

Appendix B - Full Application Checklist

SNC Reference#: 878

Project Name: Calpine WUI Forest Health Improvement Project

Applicant: Sierra County Fire Safe & Watershed Council

Please mark each box if item is included in the application. Please consult with SNC staff prior to submission if you have any questions about the applicability to your project of any items on the checklist. All applications must include a CD including an electronic file of each checklist item, if applicable. The naming convention for each electronic file is listed after each item on the checklist. (Electronic File Name = EFN; "naming convention". file extension choices)

Submission requirements for all Category One and Category Two Grant Applications

1. Completed Application Checklist (EFN: *Checklist.doc, .docx, or .pdf*)
2. Table of Contents (EFN: *TOC.doc, .docx, or .pdf*)
3. Full Application Project Information Form (EFN: *SIform.doc, .docx, or .pdf*)
4. CCC/Local Conservation Corps Document (EFN: *CCC.pdf*)
5. Authorization to Apply or Resolution (EFN: *authorization.doc, .docx, or .pdf*)
6. Narrative Descriptions (EFN: *Narrative.doc or .docx*)
 - a. Detailed Project Description (5,000 character maximum for section 6a only)
Project Description including Goals/Results, Scope of Work, Location, Purpose, etc.
 - b. Workplan and Schedule
 - c. Restrictions, Technical/Environmental Documents and Agreements
 - Restrictions / Agreements (EFN: *RestAgree.pdf*)
 - Regulatory Requirements / Permits (EFN: *RegPermit.pdf*)
 - d. Organizational Capacity
 - e. Cooperation and Community Support
 - Letters of Support (EFN: *LOS.pdf*)
 - f. Tribal Consultation Narrative (EFN: *tribal.doc, .docx*)
 - g. Long Term Management and Sustainability
 - Long-Term Management Plan (EFN: *LTMP.pdf*)
 - h. Performance Measures
7. Budget documents
 - a. Detailed Budget Form (EFN: *Budget.xls, .xlsx*)
8. Supplementary Documents
 - a. Environmental Documentation
 - California Environmental Quality Act (CEQA) documentation (EFN: *CEQA.pdf*)
 - National Environmental Policy Act (NEPA) documentation (EFN: *NEPA.pdf*)
 - b. Maps and Photos
 - Project Location Map (EFN: *LocMap.pdf*)
 - Parcel Map showing County Assessor's Parcel Number(s) (EFN: *ParcelMap.pdf*)

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Applicant: Sierra County Fire Safe & Watershed Council

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SIERRA NEVADA CONSERVANCY
PROPOSITION 1 – Watershed Improvement Program Pre-Application Form

PROJECT NAME

APPLICANT NAME (*Legal name, address, and zip code*)

AMOUNT OF GRANT REQUEST

ESTIMATED TOTAL PROJECT COST

DESCRIPTION OF PROJECT (Limit 5,000 characters including spaces)

DESCRIPTION OF PROJECT WORKPLAN AND SCHEDULE

DESCRIPTION OF COMMUNITY SUPPORT

STATUS OF TRIBAL INVOLVEMENT AND CONTACT INFORMATION

DESCRIPTION OF LONG-TERM MANAGEMENT PLAN

DESCRIPTION OF REGULATORY REQUIREMENTS/PERMITS NEEDED

DESCRIPTION OF RESTRICTIONS/AGREEMENTS NEEDED/IN PLACE

DESCRIPTION OF ORGANIZATIONAL CAPACITY

PROJECT LOCATION (*County with approx. lat/long, center of project area*)

SENATE DISTRICT NUMBER

ASSEMBLY DISTRICT NUMBER

PERSON WITH MANAGEMENT RESPONSIBILITY FOR GRANT CONTRACT

Name and title

Phone

Email Address

Mr.

Ms.

COUNTY ADMINISTRATOR OR PLANNING DIRECTOR CONTACT INFORMATION

Name:

Phone Number:

Email address:

tbeals@sierracounty.ca.gov

NEAREST PUBLIC WATER AGENCY CONTACT INFORMATION

Name:

Phone Number:

Email address:

dheiman@waterboards.ca.gov

BRIEF DESCRIPTION OF THE CEQA STATUS OF THE PROJECT

BRIEF DESCRIPTION OF THE NEPA STATUS OF THE PROJECT (IF APPLICABLE)	
<p>Please identify the appropriate project category below and provide the associated details <i>(Choose One)</i></p> <p> <input type="checkbox"/> Category One Site Improvement <input type="checkbox"/> Category Two Pre-Project Activities <input type="checkbox"/> Category One Acquisition </p>	
<p>Site Improvement/ Acquisition Project Area</p> <p>Total Acres: SNC Portion (if different):</p> <p>Acquisition Projects Only For Acquisitions Only</p> <p> <input type="checkbox"/> Appraisal Included <input type="checkbox"/> Will submit appraisal by </p>	<p>Select one primary Pre-Project deliverable</p> <p> <input type="checkbox"/> Permit <input type="checkbox"/> CEQA/NEPA Compliance <input type="checkbox"/> Appraisal <input type="checkbox"/> Condition Assessment <input type="checkbox"/> Biological Survey <input type="checkbox"/> Environmental Site Assessment <input type="checkbox"/> Plan </p>
<p>ITEMS TO BE SUBMITTED WITH PRE-APPLICATION FORM:</p> <p> <input type="checkbox"/> Project Location Map <input type="checkbox"/> Parcel Map <input type="checkbox"/> Topo Map <input type="checkbox"/> Photos of Project Site <input type="checkbox"/> Site Plan <input type="checkbox"/> Long-Term Management Plan </p>	

To be completed by the applicant:

Date of Application

Name and Title of Authorized Representative

Contact Phone Number

SIERRA NEVADA CONSERVANCY	
PROPOSITION 1 – Watershed Improvement Program Project Information Form	
SNC REFERENCE #	
PROJECT NAME	
APPLICANT NAME <i>(Legal name, address, and zip code)</i>	
AMOUNT OF GRANT REQUEST	
TOTAL PROJECT COST	
PROJECT LOCATION <i>(County with approx. lat/long, center of project area)</i>	
SENATE DISTRICT NUMBER	ASSEMBLY DISTRICT NUMBER
PERSON WITH MANAGEMENT RESPONSIBILITY FOR GRANT CONTRACT	
<i>Name and title:</i> _____ <i>Phone:</i> _____ <i>Email Address:</i> _____	
<input type="checkbox"/> Mr.	
<input type="checkbox"/> Ms.	
TRIBAL CONTACT(S) INFORMATION	
<i>Name:</i> _____ <i>Phone Number:</i> _____	
<i>Email address:</i> _____	
COUNTY ADMINISTRATOR OR PLANNING DIRECTOR CONTACT INFORMATION	
<i>Name:</i> _____ <i>Phone Number:</i> _____	
<i>Email address:</i> _____	
NEAREST PUBLIC WATER AGENCY CONTACT INFORMATION	
<i>Name:</i> _____ <i>Phone Number:</i> _____	
<i>Email address:</i> _____	

Please identify the appropriate project category below and provide the associated details *(Choose One)*

Category One Site Improvement

Category Two Pre-Project Activities

Category One Acquisition

Site Improvement/ Acquisition Project Area (for Category One Projects Only)

Total Acres:

SNC Portion (if different):

Acquisition Projects Only For Acquisitions Only

Appraisal Included

Select one deliverable (for Category Two Projects Only)

Permit

CEQA/NEPA Compliance

Appraisal

Condition Assessment

Biological Survey

Environmental Site Assessment

Plan

Full Application Project Information Form

Sierra Nevada Conservancy Proposition 1

Sierra Nevada Watershed Improvement Program

Grant Application Packet: Calpine WUI Forest Health Improvement Project

Applicant: Sierra County Fire Safe & Watershed Council

SIERRA NEVADA CONSERVANCY	
PROPOSITION 1 – Watershed Improvement Program Project Information Form	
SNC REFERENCE # 878	
PROJECT NAME Calpine WUI Forest Health Improvement Project	
APPLICANT NAME <i>(Legal name, address, and zip code)</i> Sierra County Fire Safe & Watershed Council Post Office Box 210 Calpine, California 96124	
AMOUNT OF GRANT REQUEST \$233,200	
TOTAL PROJECT COST \$250,090	
PROJECT LOCATION <i>(County with approx. lat/long, center of project area)</i> Sierra & Plumas County - Carman Creek Watershed, Middle Fork Feather River (Tahoe National Forest - Sierraville Ranger District) Approximately 2-3 miles northeast of the community of Calpine, California. Latitude 120.46/Longitude 39.72	
SENATE DISTRICT NUMBER California State Senate District 1	ASSEMBLY DISTRICT NUMBER California State assembly District 1
PERSON WITH MANAGEMENT RESPONSIBILITY FOR GRANT CONTRACT	
<i>Name and title:</i> <input checked="" type="checkbox"/> Mr. Bill Nunes <input type="checkbox"/> Ms.	
<i>Phone:</i> 530-994-3401	
<i>Email Address:</i> bnunes1964@gmail.com	
TRIBAL CONTACT(S) INFORMATION	
<i>Name:</i> Darrel Cruz	
<i>Phone Number:</i> 775-782-0014	
<i>Email address:</i> darrelcruz@washoetribe.us	
COUNTY ADMINISTRATOR OR PLANNING DIRECTOR CONTACT INFORMATION	
<i>Name:</i> Tim Beals	
<i>Phone Number:</i> 530-289-3251	
<i>Email address:</i> tbeals@sierracounty.ca.gov	
NEAREST PUBLIC WATER AGENCY CONTACT INFORMATION	
<i>Name:</i> Central valley RWQCB	
<i>Phone Number:</i> 530-224-4845	
<i>Email address:</i> dheiman@waterboards.ca.gov	

Please identify the appropriate project category below and provide the associated details *(Choose One)*

Category One Site Improvement

Category Two Pre-Project Activities

Category One Acquisition

Site Improvement/ Acquisition Project Area (for Category One Projects Only)

Total Acres: 212

SNC Portion (if different):

Acquisition Projects Only For Acquisitions Only

Appraisal Included

Select one deliverable (for Category Two Projects Only)

Permit

CEQA/NEPA Compliance

Appraisal

Condition Assessment

Biological Survey

Environmental Site Assessment

Plan

Narrative Description (SNC-Proposition1 Reference Number: 878)

Restoration goals for Calpine WUI Forest Health Improvement Project are to improve the health and extent of the forest ecosystems within the Upper West Fork of the Carman Creek Watershed and along the alignment of California State Highway 89 on National Forest Lands. This will be accomplished by reducing existing fuel loading and tree densities on approximately 212 acres to improve forest ecosystem resiliency and health, prepare the area for the application of prescribed fire, reduce potential and severity of wildfire, creation of a safer, more effective fire suppression environment, connection of the existing forest health and fuels treatment areas, restored forest heterogeneity in and around the Saddle Project Area and improved hydrologic connectivity and watershed conditions.

These proposed treatments fill in key pieces of an already existing treatment along the highway 89 corridor and around the community of Calpine along with the west fork Carman watershed. Having these treatments connected increases their effectiveness increasing the probability that a fire moving into the community could be managed with fewer resources as the fire characteristics would change upon entering the treated area. Fire in the untreated area has the potential to have rapid rates of spread, high flame lengths, tree torching and crowning leading to spotting and behavior resistant to control. As the fire moves into the treated area it would become a surface fire allowing for ground resources to effectively control the fire. This would allow for fire managers to deploy resources to other fires or portions of a fire increasing overall resource effectiveness. The completed fuel break also serves to limit the potential of a fire starting in the community to spread to the surrounding forested areas. Any fire started in the community would be retarded by the fuel break, providing suppression resources a tactical advantage, allowing them a higher success rate limiting the potential of a large damaging wildfire. The treatment along the Carman Saddle Road provides for a logical fire break in an area that typically exhibits fast moving fire spread. Having a pre-existing treatment in place would allow for fire managers to rapidly implement suppression action taking advantage of the pre-existing treatment versus falling back to more favorable ground increasing the fire size, complexity and resistance to control leading to increased probability of a large destructive wildfire with high fire severity effects.

The analysis area vegetation consists of eastside pine, mixed conifer, white and red fir, shrub land and riparian vegetation communities. The lower elevation units are primarily eastside pine vegetation communities with Jeffery pine (*Pinus jeffreyi*) and ponderosa pine (*Pinus ponderosa*) as the dominant overstory. Mid-elevation stands are mixed conifer communities with white fir (*Abies concolor*), incense cedar (*Calocedrus decurrens*), lodge pole pine (*Pinus contorta*), ponderosa pine (*Pinus ponderosa*), Jeffery pine (*Pinus jeffreyi*) and Douglas fir (*Pseudotsuga menziesii*).

The Eastside pine stands throughout the project area are characterized by average fuels loadings of 2-5 tons/acres with pockets of up to 10 tons/acre. Areas exist within these stands where the fuels are continuous horizontally and vertically (ladder fuels). Photo series plates representative of these stands are 1-PP-2, 2-PP-2, and 4-PP2 (NWCG NFES #1872, 1981). The fire behavior fuel models representative of the eastside pine stands are a FM9 and a TU5.

The mixed conifer stands throughout the Saddle project area are characterized by average fuels loadings of 10-30 tons/acre with pockets of up to 35-40 tons/acre. Areas exist within these stands where the fuels are continuous horizontally and vertically (ladder fuels). Photo series plates representative of these stands are 3-MF-4, 3-WF-2, 4-WF-2 (NWCG NFES #1872, 1981). The fire behavior fuel models representative of the mixed conifer stands are a FM10 and a TL5.

Prior to modern settlement the project area experienced high fire frequency with a fire return interval of less than 20 years in eastside pine and mixed conifer vegetative communities. In this eastside pine and pine/mixed conifer community the proportion of low/mixed/high severity fires in the historic stand structure was approximately 80/15/5 with a mean fire return interval of 10-15 years. This allowed for the stand/vegetation structure to be maintained naturally in a fire-resilient condition. These frequent and mostly low intensity fires limited the accumulation of organic material, surface and ladder fuels played an important role in shaping the pre-settlement ecosystem. Currently the fire regime is moderate with fire-free intervals approaching 100 years. This long fire-free interval allows for increased accumulation of surface fuels and the growth of fire-intolerant species. This fuel accumulation leads to wildfires with increased magnitude and extent that are difficult and dangerous to control. The fire-resiliency of forest stands is greatly reduced; wildfire could result in stand replacing effects.

