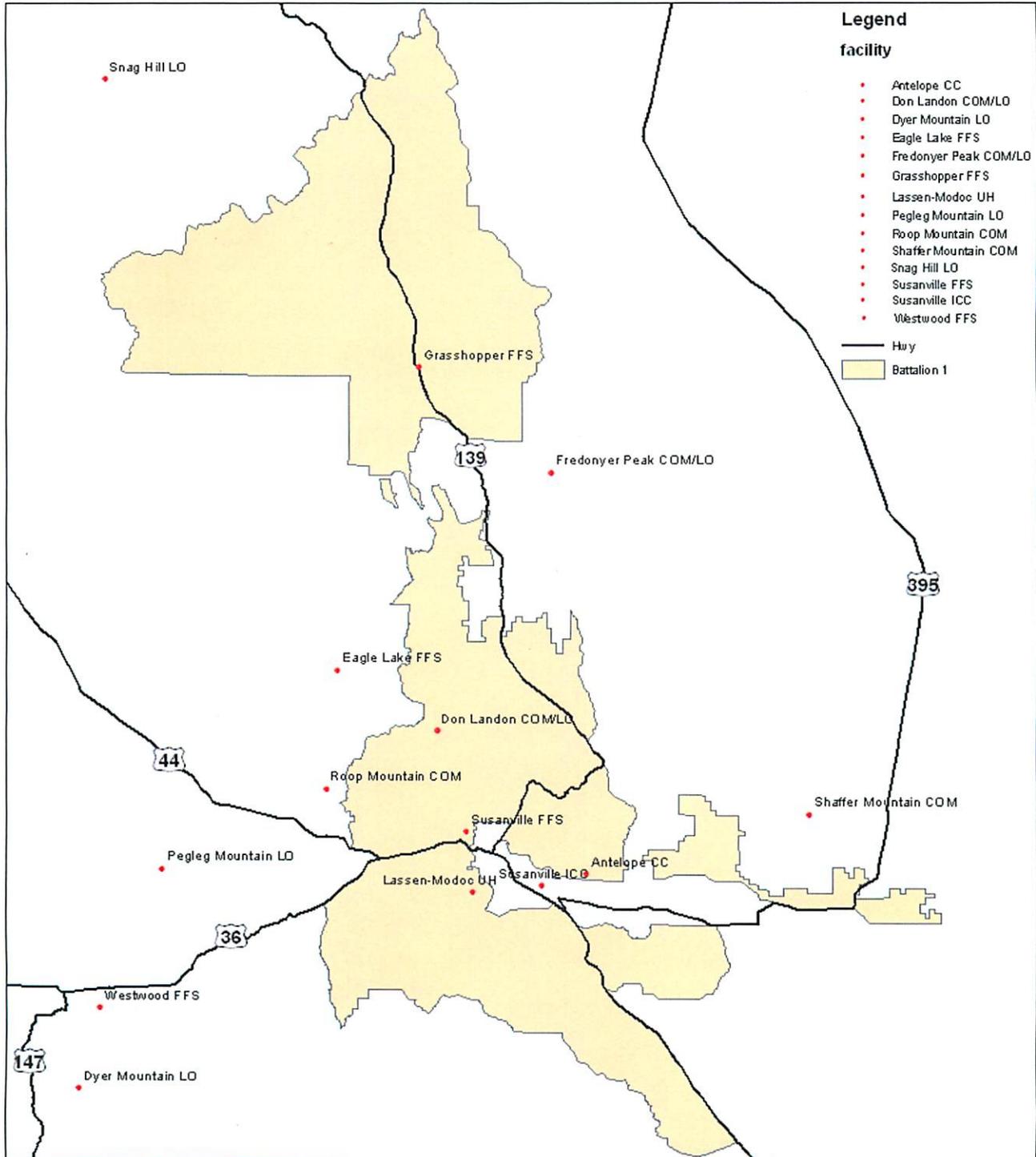


Lassen Modoc Plumas Unit



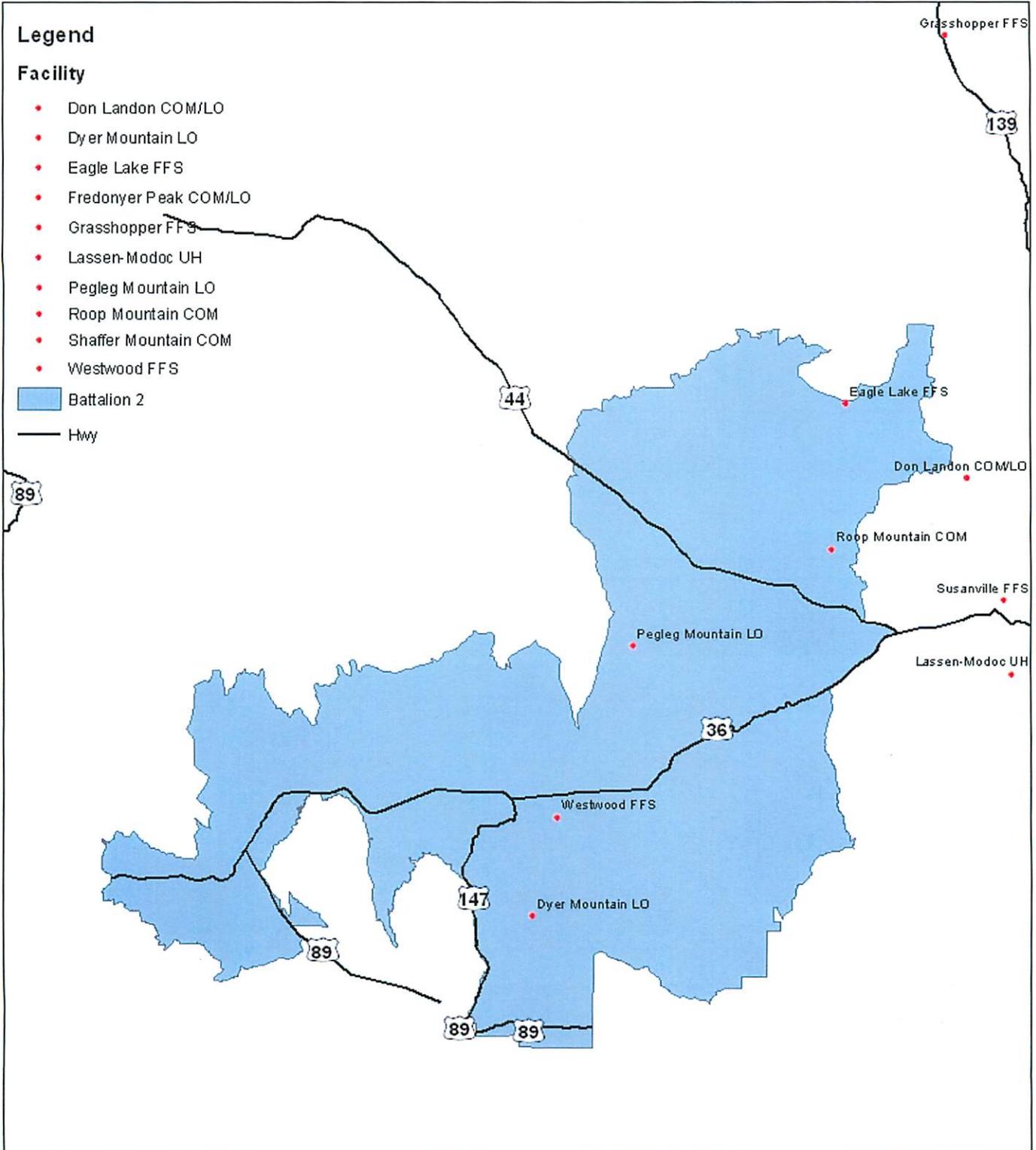


Battalion 1