These current overstocked stands intercept precipitation prior to reaching the ground and evaporate and transpire more water into the atmosphere than a thinned stand. Studies have shown a 1%-16% increase in watershed streamflow following thinning. This increase in water productivity is limited by the speed and quantity of regrowth of the thinned material. This can be lengthened through the use of prescribed fire initially to retard that growth and then providing subsequent maintenance treatments mimicking the 15-20 FRI. An additional advantage of forest thinning is the decreased probability of a fire starting in these areas developing in a large fire with severe effects, or the severity of effects in these treated areas, should a fire move through. A large fire with severe effects results in large areas of the landscape that have had the organic matter removed from the soil and surrounding vegetation killed. Subsequent precipitation events result in soil mobilization, due to lack of cover and hydrophobic soils from extreme temperature, increasing sedimentation in streams and rivers. The landscape also loses its ability to store and attenuate the release of winter precipitation through earlier snow melt without shade and no organic matter to aid in storing and releasing water.

The Carman Creek Watershed (Hydrologic Unit Code 7) is located in the northern Sierra Nevada, within the Upper Middle Fork of the Feather River watershed approximately 2 miles northeast of the town of Calpine, California. The Carman Creek Watershed is in the headwaters of the Upper Feather River which supplies water in support of the California Water Project. The removal of over stocked small diameter trees and shrubs/brush within the restoration project boundary would reduce transpiration and the inception/uptake of precipitation. This reduction is anticipated to indirectly affect the location of water in the system and may be manifested in increased soil moisture, understory productivity, runoff, and increased stream base flow into the Upper Feather River Watershed. Productivity and species richness of both understory and riparian vegetation would potentially be enhanced by the increased soil moisture and increased

solar radiation to the forest floor. Current land uses on National Forest lands are recreation, forest management, and livestock grazing. Additionally, implementation of the project is expected to increase the productivity of herbaceous plants through increases in root mass below ground which should directly enhance stream channel stability and the ability of drainages to maintain structure and function during flood discharges. Private lands adjacent to the National Forest System Lands are managed for timber production, livestock grazing and other agricultural uses.

In general, fuel treatments are designed to alter fuel characteristics/ conditions so that wildfire is less difficult, disruptive, and destructive. Of the conditions which influence fire behavior, fuels characteristics are the only ones which can be managed. The most effective method to change potential wildland fire behavior is to alter fuel structures. Fuels occur in all shapes, sizes and arrangements within a stand and across the landscape. They include live and dead fuels, herbaceous and shrub fuels, duff and litter fuels, surface, ladder and canopy fuels. Fuel treatments can address any or all of these fuel types. The effects of fuel treatments reduce fire behavior, intensity, severity, and difficulty to control while increasing the fire-resiliency of the stand/vegetation structure.

Multiple implementation methods may be used to alter or treat fuels in order to meet the desired level of treatment effectiveness; the most common methods include thinning, piling, masticating, and prescribed fire. When stands cannot be burned, reducing fuels to moderate fire behavior is still a key priority because wildfire is likely to burn the area eventually. A few ecological benefits are achieved with mechanical fuel reduction, but thinning is not an effective substitute for fire in affecting ecosystem processes. Reducing surface fuels is as important as reducing ladder fuels (PSW-GTR-220). The most successful methods to change potential fire behavior are, in order of effectiveness to reduce surface fuels, increase the canopy base height, and reduce canopy bulk density. This multi-tiered approach breaks the continuity of surface, ladder and crown fuels.

Prescribed fire has multiple benefits including resorting ecological function and cost effective fuels reduction and maintenance. Implementing prescribed fire on a landscape with pockets of untreated vegetation can create control problems and difficulty in meeting resource management objectives, having these key areas treated by the proposed project will increase overall effectiveness of the treatment area and allow for regular maintenance with prescribed fire. Using prescribed fire also allows for fire managers to implement when there is good smoke dispersion reducing the impacts to air quality versus a wildland fire which can have lasting and significant effects to air quality effecting public health and local economies.

The Calpine WUI Forest Health Improvement Project combined with the implementation of the Saddle Project's Proposed Action and the previous Borda and Calpine Defensive Fuel Profile Zone projects are a multi-phase treatment approach with the goal of achieving all the desired conditions within the project area. They all treat, to some degree, the fuels profile/conditions and reduce the threat of large damaging wildfires while restoring forest health and improving ecosystem functionality on a watershed scale.

Detailed Project Description:

The proposed project includes 212 acres of hand falling (thinning), grapple piling and mastication which will improve forest health and resilience. It is anticipated that the completed fuel treatment areas will be further treated with a low intensity prescribed fire to enhance effectiveness and promote forest health and ecosystem function. These projects are components of the Saddle Vegetation Treatment Project. The Saddle Project builds and expands vegetation treatments from the Borda and Calpine Defensible Fuel Profile Zone Projects (completed) and also includes other vegetation treatments within the watershed. The proposed project will provide connectivity between the existing treatments increasing their effectiveness and allow for ease of prescribed fire implementation. The location of this proposed treatment is adjacent to the community of Calpine and along highway 89 which receives a high level of travel. These treatments not only aid in preventing fire from traveling into the community but also aid in retarding spread from the community in the surrounding forested lands aiding suppression resources limiting the potential for large destructive wildland fires.

- **Thinning**

Thinning allows for multiple alterations to stand structure. Thinning reduces stand density, opens the canopy, removes ladder fuels, increases canopy base height and can allow for the utilization of biomass from the forest. Thinning disrupts the continuity of the fuels both vertically and horizontally. Thinning to reduce the density of crown and ladder fuels severs the vertical continuity between tree crowns and surface fire. The effectiveness of thinning within a stand is dependent on limitations that may be present through implementation. Both mechanical and manual methods can be utilized to implement thinning within a stand, but the degree of treatment effectiveness is directly related to the limitations present on the ground being thinned. Slope and topography may limit the accessibility by mechanized equipment to operate. Much of the ground where mechanized equipment cannot be used is characterized by steep slopes and sensitive terrain; thinning this type of ground is implemented by manual thinning. The limiting factor in thinning by hand is the size of the material that may be cut and handled; 11 inches diameter breast height (dbh) material is the largest material that can be effectively hand thinned and piled.

- **Machine/Grapple/Hand Piling**

Piling of fuels can be done in conjunction with thinning or as a standalone fuels treatment. Piled materials, thinned and/or existing fuels are then burned to remove them from the surface of the forest/ landscape. Piling fuels is a very effective treatment for reducing and removing the amount of surface fuels, breaking up the horizontal continuity of surface fuels across a landscape and increasing the separation between surface and canopy fuels. Burning the piles to remove and reduce the amount of fuels in a stand or across a landscape makes the reintroduction of low-intensity fire by underburning more feasible, effective and can have less undesirable fire effects, as well as providing for a larger burn window for underburning. There are increased prescribed

burning opportunities for the burning of piled material because there is a larger timeframe or burn window available * due to environmental parameters and smoke impacts (* of acceptable environmental conditions aiding in reduced smoke impacts).

- Mastication

Mastication is the chipping or mulching of materials ranging from brush and surface fuel to standing live and dead trees. When using mastication to thin a stand, the equipment is limited to material 11" dbh and less. Mastication re-arranges fuels and places them onto the surface. It is effective at breaking up the continuity (vertical and horizontal) of fuels by increasing the separation between the surface and canopy fuels across the landscape. While mastication can be effective at treating a few aspects of the existing fuels profile in an area, it does contribute to the surface fuel load. The degree to which it contributes to the fuel loading is dependent on the amount of material being masticated. The characteristics of the resulting fuel bed are dependent on the operator and the type of equipment utilized. Fuel beds of masticated material are typically more compact. Depending on the amount of material and the time since mastication, compaction also affects fire behavior. Masticated fuel beds will likely have lower flame lengths and rates of spread than un-masticated fuels. However, increased residence time and fireline intensity resulting in negative effects to the residual stand could negate some of the benefits to fire suppression operations such as lowered rates of spread and flame lengths.

Specific proposed actions include:

Fuels Reduction – Approximately 212 acres of fuels reduction have been identified as high priority fuels reduction work within the Upper West Fork Drainage of Carman Creek and along the alignment of California State Highway 89. The treatment methodology identified is hand felling/hand piling, mastication and grapple piling within the Carman Valley/Calpine Defensible Fuel Profile Zone. The treatment methodology would utilize a combination of a low psi excavator with a FECON Head for mastication and a low psi excavator with a grapple head with a combination of hand fallers working ahead of the equipment. The material to be hand felled ranges in diameter at breast height (DBH) from 4-10" and would be accomplished via chainsaw. The project area has also been identified as a high priority for treatment within the Sierra County Fire Management Plan and is near the community of Calpine, California. The anticipated Deliverable would yield approximately 212 acres of forest fuels treatments which would return forest conditions to Condition Class 1.

DESCRIPTION OF PROJECT WORKPLAN AND SCHEDULE

Award Notification and Contract Signed with SNC - July 2016

Project Boundary Layout and Designation - July 2016

Contract and Solicitation Package Development - August 2016

Review of Contractor Bid Packages and Selection of Contractor - September 1-10, 2016

Contract Initiated (Contract Supervision/Monitoring) - October 1, 2016 - September 30, 2017

Progress Reports - November 15, 2016 - October 2017

Final Project Report - November 2017

DESCRIPTION OF COMMUNITY SUPPORT

The County of Sierra, the Sierra County Fire Safe & Watershed Council and the Tahoe National Forest have formed a strong cooperative relationship to implement these projects. There is wide support throughout the region for the project, as demonstrated by: attendance at field tours; attendance at presentations at Sierra County Fire Safe & Watershed Council meetings and the collective desire to reduce catastrophic fuels conditions from adjacent landowners and citizens residing in the communities of Calpine and the larger Sierra Valley. The Sierra County Fire Safe & Watershed Council has partnered with the Forest Service to complete numerous projects and has committed to continue efforts to reduce fuels within Sierra County.

The project area is designated as a priority within the Sierra County Community Wildfire Protection Plan Fire and Sierra County is in support of this project.

STATUS OF TRIBAL INVOLVEMENT AND CONTACT INFORMATION

The project area is not associated with Federal Tribal Trust Responsibilities for Federally Recognized Native American Tribes. A scoping Letter for the Saddle Project was remitted to Darrel Cruz - Washoe Tribe of Nevada and California THPO and to Waldo Walker - Washoe Tribe of Nevada and California on February 4, 2011.

Contact Information: Darrel Cruz (darrelcruz@washoetribe.us)/Phone: (775)-782-0014

DESCRIPTION OF LONG-TERM MANAGEMENT PLAN

The project will occur on public lands managed by the US Forest Service under the 1990 Tahoe National Forest Land and Resource Management Plan (LRMP), as amended by the 2004 Sierra Nevada Forest Plan Amendment (SNFPA) FSEIS Record of Decision (ROD), and HFQLG ROD Tahoe National Forest Land Management Plan. These plans direct long-term management of public lands on the Tahoe NF in perpetuity. The US Forest Service has managed many similar areas to protect resource values in the past. The US Forest Service will be responsible for long-term maintenance of the Project. Funding for long term management will come from the US Forest Service Tahoe National Forest.

DESCRIPTION OF REGULATORY REQUIREMENTS/PERMITS NEEDED

The project is authorized under compliance with the National Environmental Policy Act. The Environmental Analysis was completed and signed on January 20, 2012 (FONSI & EA Attached).

Applications have been submitted to Central Valley Water Quality Control Board for a Silvicultural Waiver and will be in place for project implementation.

A record search, field survey, resource inventory, and Heritage Resource Report (TNF02227/R2009051700013) have been completed for this project, under provisions of the Programmatic Agreement with the advisory council on Historic Preservation and the California State Historic Preservation Office (SHPO), in compliance with Section 106 of the National Historic Preservation Act. Assessment of historical and cultural resources within the project area indicates implementation of this project will not affect any heritage resource eligible for listing in the National Register of Historic Places, nor will it cause loss or destruction of any significant cultural or historical resources.

DESCRIPTION OF RESTRICTIONS/AGREEMENTS NEEDED IN PLACE

The proposed project site(s) are all on National Forest System Lands so there are no property restrictions and/or encumbrances.

The project is authorized under compliance with the National Environmental Policy Act. The Environmental Analysis was completed and signed on January 20, 2012 (FONSI & EA Attached). This restoration project will occur on public lands managed by the US Forest Service under the 1990 Tahoe National Forest Land and Resource Management Plan (LRMP), as amended by the 2004 Sierra Nevada Forest Plan Amendment (SNFPA) FSEIS Record of Decision (ROD), and HFQLG ROD Tahoe National Forest Land Management Plan. The US Forest Service has managed many similar areas to protect resource values in the past. All land management activities, including these projects, are subject to specific Best Management Practices (BMPs) & Management Requirements/Mitigations detailed in the Tahoe NF LRMP as well as additional resource protection measures. In addition, all projects must implement all requirements of the Central Valley Water Quality Control Board (CVWQCB) and be permitted through the CVWQCB.

DESCRIPTION OF ORGANIZATIONAL CAPACITY

The Sierra County Fire Safe Council (SCFSWC) will act as the project lead and fiscal agent. The US Forest Service will work with the SCFSWC to complete the project. The SCFSWC and US Forest Service have worked together on several similar projects. The SCFSWC has contracted staff with technical expertise in fiscal management. Bill Nunes is the Chair of the SCFSWC and the lead contact for this grant application. The US Forest Service has staff committed with the technical expertise to implement and oversee vegetation monitoring. Ruby Burks is the District Fuels Officer for the Sierraville Ranger District of the Tahoe National Forest and is the lead for the project. Ruby Burks has implemented numerous similar Forest Health projects on the Sierraville Ranger District with SCFSWC as the partner on both private lands and on National Forest System Lands.

Performance Measures (SNC Reference Number: 878)

- Acres of Land Improved or Restored

Approximately 212 acres of forested habitat will be restored to Fire Regime Condition Class I.

Fire Regime Condition Class I reflects vegetative conditions of which resemble alignment with a 0-35 year fire frequency with low (surface fires common) to mixed severity (less than 75% of the dominant over story vegetation replaced). A fire regime condition class is a classification of the amount of departure from the natural regime (Hann and Bunnell 2001).

Fire Regime Condition Class 1 reflects a depiction of vegetative conditions within the range of natural variability of vegetation characteristics; fire frequency, severity and pattern. Input data for the USFS Fire Behavior Model and CALVEG would be obtained by USFS Staff to validate Fire Regime Condition Class post treatment.

- Number and Types of Jobs Created

The number and types of job created will be calculated post award of the grant in combination with a executed agreement with the California Conservation Corp and execution of a contract for the mastication and grapple piling components of the project.

The number and types of jobs created as a consequence of the successful completion of the grant project will be the performance measure project category. The occupation group utilized will be the Natural Resource and Mining Category and Government (CCC).

Estimated expected outcome of the Grant Project: 2.5 FTE (Reflects combination of Contractual Labor & CCC)

- Number of People Reached

Reporting will be reflective of two categories;

Education – includes attendance at public meetings and workshops, in person or group fire safe education, youth education programs, and other efforts to identified stakeholders (CCC forest health project implementation

mentoring and on job training). Data will be collected with Corps members reached and natural resource management topics presented.

Collaboration – direct involvement of stakeholders in project planning and/or implementation (SNC, SCFSWC, Sierra County, Community of Calpine, CA, and Tahoe NF – Sierraville RD) data will be collected reflective of the number of participants at meetings and contacts with community members.

- Resources Leveraged for the Sierra Nevada

This performance measure would be reflective by;

Projects Funds from other sources: If appropriated funds become available from the Tahoe National Forest, these funds could potentially be utilized to expand the project acreage restored.

Major In-Kind Contributions: The performance measure reported would reflect the Tahoe NF – Sierraville RD staff time for 1) project boundary designation, 2) Contracting Officer Representative – Contract Compliance, 3) Resource Specialist Monitoring, 4) Predicted Fire Weather & Contract Variance(s), and 5) Travel/Mileage to Project. Projected In-Kind Contributions = \$16,890

DESCRIPTION OF ORGANIZATIONAL CAPACITY

The Sierra County Fire Safe Council (SCFSWC) will act as the project lead and fiscal agent. The US Forest Service will work with the SCFSWC to complete the project. The SCFSWC and US Forest Service have worked together on several similar projects. The SCFSWC has contracted staff with technical expertise in fiscal management. Bill Nunes is the Chair of the SCFSWC and the lead contact for this grant application. The US Forest Service has staff committed with the technical expertise to implement and oversee vegetation monitoring. Ruby Burks is the District Fuels Officer for the Sierraville Ranger District of the Tahoe National Forest and is the lead for the project. Ruby Burks has implemented numerous similar Forest Health projects on the Sierraville Ranger District with SCFSWC as the partner on both private lands and on National Forest System Lands.

PROJECT LOCATION (*County with approx. lat/long, center of project area*)

Sierra & Plumas County - Carman Creek Watershed, Middle Fork Feather River (Tahoe National Forest - Sierraville Ranger District) Approximately 2-3 miles northeast of the community of Calpine, California. Latitude 120.46/Longitude 39.72

SENATE DISTRICT NUMBER

California State Senate District 1

ASSEMBLY DISTRICT NUMBER

California State Assembly District 1

PERSON WITH MANAGEMENT RESPONSIBILITY FOR GRANT CONTRACT

Name and title

Phone

Email Address

Mr. Bill Nunes

530-994-3222

bnunes1964@gmail.com

Ms.

COUNTY ADMINISTRATOR OR PLANNING DIRECTOR CONTACT INFORMATION

Name: Tim Beals

Phone Number: 530-289-3251

Email address: tbeals@sierracounty.ca.gov

tbeals@sierracounty.ca.gov

NEAREST PUBLIC WATER AGENCY CONTACT INFORMATION

Name: Central Valley RWQCB

Phone Number: 530-224-4845

Email address: dheiman@waterboards.ca.gov

dheiman@waterboards.ca.gov

BRIEF DESCRIPTION OF THE CEQA STATUS OF THE PROJECT

The project is authorized under compliance with the National Environmental Policy Act. The Environmental Analysis was completed and signed on January 20, 2012 (FONSI & EA Attached).

CEQA has not been initiated or completed for the Calpine WUI Forest Health Project. The SCFSWC in partnership with the Tahoe National Forest - Sierraville RD is requesting SNC serve as the lead agency in completed CEQA with the Tahoe National Forest providing technical expertise.

<p align="center">BRIEF DESCRIPTION OF THE NEPA STATUS OF THE PROJECT (IF APPLICABLE)</p> <p>The project is authorized under compliance with the National Environmental Policy Act. The Environmental Analysis was completed and signed on January 20, 2012 (FONSI & EA Attached).</p>	
<p>Please identify the appropriate project category below and provide the associated details <i>(Choose One)</i></p> <p> <input checked="" type="checkbox"/> Category One Site Improvement <input type="checkbox"/> Category Two Pre-Project Activities <input type="checkbox"/> Category One Acquisition </p>	
<p>Site Improvement/ Acquisition Project Area</p> <p>Total Acres: 212 SNC Portion (if different):</p> <p>Acquisition Projects Only For Acquisitions Only</p> <p> <input type="checkbox"/> Appraisal Included <input type="checkbox"/> Will submit appraisal by </p>	<p>Select one primary Pre-Project deliverable</p> <p> <input type="checkbox"/> Permit <input type="checkbox"/> CEQA/NEPA Compliance <input type="checkbox"/> Appraisal <input type="checkbox"/> Condition Assessment <input type="checkbox"/> Biological Survey <input type="checkbox"/> Environmental Site Assessment <input type="checkbox"/> Plan </p>
<p>ITEMS TO BE SUBMITTED WITH PRE-APPLICATION FORM:</p> <p> <input checked="" type="checkbox"/> Project Location Map <input checked="" type="checkbox"/> Parcel Map <input checked="" type="checkbox"/> Topo Map <input checked="" type="checkbox"/> Photos of Project Site <input checked="" type="checkbox"/> Site Plan <input checked="" type="checkbox"/> Long-Term Management Plan </p>	

To be completed by the applicant:

February 19, 2016

Date of Application

Bill Nunes - SCFSWC Chair

530-994-3222

Name and Title of Authorized Representative

Contact Phone Number

Eidman, Patrick@SNC

From: Petterson, Eric -FS <epetterson01@fs.fed.us>
Sent: Tuesday, March 01, 2016 9:16 AM
To: Youngblood, Quentin -FS
Subject: Fwd: SNC prop1 grant CCC feasibility concurrence
Attachments: image005.jpg; image006.png; image007.png; image008.png; image009.png

Sent from my iPhone

Begin forwarded message:

From: "Prop 1@CCC" <Prop1@CCC.CA.GOV>
Date: February 26, 2016 at 10:45:15 PST
To: "Petterson, Eric -FS" <epetterson01@fs.fed.us>, "Prop 1@CCC" <Prop1@CCC.CA.GOV>, "inquiry@prop1communitycorps.org" <inquiry@prop1communitycorps.org>
Cc: "Campbell, Lynn@SNC" <Lynn.Campbell@sierranevada.ca.gov>
Subject: RE: SNC prop1 grant CCC feasibility concurrence

Hello Eric.

Carie Monroe, the Conservation Supervisor at our CCC Placer location has responded to the partnership for your project: Calpine WUI Forest Health Project. CCC can assist with this project.

Please include this email with your project application as proof that you reached out to the CCC. Feel free to contact Carie Monroe at Carie.Monroe@ccc.ca.gov directly if you have project-specific questions and when your project receives funding.

Thanks,

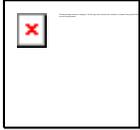
Nick Martinez
Region II Analyst
California Conservation Corps
Office (916) 341-3157
Nicholas.Martinez@ccc.ca.gov



From: Petterson, Eric -FS [<mailto:epetterson01@fs.fed.us>]
Sent: Thursday, February 18, 2016 2:08 PM
To: Prop 1@CCC <Prop1@CCC.CA.GOV>; inquiry@prop1communitycorps.org
Cc: Petterson, Eric -FS <epetterson01@fs.fed.us>; Campbell, Lynn@SNC <Lynn.Campbell@sierranevada.ca.gov>
Subject: SNC prop1 grant CCC feasibility concurrence

To CCC representative and Crystal Muhlenkamp,

Appreciate your review and consideration of the Calpine WUI Forest Health Project specific to your feasibility assessment as per the SNC prop1 grant cycle due March 1 2016.

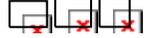


Eric Petterson
Zone Fire Management Officer
Forest Service
Tahoe National Forest, Truckee and Sierraville
Ranger Districts

p: 530-227-6717
epetterson01@fs.fed.us

10811 Stockrest Springs Road
Truckee, CA 96161

www.fs.fed.us



Caring for the land and serving people

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Sierra County Fire Safe and Watershed Council

Board of Directors Resolution 2016-1

In the matter of a resolution approving the application for grant funds for the
Calpine WUI - Forest Health Improvement Project
Under the Sierra Nevada Conservancy Sierra Nevada Watershed Improvement Program
Funded by the Water Quality, Supply and Infrastructure Improvement Act of 2014
Proposition 1

Resolution 2016-1
Approved February 23, 2016

The following resolution was adopted by the Board of Directors of the Sierra County Fire Safe
and Watershed Council on February 23, 2016, by the following vote:

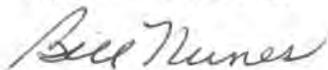
Ayes: Hall, Christensen, Goicoechea, Turner, Nunes

Noes: None

Abstentions: None

Absent: None

Signed and Approved



Bill Nunes, Chair, Board of Directors

WHEREAS, the Legislature and Governor of the State of California have provided funds for this program shown above; and,

WHEREAS, the Sierra Nevada Conservancy (SNC) has been delegated the responsibility for the administration of a portion of these funds through a local assistance grants program, establishing necessary procedures; and,

WHEREAS, said procedures established by the Sierra Nevada Conservancy require a resolution certifying the approval of application(s) by the Applicant's governing board before submission of said application(s) to the SNC; and,

WHEREAS, the Applicant, if selected, will enter into an agreement with the SNC to carry out the project; and,

WHEREAS, the Sierra County Fire Safe and Watershed Council has identified the Calpine WUI - Forest Health Improvement Project as valuable toward meeting its mission and goals;

BE IT THEREFORE RESOLVED by the Board of Directors of the Sierra County Fire Safe and Watershed Council that this Board:

Approves the submittal of an application for the Calpine WUI - Forest Health Improvement Project; and

Certifies that Applicant understands the assurances and certification requirements in the application; and

Certifies that Applicant or title holder will have sufficient funds to operate and maintain the resource(s) consistent with the long-term benefits described in support of this application, or will secure the resources to do so; and

Certifies that Applicant will comply with all requirements as determined during the application process; and

Appoints Bill Nunes, or designee, as agent to conduct all negotiations, execute and submit all documents, including but not limited to: applications, agreements, payment requests and so on, which may be necessary for the completion of the aforementioned project(s).

PASSED AND ADOPTED by the Sierra County Fire Safe and Watershed Council on the 23rd day of February, 2016.

State of California
Secretary of State



I, BRUCE McPHERSON, Secretary of State of the State of California, hereby certify:

That the attached transcript of _____ page(s) has been compared with the record on file in this office, of which it purports to be a copy, and that it is full, true and correct.



IN WITNESS WHEREOF, I execute this certificate and affix the Great Seal of the State of California this day of

MAR 16 2006

BRUCE McPHERSON
Secretary of State

Sierra County Fire Safe and Watershed Council, Inc.

ARTICLES OF INCORPORATION **ENDORSED - FILED**
SIERRA COUNTY FIRE SAFE AND WATERSHED COUNCIL, INC. In the office of the Secretary of State of the State of California
A California Nonprofit Public Benefit Corporation

MAR 16 2006

ARTICLE 1 - NAME

The name of this corporation is **SIERRA COUNTY FIRE SAFE AND WATERSHED COUNCIL, INC.**

ARTICLE 2 – INCORPORATING UNINCORPORATED ASSOCIATION

The name of the existing unincorporated association now being incorporated by the filing of these Articles is the "Sierra County Fire Safe and Watershed Council."

ARTICLE 3 – PUBLIC BENEFIT PURPOSE

- A. This corporation is a nonprofit public benefit corporation and is not organized for the private gain of any person. It is organized under the California Nonprofit Public Benefit Corporation Law for public and charitable purposes. The general purpose of this corporation is to engage in any lawful act or activity, other than credit union business, for which a corporation may be organized under such law.
- B. The specific purpose of the corporation shall be to help protect private and public property and the natural resources in Sierra County from wildfires through fuel reduction, fire planning and protection and educational programs and activities.

ARTICLE 4 - INITIAL AGENT FOR SERVICE OF PROCESS

The name and address in the State of California of this corporation's initial agent for service of process is:

Greg Bulanti
Sierra County Fire Safe and Watershed Council, Inc.
P.O. Box 210
Calpine, CA. 96124

ARTICLE 5 - GENERAL PROVISIONS

- A. This corporation is organized and operated exclusively for charitable and educational purposes within the meaning of Section 501(c)(3) of the United States Internal Revenue Code, as amended.
- B. Notwithstanding any other provision of these Articles, the corporation will not, except to an insubstantial degree, engage in any activities or exercise any powers that are not in furtherance of the purposes of this corporation, and the corporation will not carry on any other activities not permitted to be carried on by a corporation exempt from federal income tax under section 501(c)(3) of the United States Internal Revenue Code, as amended.
- C. No substantial part of the activities of this corporation will consist of carrying on propaganda or otherwise attempting to influence legislation, except as provided in section 501(h) of the United States Internal Revenue Code, as amended, and the corporation will not participate or intervene in (including the publishing or distribution of statements) any political campaign on behalf of, or in opposition to, any candidate for public office.
- D. The property of this corporation is irrevocably dedicated to charitable and educational purposes and no part of the net earnings of this corporation will ever inure to the benefit of any of its directors, trustees, officers, private shareholders or members thereof or to the benefit of any private person.
- E. On the dissolution and winding up of this corporation, its assets remaining after payment of, or provision for payment of, all debts and liabilities of this corporation, will be distributed to a nonprofit fund, foundation or

Sierra County Fire Safe and Watershed Council, Inc.

corporation which is organized and operated exclusively for charitable, educational or other exempt purposes and which as established its tax-exempt status under Section 501(c)(3) of the United States Internal Revenue Code, as amended.

Dated: 25 Feb 06

[Signature]
Mark Jokerst, Incorporator

DECLARATION OF OFFICERS [or DIRECTORS]

The undersigned hereby declare under penalty of perjury under the laws of the State of California that they are the current Board of Directors of the Sierra County Fire Safe and Watershed Council, an unincorporated association, referred to in the Articles of Incorporation to which this declaration is attached, and that association has duly authorized and approved in accordance with its rules and procedures its incorporation by means of those articles.

Executed at SIERRA CITY, California on 2/25/06

[Signature]
Greg Bulanti

Executed at SIERRA CITY, California on 02-25-06

[Signature]
Mike Heuer

Executed at SIERRA CITY, California on 2-25-06

[Signature]
Mike Freschi

Executed at Sierra City, California on 2/25/06

[Signature]
Carl Butz

Executed at Sierra City, California on 2/25/06

[Signature]
Peter Heubner

Executed at Sierra City, California on 2/25/06

[Signature]
Mark Jokerst



BYLAWS
SIERRA COUNTY FIRE SAFE AND WATERSHED COUNCIL, INC.
A California Nonprofit Public Benefit Corporation

Article I: Name and Mission of Organization

Section 1.0: This organization shall be known as the "Sierra County Fire Safe and Watershed Council, Inc." hereinafter known as "the Council". The mission of the Council shall be to protect private and public property as well as natural resources in Sierra County from wildfires through fuel reduction, fire planning and protection and educational programs and activities.

Section 1.1: This organization shall be a Public Benefit Charitable Corporation as defined and as governed by all applicable local, state and federal laws.