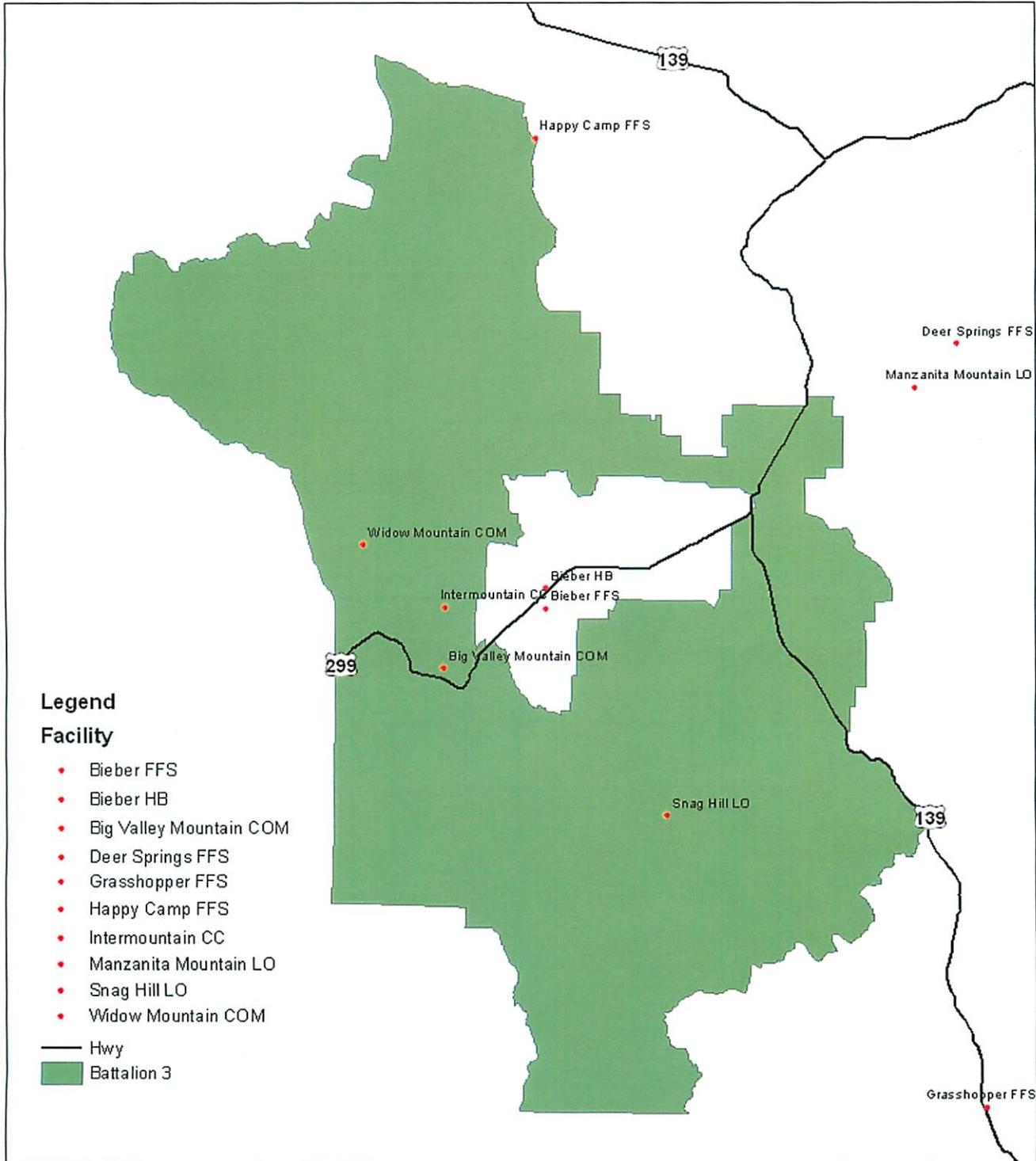


Battalion 2



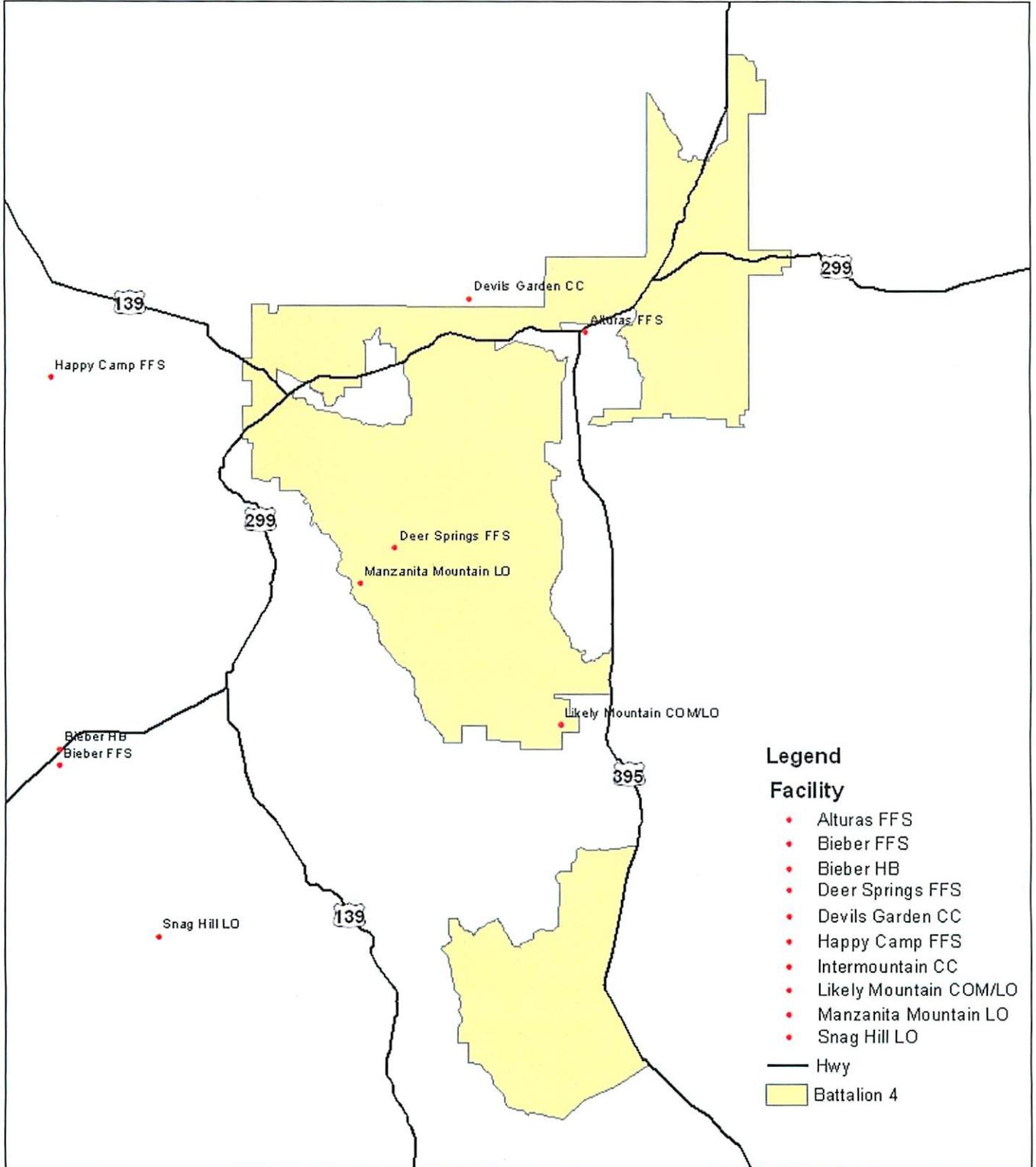


Battalion 3





Battalion 4





Lassen Modoc Plumas Unit Fire History



Legend

-  1900 - 1909
-  1910 - 1919
-  1920 - 1929
-  1930 - 1939
-  1940 - 1949
-  1950 - 1959
-  1960 - 1969
-  1970 - 1979
-  1980 - 1989
-  1990 - 1999
-  2000 - 2009
-  LMU
-  Hwy