Section 1.2: The office of the Council is: Sierra County Fire Safe and Watershed Council, P.O. Box 210, Calpine, California 96124.

Article II: Goals and Objectives, Partnerships

Section 2.1: The goals and objectives of the Council shall be: (1) to identify and reduce the hazardous fuel conditions within the "At-Risk" Communities, their associated Wildland-Urban Interface and the "At-Risk" Watersheds within Sierra County; (2) to educate, aid and assist local landowners, residents and businesses in the development of defensible space in and around their property; and (3) collaborate with and/or assist Local, County, State and Federal agencies in the fulfillment of these goals. The scope of the Council shall encompass all of Sierra County.

Section 2.2: The Council may work in collaborative partnerships with the California Fire Safe Council, other Fire Safe Councils, the Sierra County Board of Supervisors and the various agencies of Sierra County, the US Forest Service, the Bureau of Land Management, the California Department of Forestry and Fire Protection, Local Fire Departments and Special Districts, the Sierra County Sheriff's Department, the California Highway Patrol, Caltrans, industrial forest landowners, and landowners, businesses and residents of the county and others as needed to fulfill these goals and objectives.

Section 2.3: The Sierra County Fire Safe Council is a non-profit public benefit corporation formed for the specific objectives and purposes stated above, and for such other purposes as may be permitted under the laws of the State of California.

Article III: Members

Section 3.0: This corporation shall have two classes of members, known as Voting Members and Supporting Members. Any person dedicated to the purposes of the corporation and who is a landowner, real-estate owner or business owner in Sierra County; or a public or private land manager operating in Sierra County; or a Timber Operator, Contractor, Forester or other professional operating in Sierra County; or a representative of local, county, state or federal government operating in Sierra County; or a full or part-time Sierra County resident shall be eligible for membership as a Voting Member on approval of the membership application by the Board of Directors and on timely payment of such dues and fees as the Board of Directors may fix from time to time. Supporting membership is open to all interested parties. Membership requires the submission of an application and approval of the Board of Directors.

Section 3.1: Each Voting Member in good standing is entitled to one vote for the election of Board Directors and Officers, for amendments to these Bylaws and for amendments to the Articles of Incorporation. All members in good standing are entitled to call for special meetings per Article VI. Members in good standing may speak at any meeting when recognized by the presiding Chair. Voting privileges shall be confirmed by the Secretary on acceptance of a Voting Membership application.

Section 3.2: Each member must pay, within the time and on the conditions set by the Board of Directors, the dues, fees, and assessments in amounts to be fixed from time to time by the Board of Directors. The dues, fees, and assessments shall be equal for all members of each class, but the Board of Directors may, in its discretion, set different dues, fees, and assessments for each class.

Section 3.3: Members who have paid the required dues, fees, and assessments in accordance with these bylaws and who are not suspended shall be members in good standing.

Section 3.4: A membership shall terminate on occurrence of any of the following events:

- a) Resignation of the member;
- b) Expiration of the period of membership, unless the membership is renewed on the renewal terms fixed by the Board of Directors;
- c) The member's failure to pay dues, fees, or assessments as set by the Board of Directors within 30 days after they are due and payable;
- d) Any event that renders the member ineligible for membership, or failure to satisfy membership qualifications; or
- e) Termination of membership under Section 3.5 of these bylaws based on the good faith determination by the Board of Directors that the member has failed in a material and serious degree to observe the rules of conduct of the corporation, or has engaged in conduct materially and seriously prejudicial to the corporation's purposes and interests.

Section 3.5: If grounds appear to exist for terminating a member under Section 3.4 of these bylaws, the following procedure shall be followed:

- a) The Board of Directors shall give the member at least 15 days' prior notice of the proposed suspension or termination and the reasons for the proposed suspension or termination. Notice shall be given by any method reasonably calculated to provide actual notice. Notice given by mail shall be sent by first-class or registered mail to the member's last address as shown on the corporation's records.
- b) The member shall be given an opportunity to be heard, either orally or in writing, at least five days before the effective date of the proposed suspension or termination. The hearing shall be held, or the written statement considered, by the Board of Directors or a person authorized by the Board of Directors to determine whether the termination should occur.
- c) The Board of Directors shall decide whether the member's membership should be terminated. The decision of the Board of Directors shall be final.
- d) Any action challenging a termination of membership, including a claim alleging defective notice, must be commenced within one year after the date of the termination.

Article IV: Board of Directors and Officers

Section 4.0: Subject to the limitations of the articles and these bylaws, the activities and affairs of this corporation shall be conducted, and all corporate powers shall be exercised by or under the direction of the Board. The Board may delegate management and/or performance of the activities of the corporation to any person or persons, a company, or a committee however composed, provided that the activities and affairs of the corporation shall be managed and all corporate powers shall be exercised under the ultimate direction of the Board. Two signatures shall be required on all checks and legal documents of the Council.

Section 4.1: The elected Board shall consist of no less than seven (7) Directors, including the elected Officers. The number of Directors may be changed by a majority vote of the Voting Members in good standing. Additions or subtractions to the number of Board Directors shall maintain an odd number of Board Directors.

Section 4.2: The elected officers of the Council shall be the Chair, Vice-Chair, Treasurer, Secretary, and Public Information Officer. All Directors and Officers shall perform the duties prescribed by these Bylaws.

Section 4.3: Elections shall be held at the Annual Meeting of the Members and shall include all Officers and as many Director positions as may be needed. Terms of office shall begin January 1st.

Section 4.4: The Officers shall be elected for one-year terms. Directors shall be elected for two-year terms, the original terms staggered to retain a continuity of corporate memory within the board. Officers and Directors may be re-elected to office. At the first General Election, the Chair, Vice-Chair, Treasurer and four Directors shall be elected, two (2) Directors to serve a term of one (1) year in office and two (2) Directors to serve a term of two (2) years in office.

Section 4.5: An Executive Director shall be contracted or hired by the Board to serve at their direction. The Executive Director shall attend all Council meetings and shall report to the Council. The Executive Director performance shall be reviewed by the Board prior to each Annual Meeting. The Executive Director shall not have a vote on the affairs of the Council.

Section 4.6: Fees and Compensation of Directors. Directors and members of committees shall receive no direct compensation for their services as Members of the Board, however they may be reimbursed for pre-approved expenses that relate to their duties, including necessary supplies, fees and travel.

Section 4.7: Officers and Members of the Board may be hired as independent contractors for specific projects of the Council, based on their knowledge and expertise.

Section 4.8: Conflict of Interest Policy: Elected Directors and Officers shall excuse themselves from any action of the Board that results in a direct financial gain to themselves.

Section 4.9: An officer or director may be removed from office in the event of neglect of duties, actions detrimental to the goals and objectives and/or reputation of the council, or for missing three (3) consecutive meetings.

Section 4.10: To the fullest extent permitted by law, this corporation shall indemnify its directors, officers, and other persons described in Section 5238 of the California Corporations Code, including persons formerly occupying any such positions, against all expenses, judgments, fines, settlements and other amounts actually and reasonably incurred by them in connection with any proceeding as that term is used in that section, and including an action by or in the right of the corporation, by reason of the fact that the person is or was described in that section.

Article V: Duties of Officers and Directors

Section 5.0: The Chair shall be the presiding officer of the organization. The Chair shall call to order all meetings, conduct all meetings and set the agenda for the next meeting. The Chair and Executive Director shall co-sign all contracts and grant proposals. The Chair and/or the Vice-Chair and the Treasurer shall co-sign all checks issued by the Council. The Chair may have other duties as indicated through these Bylaws and as assigned by the Board.

Section 5.1: The Vice-Chair shall have the power to co-sign all checks issued by the Council. In the event of the temporary absence or disability of the Chair, the Vice-Chair shall exercise all of the duties and powers of the Chair, with the exception of co-signing legal instruments. The Vice-Chair shall be in charge of programs and committees.

Section 5.2: The Treasurer shall have the power to co-sign all checks issued by the Council. The Treasurer shall hold and keep safe in an FDIC insured bank all funds received by the organization. The Treasurer shall keep a set of standard books or records of all organizational monies suitable for annual audit. The Treasurer shall pay all legal bills authorized by the board and shall prepare all financial statements. The Treasurer shall prepare monthly financial statements and report to the board and the general membership. The Treasurer shall open the financial books to members and the public according to state and federal law. The Treasurer shall work with the Chair and the Vice-Chair to prepare the annual operating budget for approval by the Council.

Section 5.3: The Secretary shall discharge such duties that pertain to the office, including but not restricted to keeping records of all Council meetings, records of committee and sub-committee meetings, receive correspondence and read such correspondences as directed by the Chair or the members at large. The Secretary

shall take the minutes of all board and membership meetings to include the names of all persons present. If the Secretary is absent, the Chair shall appoint someone to take the minutes. The Secretary will take the minutes of all committee meetings, or see to it that someone is appointed to take those minutes. The Secretary shall collect and archive all Council records, as well as all grant proposals, grant tracking records, and grant monitoring records. The Secretary shall maintain the Bylaws of the Council and have a current copy in hand at all meetings. The Secretary shall be responsible for assuring that all County, State and Federal filings necessary to maintain the legal standing of the Council are properly prepared and recorded. The Secretary shall maintain a membership roster including postal address, telephone numbers and email addresses. The roster shall verify the voting eligibility of all Voting Members. The Secretary shall oversee all elections, verify the eligibility of all those casting votes, oversee the tallying of votes and determine the validity of the election.

Section 5.4: The Public Information Officer shall be responsible for all meeting notices, public notices, advertising and public information programs and activities.

Section 5.5: The Executive Director shall be contracted or hired on approval of the board to carry out the day-to-day management of the Council to the satisfaction of the Board. The Executive Director's primary focus shall be applying for grant funds, coordinating active projects and planning future projects. The Executive Director shall submit a written report at each meeting of the board containing a list of all active and planned projects with their status summarized and their priorities indicated. The Executive Director shall produce a brief summary of each completed project suitable for public dissemination. The Executive Director shall maintain a list of all grant sources available to individual landowners, for public dissemination.

Section 5.6: Elected Directors shall act as a governing board in association with the elected Officers. Specific duties shall be assigned to Board members by the Chair as necessary to achieve the Goals and Objectives of the Council.

Article VI: Fiscal Year, Meetings

Section 6.0: The fiscal year of the Council shall be from January 1st through December 31st.

Section 6.1: An Annual Meeting of the Members shall be held on the third (3rd) Saturday of October at a time and place to be decided by the Board. The annual meeting will include a report from the Chair on the organization's goals and progress, a report from the Treasurer on the organization's budget, a report from the Vice-Chair on all committee activities, and a report from the Executive Director on active and future programs and priorities. Elections of Officers and Directors shall be held at this meeting. The Annual Meeting shall be noticed to all members by electronic mail (e-mail) at least thirty (30) days prior to the meeting, said announcement to include the agenda, a list of nominees for office with their statements of intent not to exceed 100 words, and forms for the return of mail-in ballots with a clearly stated deadline and address for delivery. The decision of a General Membership vote shall be on two-thirds (2/3) of those members present and voting.

Section 6.2: Regular meetings of the Board will be held on the third (3rd) Saturday of each month, unless otherwise determined. Board meetings shall have a quorum of at least 51% of the Board of Directors. The location of these meetings may be rotated to include all active communities of the county at least once a year and all Board meetings shall be open to all members. The location of the following meeting shall be scheduled at each meeting and posted in the local news media.

Section 6.3: Special Board meetings may be called by the Chair, by any two Officers, by any three Directors or by any five Voting Members at any time with a fourteen (14) day notice to all Board members. No business shall be transacted except that mentioned in the notice. Special Board meetings must have a quorum of 2/3 of the Board of Directors. Notice of special meetings may be made by electronic mail.

Article VII: Nominating Committee, Eligibility of Nominees and Elections

Section 7.0: A Nominating Committee shall be selected at the Annual Meeting. The Nominating Committee Chair shall be appointed by the Council Chair with two (2) additional committee members elected by the Voting Membership. The committee will present the names of nominees at the September meeting, where nominations

from the floor will be accepted from any member. Nominations for the year shall be closed during the September meeting.

Section 7.1: All nominees to Board positions shall be Voting Members in good standing of the Council. All nominees, including those nominating from the floor, shall have given their consent in writing to the Secretary prior to the election. One or more members must be nominated for each position.

Section 7.2: The election shall be held at the Annual Meeting and the results announced at that meeting. Election shall be by written ballot, counted by the Secretary and two (2) members appointed by the Chair. Results of the vote shall be announced by the Chair immediately following (1) the tally of the votes and (2) the Secretary's statement that the election is valid. Eligible Voting Members may deliver an absentee vote to the Chair prior to the election. Mail-in Ballots shall be opened by the appointed election panel at the annual meeting, not before. Proxy votes are not allowed at any election or Bylaws Amendment vote of the Council.

Section 7.3: Should a vacancy take place prior to the completed term of an office, the Board shall appoint a Voting Member to fill that vacancy for the remaining period of the term. In the event that the Chair resigns from and/or leaves office, the Vice-Chair shall become the Chair and a special election will be held to fill the office of Vice-Chair. If the office of Vice-Chair position becomes vacant, the Nominating Committee shall select a candidate and a general election shall be held as soon as possible.

Article VIII: Committees

Section 8.0: Committees may be established by the Council Board as needed, with committee membership open to all Voting Members. Committee chairs shall be appointed by the Council Chair, with the exception of the Bylaws, Nominating and Budget Committees which shall be formed per Article 8.1. Members of committees may be volunteers or be appointed by the Council Board. Appointed Committees may become standing committees on approval of the Board.

Section 8.1: There shall be at least three standing committees appointed annually by the Council Chair at the Annual Meeting: 1) A Bylaws Committee of three (3) members, one from the Board and two from the Voting Membership; 2) A Nominating Committee shall be elected per Article VII above; and 3) A Budget Committee shall include the Chair, Vice-Chair, Treasurer, the Executive Director and one member appointed from the Voting Membership.

Section 8.2: Minutes of all committee meetings will be filed with the Secretary.

Article IX: Parliamentary Authority

Section 9.0: The rules contained in the most current edition of "Roberts Rules of Order" shall govern the actions of the Council in all cases to which they are applicable and in which they are consistent with these Bylaws and any special rules of order the Council may adopt. The Bylaws Committee Chair shall act as Parliamentarian for the Council.

Article X: Amendment of the Bylaws

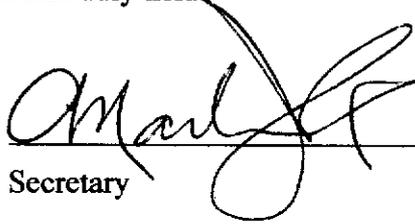
Section 10.0: Any amendment to these Bylaws must be proposed as "New Business" in writing at a regularly scheduled Council meeting. Following receipt of the proposal, the Chair shall request the Bylaws Committee to review the proposed amendment and draft a copy for Board consideration prior to a vote by the General Membership at the Annual Meeting. Bylaws Amendments shall take place on the vote of two-thirds of the Voting Membership present at the Annual Meeting.

CERTIFICATE OF SECRETARY

I, Mark Jokerst certify that:

1. I am the Secretary of **SIERRA COUNTY FIRE SAFE AND WATERSHED COUNCIL, INC.**
2. The foregoing Bylaws are the Bylaws of the Corporation as approved and adopted by the initial Incorporator of the Corporation and later approved by unanimous consent of the Board of Directors on Feb 25, 2006, at the Initial Meetings of the Directors duly held.

Dated: Feb 25 2006


Secretary

History of Corporation Documents		
Date	By	Description
25 Feb 06	MJ	ARTICLES OF INCORP ADOPTED
25 Feb 06	MJ	BYLAWS ADOPTED

Roster of Officers and Standing Committees		
Officers	Chair	Greg Bulanti
	Vice-Chair	Mike Heuer
	Treasurer	Carl Butz
	Secretary	Mark Jakobst
	Public Information Officer	Jean Myles
Directors	Director (odd year)	Peter Heubner
	Director (even year)	Mike Freschi
Bylaws Committee Committee of Three including one Board Member and two Voting Members in good standing, all appointed by the Council Chair.	Chair (also Parliamentarian)	Bob Myles
	Secretary	Mark Jakobst
	Member	Carl Butz
Budget Committee Four including Board Chair, Board Vice-Chair, Executive Director, Board Treasurer and one Voting Member in good standing, all appointed by the Council Chair.	Chair (Board Chair)	Greg Bulanti
	Secretary (Exec Director)	John McDonald
	Member (Board Treasurer)	Carl Butz
	Member	t. b. d.
Nominating Committee A committee of Three including one appointed by the Chair and two elected by the Voting Members.	Chair	Greg Bulanti Mike Freschi
	Secretary	
	Member	Bob Hale

SIERRA COUNTY

Board of Supervisors
P.O. Drawer D
Downieville, California 95936
Telephone (530) 289-3295
Fax (530) 289-2830



February 25, 2016

Sierra County Firesafe and Watershed Council
PO Box 633
Loyalton, California 96118

Attn: Ms. Victoria Fisher
Executive Director

The Sierra County Board of Supervisors on March 1, 2016 approved the content of this letter and strongly supports the grant application for the Calpine WUI Forest Health Improvement Project. This project will treat over 200 acres in the Calpine-Carman Valley-State Route 89 corridor area and will provide enormous public benefits, property fire protection, and defensible fire conditions in the forested areas described. This project is compatible with the County Fire Plan and we encourage the Council to proceed with the grant application to secure this viable project.

Please feel free to submit this strong letter of support and endorsement to the grant funding agency and if you have questions or need additional information, please do not hesitate to contact us.

Thank you.

Sincerely,

Sierra County
Board of Supervisors

Lee Adams
Chairman of the Board

By: Peter W. Huebner, Vice-Chair

CC: US Forest Service-Sierraville Ranger District
Sierra County Fire Protection District #1
CalFire

SIERRA COUNTY

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Sierra County
Board of Supervisors

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Chairman of the Board

CC: US Forest Service-Sierraville Ranger District
Sierra County Fire Protection District #1
CalFire

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Telephone (530) 289-3295
Fax (530) 289-2830



March 1, 2016

Sierra County Land Trust
Nevada City, California 95959

Attn: Ms. Laurie Oberholzer

The Sierra County Board of Supervisors approved this letter today during its regular meeting giving full support and endorsement of your proposed grant application being submitted to the Sierra Nevada Conservancy and California Resources Agency. The project involves a project area of 1525 acres of forested lands located north and east of Sierra City, Sierra County and in the vicinity of the Lakes Basin area.

The project is a funding request for development of a forest management plan for the properties which will involve fuel treatment options for consideration of implementation. CalFire will be operating as the lead agency and a non-industrial timber management plan will eventually be the product of this proposed project. The project is consistent with the County Fire Plan as it is proposed to reduce the threat of catastrophic wildfire and to protect valuable resources. The project will be coordinated with the Sierra County Firesafe and Watershed Council to assure that the contemplated deliverables from the grant funds will be consistent with goals and objectives of the County Fire Plan.

Thank you.

Sincerely,

Sierra County
Board of Supervisors

Lee Adams
Chairman

By: Peter W. Husbner, Vice-Chair
CC: SNC-Ms. Lynn Campbell
SCFSWC-Ms. Victoria Fisher
USFS-Ranger Karen Hayden

PUBLIC NOTICE * PUBLIC NOTICE

**USDA-Forest Service, Tahoe National Forest
Sierraville Ranger District, Sierra County**

SADDLE PROJECT 30-DAY PUBLIC SCOPING

The Sierraville Ranger District of the Tahoe National Forest is proposing the Saddle Project. The Saddle Project would complete the Defensible Fuels Profile Zone (DFPZ) north and west of Calpine and north of the Yuba Pass area by implementing hand thinning on approximately 758 acres, grapple piling and mastication and on 126 acres, prescribed burning only on 625 acres, and mechanical variable thinning under a combination of service, stewardship and timber sale contracts to 2,576 acres. To increase stand heterogeneity, the project would also implement radial thinning and group selection treatments on 567 acres. It would include meadow, black oak, and aspen restoration treatments on approximately 135 acres. Various watershed restoration and road improvement actions would also be included. The Saddle Project would temporarily use 6.5 miles of tilled roads or roadbeds. All temporarily-used roads would be decommissioned after project implementation.

The Saddle Project is located in Sierra County, California north and west of Calpine and north of Yuba Pass. The project is part of the Herger-Feinstein Quincy Library Group Forest Recovery Act Pilot Project and falls under the Healthy Forest Restoration Act (HFRA) Authority, which is subject to the objection process pursuant to 36 CFR part 218, subpart A. If you have information that is specific to this proposed action that you feel the Forest Service may not be aware of, or feel you have issues (points of dispute, debate, or disagreement) regarding potential effects of the proposed actions, those comments should be submitted to: Karie Wiltshire, USDA Forest Service, Sierraville Ranger District, P.O. Box 95 (317 South Lincoln), Sierraville, CA 96126, office hours 8 a.m. to 4:30 p.m. Monday-Friday; telephone 530-994-3401, ext 6680; FAX 994-3143; e-mail: comments-pacificsouthwest-tahoe-sierraville@fs.fed.us. Persons who submit specific written comments related to the project during scoping or other public involvement are eligible to object to the project in the HFRA objection process. The public scoping period will end on March 8, 2010. To obtain additional information about the Dingo Project, please contact Karie Wiltshire at the Sierraville District Office (email: kwiltshire@fs.fed.us). Comments received, including the names and addresses of those who comment, will be considered part of the public record on this proposal and will be available for public inspection.

Saddle Project Public Collaboration Meeting



Meeting Agenda

1. Introduction
2. Description of comment & objection process
3. Project area needs
4. Draft proposed action
5. Questions, comments, concerns
6. Return sign-in sheet to Karie

Collaboration

○ **Former** Appeal Process (215 Regulations)

Proposed Action

30-day Scoping Period

Environmental Assessment

45-day Comment Period

Decision Notice

45-day Appeal Period

***Eligible from
scoping or
comment period***

Collaboration

○ Healthy Forest Restoration Act (**HFRA**)



Draft Proposed Action & Public Meeting
Request for Mailing List and/or Written Comment

Proposed Action

30-day Scoping Period

Environmental Assessment

30-day Objection Period

**Eligible from
public meeting
or scoping
WRITTEN
comment**

Decision Notice

Comments from Public Meeting

○ Please see Handout

- Request to be on mailing list
- Write comments **specifically** related to project

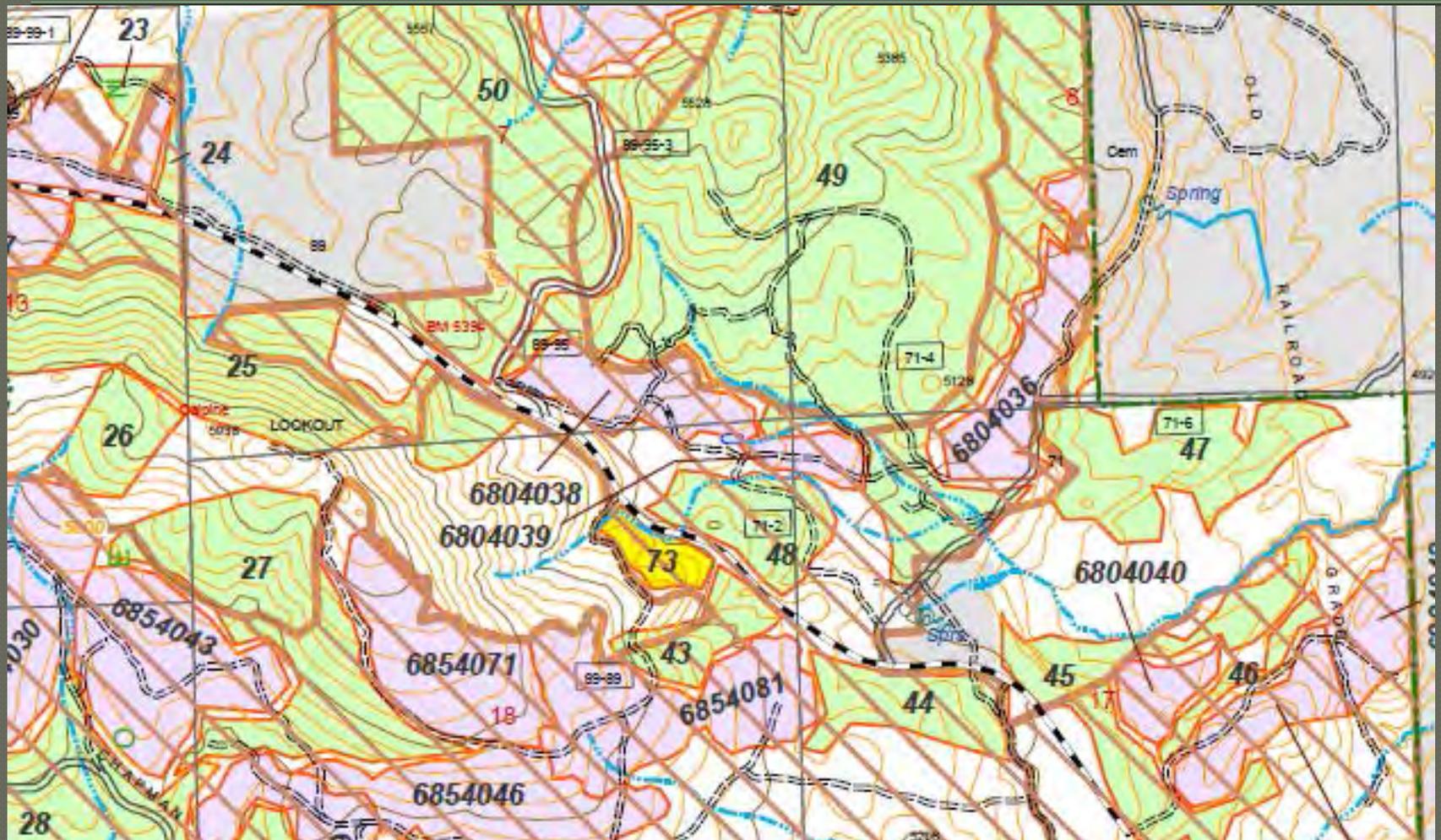


Project Area Needs

Fuels Focal Points

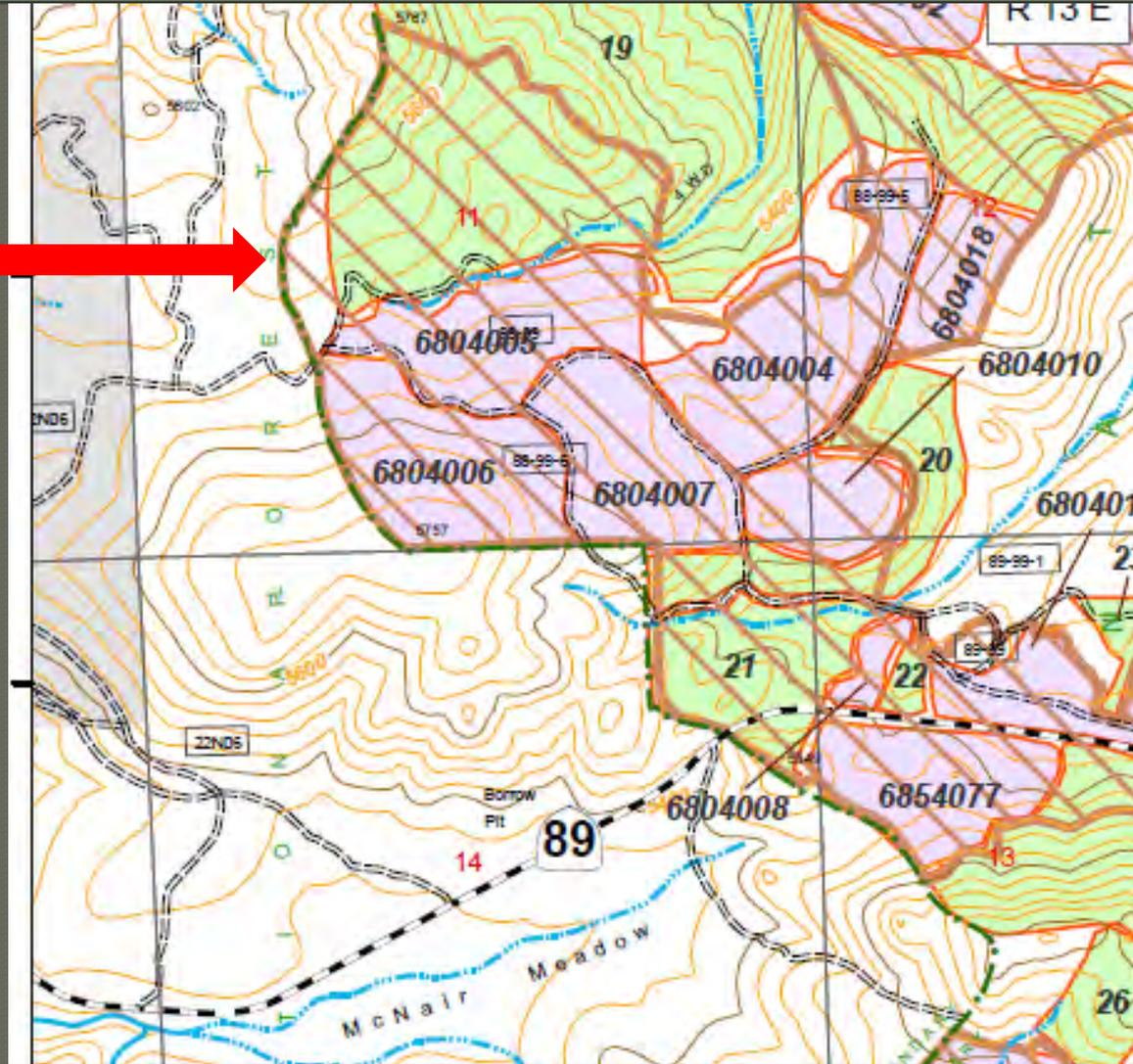
- ◉ DFPZs
- ◉ Fire resiliency within the landscape

DFPZ Gaps in Project Area



DFPZ Treatments that Connect to Neighboring DFPZ Networks

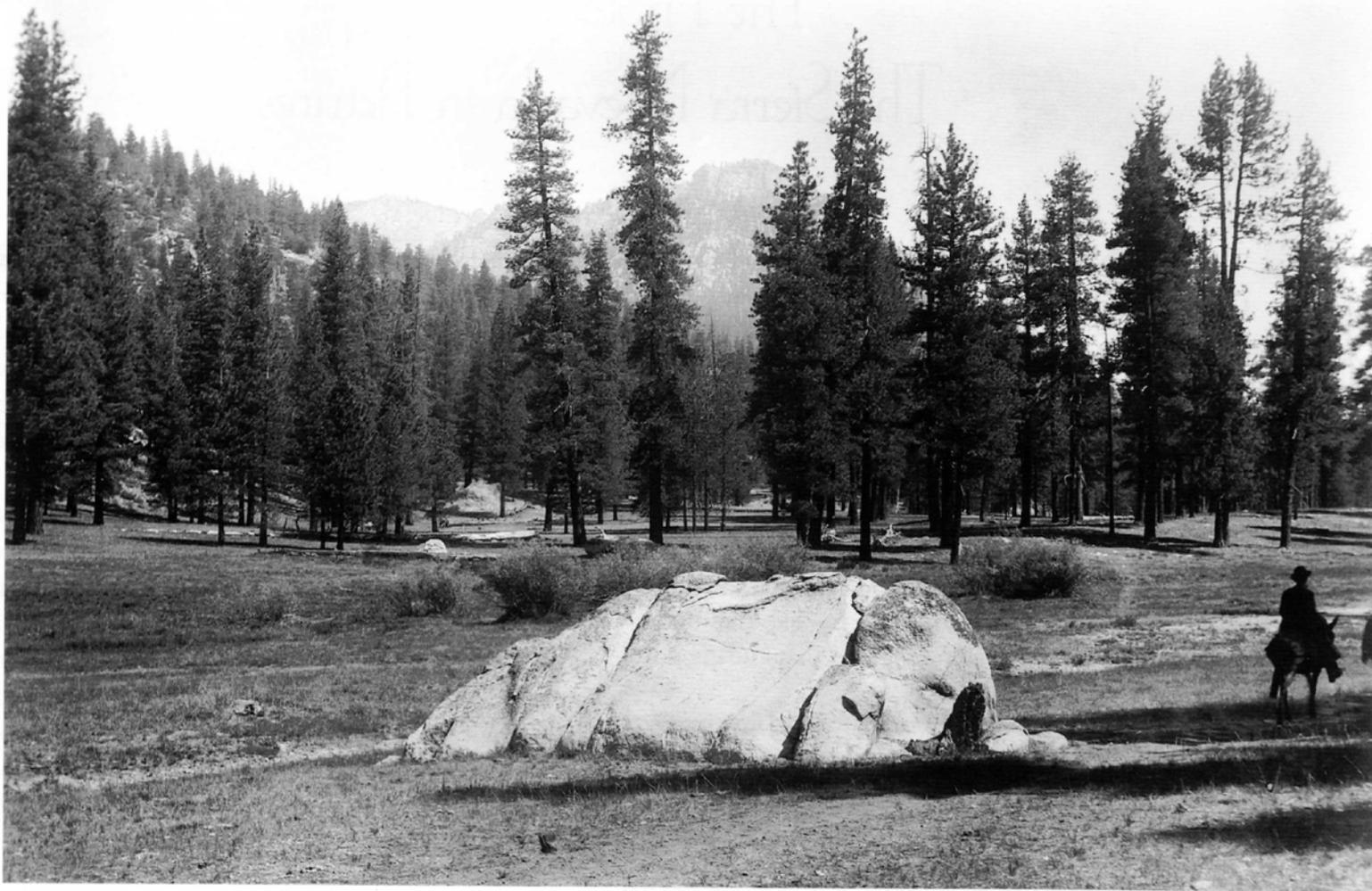
Plumas NF



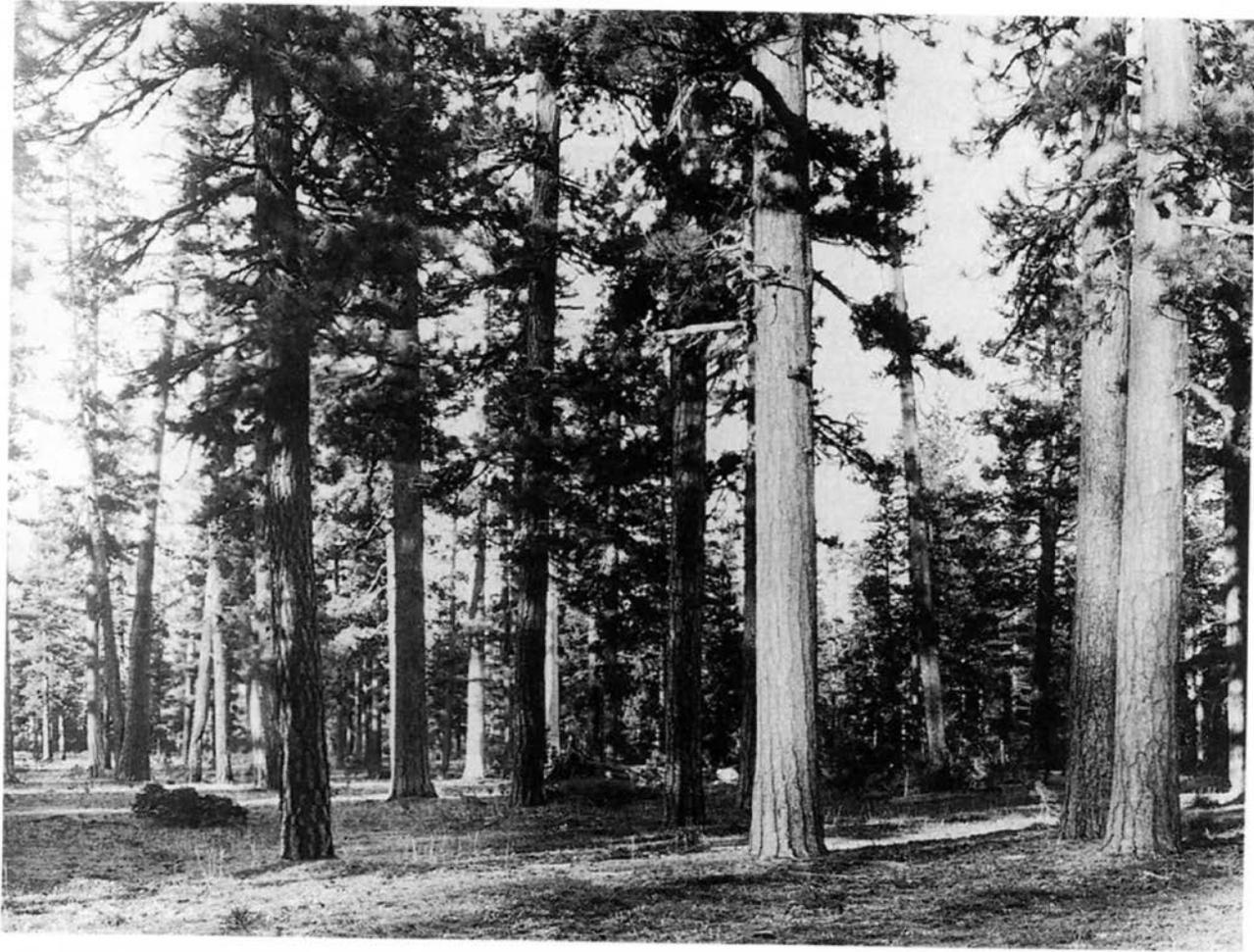
Improving Fire Resiliency

- ◉ Departure from historic fire return intervals
- ◉ Re-introducing fire as ecological process

Historical Forest Structure of the Sierra Nevada



An open stand of Jeffrey pine occupies the valley floor in this view north-northwest across the upper end of Trout Meadows, Tulare County. The shrubs in the meadow beyond the boulder are willows. Herbaceous plants in the foreground have been closely grazed by livestock. The charred stub next to the rock is evidence of past fire. A reconnaissance showed that many of the pines here have multiple fire scars. —Courtesy University of the Pacific Libraries, John Muir Collection



An unlogged yellow pine stand in the vicinity of Westwood, California, in 1900. Tree density varies within the stand. The presence of seedlings and saplings suggests that the area had not burned for several decades. —Courtesy Lassen Historical Society, Susanville, California

THE
R

31



West-northwest view of the Middle Fork of the Stanislaus River between Cow Creek and Lily Creek in Tuolumne County. Forester George Sudworth's original caption on the photograph read, "Characteristic distribution of yellow pine in forests." Pines and live oak grow in patches, with numerous openings visible between these patches. —Courtesy Forestry Library, University of California, Berkeley, G. B. Sudworth photo

Saddle Project Existing Forest Condition



Overstocked conditions in an eastside mixed-conifer stand (Unit 680-4063).

Forest Ecological Health Implications

Lowered Forest Resiliency



High numbers of trees competing for limited site resources, e.g., water, light, soil nutrients and space. Note the ladder fuels beneath the crown of the larger pine. (Unit 71)

Forest Pests



Bark Beetles

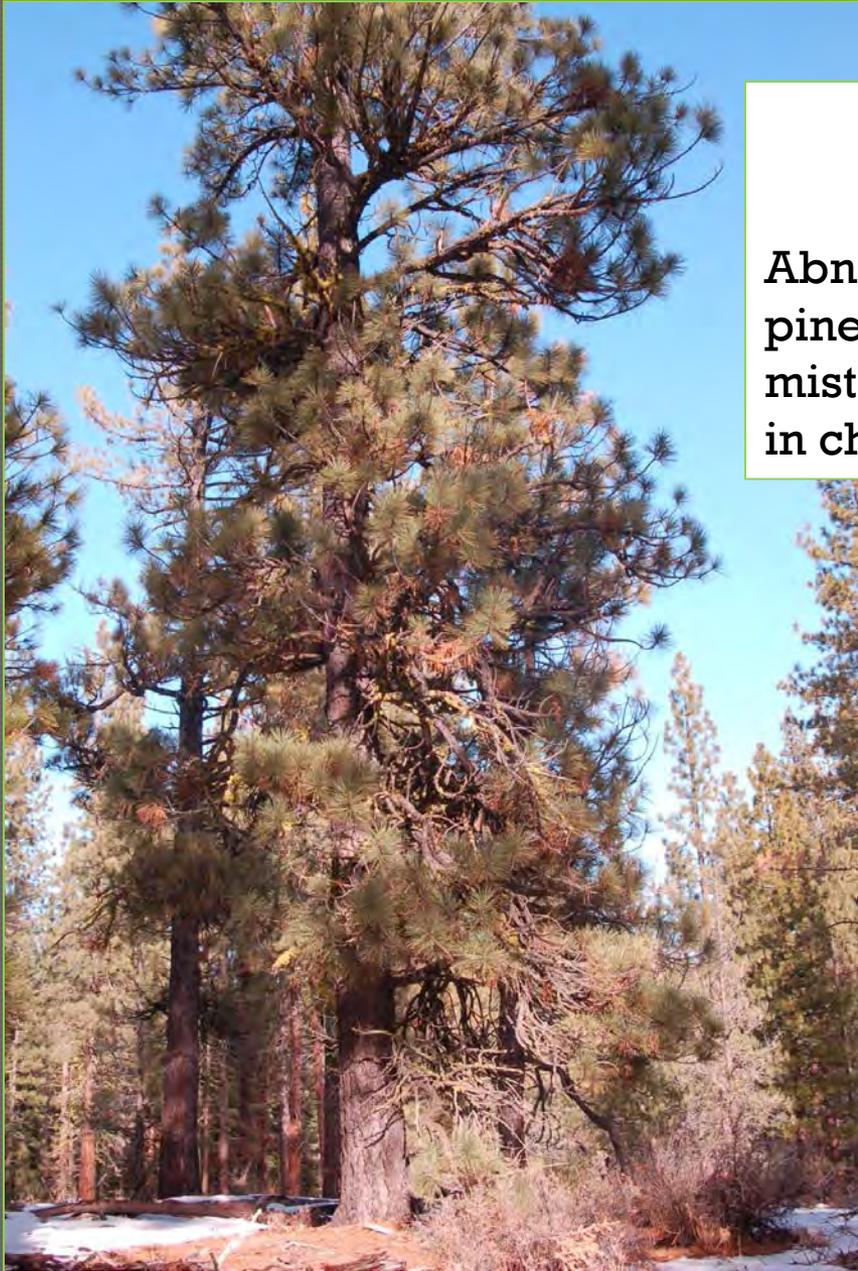
On- going mortality from the combination of moisture stress and bark beetle infestations in an overstocked, conifer stand (Unit 680-4063)



In the absence of fire, this overstocked stand has undergone self-thinning leaving heavy accumulations of ground fuels. Note historically wide spacing of stumps (Unit 680-4063)

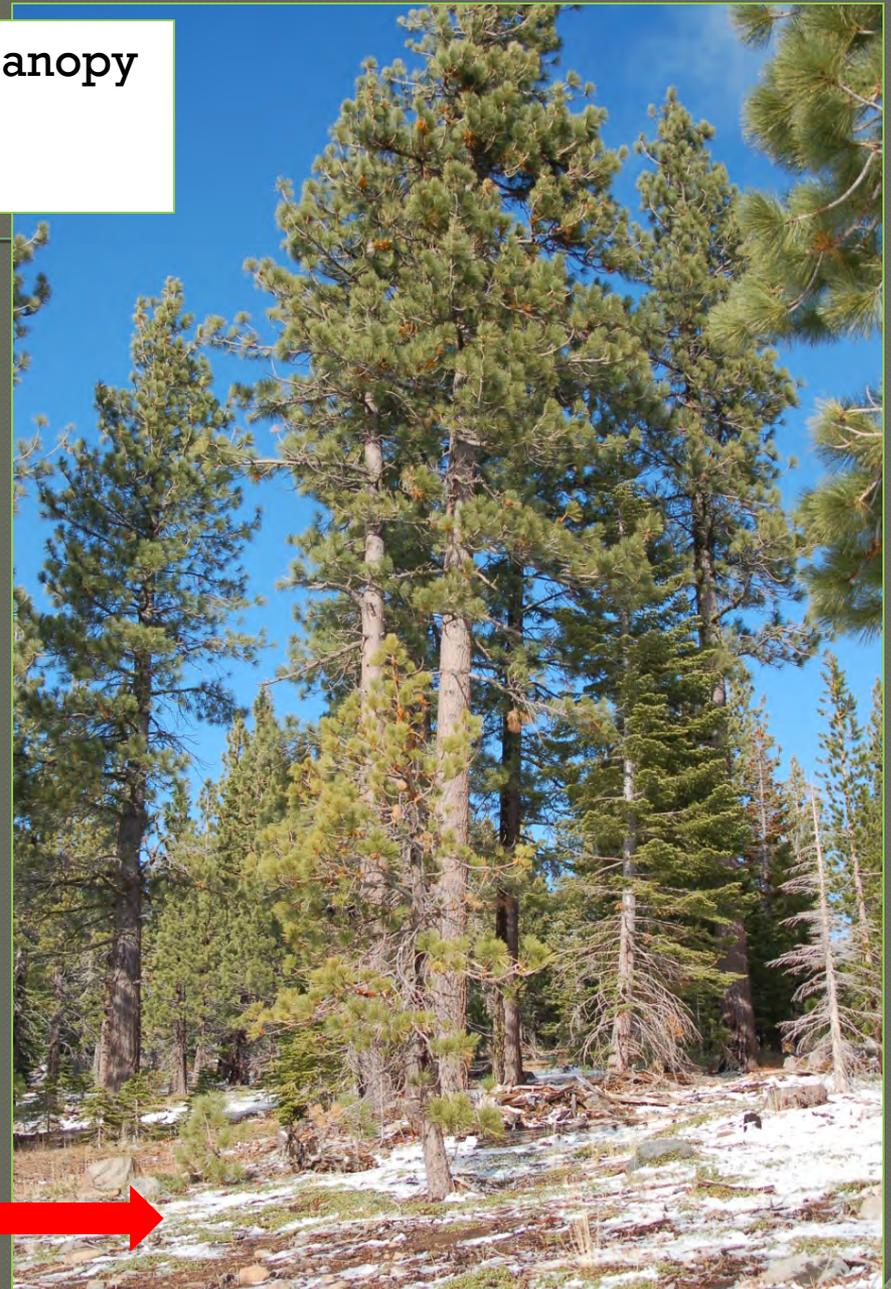
Dwarf Mistletoe

Abnormal branch growth (brooming) in a pine infected by the parasite dwarf mistletoe. Fire historically kept infestations in check (Unit 675-4022)



Parasite Dwarf Mistletoe erupting from pine branch (Unit 685-4011)

Dwarf mistletoe infection at all canopy levels: overstory saplings and seedlings (Unit 680-4011)



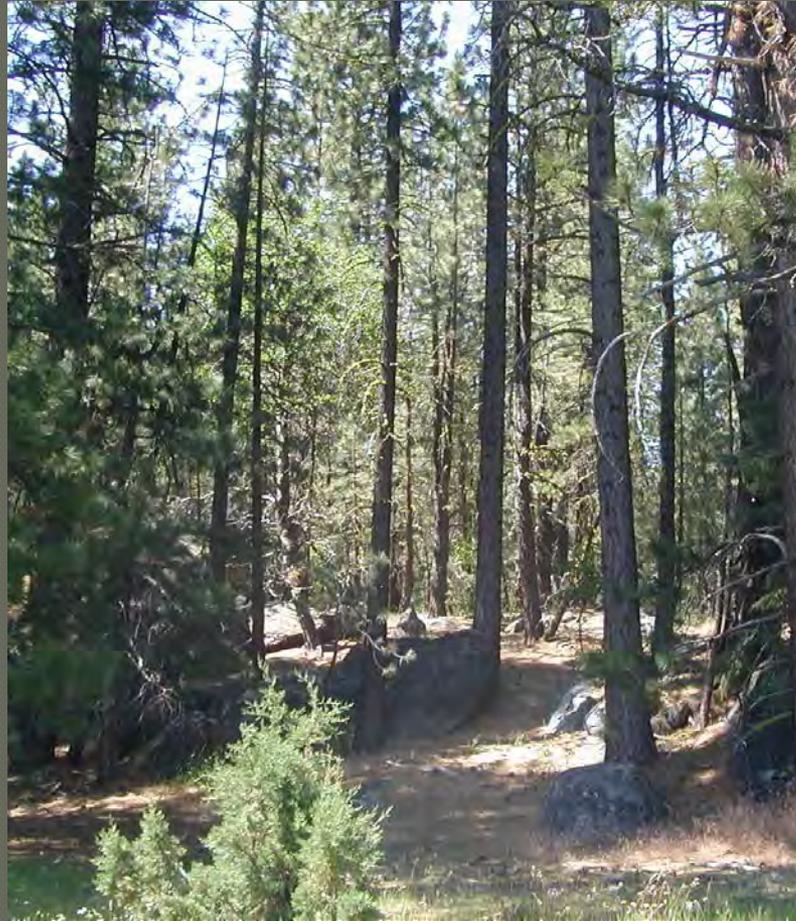
Unique features: Oak, aspen,
meadows

Oak crowded out by conifers (Unit 71)



Poor oak regeneration
where conditions are
unfavorable for growth.

Conifer encroachment in aspen communities



Conifer encroachment into meadow



Project Need #1

Action is needed to create a safer, more effective fire suppression environment and connect the existing shaded fuelbreaks in and around the Saddle Project Area.

- Completion of Defensible Fuel Profile Zone (DFPZ) network as well as adjustments to the network to optimize effectiveness.
- Treatment of Wildland Urban Interface (WUI) surrounding Calpine.
- Removal of dead and down fuels in the network.

Project Need #2

Action is needed to restore forest ecosystem health and resiliency.

- Improve forest resiliency to stresses such as pests and pathogens, and drought caused by abnormally high tree density.
- Manage stand conditions to promote fire-adapted forest ecosystems while restoring active fire regimes and the ecological processes associated with fire (such as nutrient cycling and plant succession).
- Restore the oak, aspen, and meadow communities in a landscape dominated by conifers.
- Improve habitat sustainability for small prey species and their predators.

Project Need #3

Action is needed to increase forest spatial heterogeneity.

- Restore landscape mosaic of clusters and gaps with multiple age classes.
- Encourage the growth and sustainability of larger, older trees.
- Restore the historical species diversity and fire resiliency associated with ponderosa, Jeffrey and sugar pine.

Project Need #4

Action is needed to implement of site-specific watershed restoration actions.

Project Purpose

◉ Implement HFQLG & 2004 SNFPA

- Construction of a strategic system of DFPZs, group selection harvest, individual tree selection harvest, and riparian management and watershed restoration projects. The Act directs the Forest Service to construct 40,000 to 60,000 acres of DFPZs across the Pilot Project Area each year.
- Design cost effective treatments.
- Providing a wood supply for local industry and sustaining a part of the employment base in rural communities.

Proposed Action: See Map

Variable Density Thinning



Clumped distribution



Radial Thinning

Large pine that is a candidate for radial thinning of understory trees to reduce competition for limited site resources and hazardous ladder fuels (Unit 685-4011)

Radial thinning around legacy trees



Group Selection



Candidate location for group selection to initiate structural and age class diversity. (Unit 675-4024)

Group Selection in Red Fir



Oak Restoration



Black oak provides structural and species diversity and is an important source of food and habitat for wildlife (Unit 680-4080)

Meadow Restoration



Aspen Restoration



○ Please get sign-in sheets & comments to
Karie

○ Thanks for coming!!!!



SIERRA NEVADA CONSERVANCY
SNC Watershed Improvement Program - DETAILED BUDGET FORM

Project Name: Calpine WUI Forest Health Improvement Project

Applicant: Sierra County Fire Safe & Watreshed Council

SECTION ONE DIRECT COSTS	Year One	Year Two	Year Three	Year Four	Year Five	Total
						\$0.00
Site Restoration Work Costs (Contract)	\$212,000.00					\$212,000.00
						\$0.00
						\$0.00
						\$0.00
						\$0.00
						\$0.00
DIRECT COSTS SUBTOTAL:	\$212,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$212,000.00

SECTION TWO PARTIAL INDIRECT COSTS	Year One	Year Two	Year Three	Year Four	Year Five	Total
						\$0.00
						\$0.00
						\$0.00
						\$0.00
INDIRECT COSTS SUBTOTAL:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PROJECT TOTAL:	\$212,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$212,000.00

SECTION THREE Administrative Costs (Costs may not exceed 15% of the above listed Project costs) :						Total
Sierra County Fire Safe Council Project Management - Field Inspection & Contract Compliance & Monitoring	\$8,500.00					\$8,500.00
Sierra County Fire Safe Council - Project Boundary Designation	\$1,800.00					\$1,800.00
Sierra County Fire Safe Council - Travel vehicle Expense	\$1,450.00					\$1,450.00
Sierra County Fire Safe Council - Publication/Printing	\$2,100.00					
Sierra County Fire Safe Council - Contract Advertisement & Contract Awardee Selection	\$1,600.00					\$1,600.00
Sierra County Fire Safe Council - Project Administration	\$4,650.00					\$4,650.00
Sierra County Fire Safe Council - Materials & Supplies	\$1,100.00					\$1,100.00
ADMINISTRATIVE TOTAL:	\$21,200.00	\$0.00	\$0.00	\$0.00	\$0.00	\$19,100.00
SNC TOTAL GRANT REQUEST:	\$233,200.00	\$0.00	\$0.00	\$0.00	\$0.00	\$231,100.00

SECTION FOUR OTHER PROJECT CONTRIBUTIONS	Year One	Year Two	Year Three	Year Four	Year Five	Total

<i>List other funding or in-kind contributors to project (i.e. Sierra Business Council, Department of Water Resources, etc.)</i>						
USFS - Project Boundary Designation	\$3,600.00					\$3,600.00
USFS - Contracting Officer Representative (Project implementation Oversight & Contract Inspection)	\$5,250.00					\$5,250.00
USFS - Resource Specialist Monitoring (Wildlife/Archaeology/Botany/Hydrology/Soils/Range)	\$5,080.00					\$5,080.00
USFS - Contract Compliance with Predicted Fire Weather and Variance(s)	\$1,640.00					\$1,640.00
USFS - Travel/Mileage (TNF-SVRD to Work Site)	\$1,320.00					\$1,320.00
						\$0.00
Total Other Contributions:	\$16,890.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16,890.00

NOTE: The categories listed on this form are examples and may or may not be an expense related to the project. Rows may be added or deleted on the form as needed. Applicants should contact the SNC if questions arise.

Appendix F - CEQA/NEPA Compliance Form

(California Environmental Quality Act & National Environmental Policy Act)

Instructions: All applicants must complete the CEQA compliance section. Check the box that describes the CEQA status of the proposed project. You must also complete the documentation component and submit any surveys, and/or reports that support the checked CEQA status.

If NEPA is applicable to your project, you must complete the NEPA section in addition to the CEQA section. Check the box that describes the NEPA status of the proposed project. Submit any surveys, and/or reports that support the NEPA status. For both CEQA and NEPA, submittal of permits is only necessary if they contain conditions providing information regarding potential environmental impacts.

NOTE: Effective July 1, 2015, AB52 compliance is required.

CEQA STATUS

(All applicants must complete this section)

Check the box that corresponds with the CEQA compliance for your project. The proposed action is either Categorical Exempt from CEQA, requires a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report per CEQA.

Categorical Exemption or Statutory Exemption

If a project is exempt from CEQA, all applicants, including public agencies that provide a filed Notice of Exemption, are required to provide a clear and comprehensive description of the physical attributes of the project site, including potential and known special-status species and habitat, in order for the SNC to make a determination that the project is exempt. A particular project that ordinarily would fall under a specific category of exemption may require further CEQA review due to individual circumstances, i.e., it is within a sensitive location, has a cumulative impact, has a significant effect on the environment, is within a scenic highway, impacts an historical resource, or is on a hazardous waste site. Potential cultural/archaeological resources must be noted, but do not need to be specifically listed or mapped at the time of application submittal. Backup data informing the exemption decision, such as biological surveys, Cultural Information Center requests, research papers, etc. should accompany the full application. Applicants anticipating the SNC to file an exemption should conduct the appropriate surveys and submit an information request to an office of the California Historical Resources Information System (CHRIS).

1. Describe how your project complies with the requirements for claiming a Categorical or Statutory Exemption per CEQA:

2. If your organization is a state or local governmental agency, submit a signed, approved Notice of Exemption (NOE) documenting the use of the Categorical Exemption or Statutory Exemption, along with any permits, surveys, and/or reports that have been completed to support this CEQA status. The Notice of Exemption must bear a date stamp to show that it has been filed with the State Clearinghouse and/or County Clerk, as required by CEQA.
3. If your organization is a nonprofit, there is no other California public agency having discretionary authority over your project, and you would like the SNC to prepare a NOE for your project, let us know that and list any permits, surveys, and/or reports that have been completed to support the CEQA status. All supplementary documentation must be provided to the SNC before the NOE can be prepared.

-
- Negative Declaration OR**
 Mitigated Negative Declaration

If a project requires a Negative Declaration or Mitigated Negative Declaration, then applicants must work with a qualified public agency, i.e., one that has discretionary authority over project approval or permitting, to complete the CEQA process.

1. Describe how your project complies with the requirements for the use of a Negative Declaration or a Mitigated Negative Declaration per CEQA:

2. Submit the approved Initial Study and Negative Declaration/Mitigated Negative Declaration along with any Mitigation Monitoring or Reporting Plans, permits, surveys, and/or reports that have been completed to support this CEQA status. The IS/ND/MND must be accompanied by a signed, approved Notice of Determination, which must bear a date stamp to show that it has been filed with the State Clearinghouse and/or County Clerk, as required by CEQA.

Environmental Impact Report

If a project requires an Environmental Impact Report, then applicants must work with a qualified public agency, i.e., one that has discretionary authority over project approval or permitting, to complete the CEQA process.

1. Describe how your project complies with the requirements for the use of an Environmental Impact Report per CEQA:

2. Submit the Draft and Final Environmental Impact Report along with any Mitigation Monitoring or Reporting Plans, permits, surveys, and/or reports that have been completed to support this CEQA status. The EIR documentation must be accompanied by a signed, approved Notice of Determination, which must bear a date stamp to show that it has been filed with the State Clearinghouse and/or County Clerk, as required by CEQA.
-

NEPA STATUS

Check the box that corresponds with the NEPA compliance for your project.

Categorical Exclusion

Submit the signed, approved Decision Memo and Categorical Exclusion, as well as documentation to support the Categorical Exclusion, including any permits, surveys, and/or reports that have been completed to support this NEPA status.

Environmental Assessment & Finding of No Significant Impact

Submit the signed, approved Environmental Assessment and Finding of No Significant Impact along with any permits, surveys, and/or reports that have been completed to support this NEPA status.

Environmental Impact Statement

Submit the Draft and approved, Final Environmental Impact Statement, along with the Record of Decision and any permits, surveys, and/or reports that have been completed to support this NEPA status.

DECISION NOTICE
And
FINDING OF NO SIGNIFICANT IMPACT
For
Saddle Project

USDA Forest Service, Tahoe National Forest
Sierraville Ranger Forest
Sierra County, California

DECISION AND REASONS FOR THE DECISION

Introduction

The Saddle Project is part of the pilot project to implement the Herger-Feinstein Quincy Library Group Forest Recovery Act of October 21, 1998 (HFQLG). The underlying need for the pilot project is to fulfill the Secretary of Agriculture's statutory duty under the HFQLG Act, to the extent consistent with applicable Federal law. That duty is to test and demonstrate the effectiveness of certain resource management activities designed to meet ecological, economic, and fuel reduction objectives on the Lassen and Plumas National Forests, and Sierraville District of the Tahoe National Forest. The Act requires the Secretary to conduct a pilot project for a period of up to 5 years (extended through 2012). To accomplish the purpose of the Act, resource management activities are required, including construction of a strategic system of Defensible Fuel Profile Zones (DFPZs), group selection harvest, individual tree selection harvest, riparian management and watershed restoration projects. The Act directs the Forest Service to construct 40,000 to 60,000 acres of DFPZs each year. The Saddle Project is located in Sierra County, California north and west of Calpine and north of Yuba Pass.

I have read the Saddle Project Environmental Assessment (EA), reviewed the analysis in the project file, including documents incorporated by reference (listed on page 87 of the EA), and fully understand the environmental effects disclosed therein. I have also considered the comments submitted during the public scoping for this project. The EA and supporting documents are available at the Sierraville Ranger District.

Decision

It is my decision to select Alternative 1, the Proposed Action, which is fully described in the EA on pages 7 through 19 and presented on Maps of the EA (*EA Appendix A*). My decision provides for implementation of up to 4,151 acres of vegetation (silvicultural) management prescriptions (including hand thinning, variable thinning, radial thinning, group selection meadow and aspen restoration and up to 534 acres of prescribed burn optional areas. These activities will require use of up to 8.1 miles of existing, tilled roads or roadbeds. All temporarily-used roads will be obliterated after project implementation. Most of the Saddle Project's treatments will be conducted near the community of Calpine, and will complement and complete fuels management needs in the Calpine Wildland Urban Interface (WUI).

Reasons for the Decision

I have selected Alternative 1 because it best meets the purpose and need for the Saddle Project, which in addition to implementing the HFQLG pilot project, includes the following:

- Creation of a safer, more effective fire suppression environment and connection of the existing shaded fuelbreaks in and around the Saddle Project Area.
- Improved forest ecosystem resiliency and health
- Restored forest heterogeneity
- Improved hydrologic connectivity and watershed conditions

Response to the Purpose and Need

EA Section 2.6 (pages 25-38) compares the action alternatives (Alternatives 1 and 3) and the no action alternative (Alternative 2). Alternative 1 provides the best response to the project needs and purpose by establishing an effective fire suppression environment and best completing the DFPZ with strategic links and effective treatments; by reducing tree density in unhealthy overstocked timber stands, and increasing stand resiliency to wildfires; by re-establishing heterogeneity with variable spacing, radial thinning and group selection, and by restoring and enhancing oak, meadow and aspen communities; and by improving hydrologic connectivity and watershed conditions with 9 site-specific watershed restoration actions in addition to the meadow enhancement treatments.

All treatment units will benefit from thinning and fuels hazard reduction. Many of the stands are currently in an unhealthy condition and have high existing ground fuels. It is highly likely that if no action is taken to reduce the stocking in these stands or reduce the fuel hazard, then drought assisted insect and disease mortality will increase, perhaps to a catastrophic level. In addition, as the tree density and fuel conditions continue to worsen, the potential for uncharacteristically high severity wildfire will increase.

- Alternative 1 will expand the current network of DFPZs, using roads, ridgelines and other strategic land features to improve the ability of firefighters to limit the extent of wildfires. Once these areas have been thinned and the ground fuels reduced, it will be much easier and safer to re-introduce low intensity prescribed fire into the ecosystem.
- Group selection harvest will contribute to stand diversity and community economic stability.
- Oak, meadow and aspen restoration and enhancement will restore these unique communities from conifer encroachment.
- Selectively thinning trees up to a 30-inch DBH limit will improve the cost efficiency of the project. Cost efficiency is an important objective of the HFQLG Act Pilot Project, and it was an important factor in the Sierra Nevada Forest Plan Amendment Record of Decision (SNFPA ROD 2004), which on page 9 states: “Modifications to some of the diameter size limits imposed by the SNFPA 2001 ROD will improve the cost-effectiveness of projects.” Also on page 9 the 2004 ROD states: “The emphasis in the SNFPA 2001 ROD to focus on removing small fuels, outside the threat and defense zones, effectively precludes most commercial options for removing fuels. The potential supply of raw material for biomass far exceeds regional market demand and is costly to get to market. We’re losing the capacity to remove larger diameter fuels.” Page 4 of the 2004 ROD states: “This decision also

addresses the need to retain industry infrastructure by allowing more wood by-products to be generated from fuels treatments and dead and dying trees to be harvested during salvage operations. It acknowledges that the Forest Service has a role to play in providing a wood supply for local manufacturers and sustaining a part of the employment base in rural communities. In some cases, these wood by-products will also help to offset the cost of fuels treatments.”

- The design elements and standard management requirements included in Alternative 1 (EA Appendix B) will maintain large trees, snags and large woody debris, protect riparian and other unique habitats, protect soils and water quality, provide for the long-term development and sustainability old forest habitat, and minimize disturbance to wildlife.

ALTERNATIVES CONSIDERED

Alternative 1: Proposed Action.

Alternative 2: No Action. Under this alternative, the Proposed Action would not be implemented in this area at this time.

Alternative 3: Non-Commercial Funding Alternative. An action alternative with a 11” dbh limit for vegetation prescriptions, with associated post-treatment prescribed underburning, and fuels and biomass removal was been designed to comply with the Non-commercial Funding Alternative requirement, which is required by Judge England's November 3, 2009 court order remedy for Case 2:05-cv-00205-MCE-GGH, Sierra Forest Legacy et al., Plaintiffs, versus Mark Rey in his official capacity as Under Secretary of the Agriculture, and People of the State of California vs. United States Department of Agriculture. This alternative’s sole purpose is to achieve the fuels reduction element of the purpose and need, with all treatments being solely directed at reducing hazardous fuels.

Alternative 4: An additional alternative considered but eliminated from detailed study is summarized in the EA on page 25, and is examined in EA Appendix F. Alternative 4 proposes tree removal diameter limits by land allocations similar to those under the 2001 Sierra Nevada Forest Plan Amendment Record of Decision (2001 SNFPA ROD as follows: 12”dbh in the Old Forest Emphasis (OFE) land allocation, 20”dbh in the WUI Threat Zone and in the General Forest allocation, and 24” dbh in the WUI Defense Zone. It limits the application of Group Selection treatments throughout the allocations and restricts the size to 1 acre. The IDT determined that Alternative 4: 1) was duplicated within the existing range of alternatives regarding several elements and 2) failed to adequately meet the purpose and need of the Saddle Project for other elements. Please refer to EA Appendix F and its attachments for a detailed discussion of Alternative 4.

PUBLIC INVOLVEMENT

The National Policy Act (NEPA) and the Healthy Forests Restoration Act (HFRA, Sections 104(e) and 104(f)) guided the public scoping and collaboration processes for this proposal. The Omnibus Spending Bill for FY 2008 amended the Herger-Feinstein Quincy Library Group Forest Recovery (HFQLG) Act to require application of Sections 104 through 106 of the HFRA to projects authorized under the HFQLG Act. The proposal for this project was developed through public meetings and interdisciplinary input. The Sierraville Ranger District of the Tahoe Forest Service hosted a public collaboration meeting for this project on December 10, 2009 at the

Sierraville Ranger District. It was advertised in the *Sierra Booster* and *Mountain Messenger*, and invitations were mailed to 20 potentially interested community members and landowners adjacent to the Saddle Project area. Three interested individuals attended the collaboration meeting. Attendees asked questions about the project, and were asked to provide written comments regarding concerns and clarifications. This written and verbal feedback was used to refine the Saddle Proposed Action.

A public notice announcing a 30-day Scoping Period for the Saddle Project Proposed Action was published in the *Mountain Messenger* on February 4, 2010 and in the *Sierra Booster*. On February 4, 2010, information about the Proposed Action was mailed to 36 potentially interested citizens and landowners adjacent to the Saddle Project. The project has been published in the Tahoe National Forest's quarterly Schedule of Proposed Actions (SOPA) starting in October 2009.

Scoping comments on the proposed project were received from 7 individuals or groups. The comments in response to this scoping were used to develop the issues and alternatives included in the Environmental Assessment. Documentation of the scoping comments received with responses from the Forest Service is located in the EA Appendix G: Saddle Project Response to Public Scoping Comments. Once the EA was completed, the 30-day Objection Period was initiated on November 24, 2011 with a Public Notice in *The Union*. The EA and Appendices were mailed or e-mailed to 10 individuals or organizations that responded during scoping, and were eligible to file an Objection during the Saddle Project Objection Period. No Objections were filed during the Objection Period.

EFFECTS RELATIVE TO FINDING OF NO SIGNIFICANT IMPACT (FONSI) SIGNIFICANCE ELEMENTS

In 1978, the Council on Environmental Quality promulgated regulations for implementing the National Environmental Policy Act (NEPA). These regulations (40 CFR Parts 1500-1508) include a definition of "significantly" as used in NEPA. The eleven elements of this definition are critical to reducing paperwork through use of a finding of no significant impact (FONSI) when an action will not have a significant effect on the human environment, and is therefore exempt from requirements to prepare an environmental impact statement. Significantly as used in NEPA requires considerations of both Context and ten elements of Intensity.

(a) Context:

Significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, affected interests, and the locality. Significance varies with setting. In the case of a site-specific action, significance will usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

The local context of the Proposed Action is limited to the eastern portion of the Tahoe National Forest in the northern portion near the community of Calpine and Highways 89 and 49 of the Sierraville Ranger District in locations described in Chapter 1 of the EA. The Proposed Action will implement up to 4,151 acres of vegetation (silvicultural) management prescriptions, and up to 534 acres of prescribed burn optional areas. It will improve site-specific watershed conditions.

The Proposed Action will temporarily use up to 8.1 miles of existing, tilled roads or roadbeds. All temporarily-used roads will be obliterated after project implementation. Hand thinning treatments around the Calpine Lookout will improve public safety and fire suppression effectiveness. Most of the treatments will occur near the community of Calpine, and will complement and complete fuels management needs in the Calpine Wildland Urban Interface (WUI).

In the context of seasonality and duration of activities, analysis prepared in support of the EA (*Wildlife Biological Evaluation, Aquatic Resources Biological Evaluation, Sensitive Plant Biological Evaluation, Management Indicator Species Report, Forest Vegetation Report, Fire and Fuels Report, Weed Risk Assessment, Cumulative Watershed Effects Assessment, and Air Quality Report*, all hereby incorporated by reference and available upon request), indicate that Alternative 1 will pose significant direct, indirect or cumulative effects.

As explained in Chapter 1 of the EA, this Project is part of the larger Herger-Feinstein Quincy Library Group Forest Recovery Act Pilot Project. The law that authorizes this pilot project was passed by Congress and signed into law by the President in October of 1998. The Act limits total acreage affected by resource management activities to approximately 70,000 acres annually. The proposed 4,685 maximum acres of treatments for the Saddle Project will constitute a very small portion of the total annual acreage of management activities under HFQLG. For that reason, the scale of the this project is not indicative of significant effects, even when considered in terms of local effects within the Pilot Project area, and even when considered in terms of only one year's program of activities under the Pilot Project.

(b) Intensity:

Intensity refers to the severity of impact. The following are considered in evaluating intensity, as detailed in the remainder of this section.

- (1) Beneficial and Adverse Impacts
- (2) Degree to which the Alternatives Affects Public Health and Safety
- (3) Unique Characteristics of the Geographic Area
- (4) Degree to which Effects on the Human Environment are Likely to be Highly Controversial
- (5) Degree to which the Possible Effects on the Human Environment are Highly Uncertain or Involve Unique or Unknown Risks
- (6) Degree to which the Action May Establish a Precedent for Future Actions with Significant Effects or Represents a Decision in Principle about a Future Consideration
- (7) Whether the Action is Related to Other Actions with Individually Insignificant but Cumulatively Significant Impacts
- (8) Degree to which the Action May Adversely Affect Properties Listed in or Eligible for the National Register of Historic Places, or May Cause Loss of Significant Scientific, Cultural or Historic Resources
- (9) Degree to which the action may Adversely Affect an Endangered or Threatened Species or its Habitat as Determined to be Critical under the Endangered Species Act of 1973

(10) Whether the Action Threatens a Violation of Federal, State, or Local Law or Requirements Imposed for the Protection of the Environment

(1) Beneficial and Adverse Impacts

This project is designed to improve existing conditions. The project design features developed for the Proposed Action including Land and Resource Management Plan (LRMP) standards and guidelines, Best Management Practices (BMPs), and project-specific resource protection measures and Standard Management Requirements (SMRs) will minimize or avoid adverse impacts. The rationale for effects determinations are detailed in the supporting analyses for the Saddle Project EA and are summarized in the remaining sections of this document. All analyses prepared in support of the EA and this document considered both beneficial and adverse effects, but all effects determinations were made on the basis of only adverse effects.

Hazardous Materials

During operations for Alternative 1, equipment may have the potential to release hazardous substances, such as oil and diesel, or may contaminate exposed soil. Borax, a natural substance, will be used as a fungicide on cut conifer stumps. Precautionary mitigation measures such as the BMPs, Contract Clause C6.341 – Prevention of Oil Spills, SMRs 1, 2 and 17 in EA *Appendix B* will decrease and mitigate risk of spill, and Best Management Practices for the use of pesticides will be strictly adhered to, including spill contingency planning, following label requirements, and use of personal protection equipment during application. Magnesium chloride may be used as a dust palliative on the NFS 05 road within the project area. The use of dust palliatives will follow EA *Appendix B* SMR 15 and contract Clause C5.31# - Road Maintenance T-Specifications. More details are available in the Saddle Transportation Management Plan Report (incorporated by reference and available upon request). Based on decades of implementation of similar projects and mitigation measures throughout the Sierraville Ranger District, the risk of releasing hazardous materials is very low.

Sensitive plants: Effects of the Application of Borax

Although large amounts of borax (including Sporax) can be toxic to plants and microorganisms, boron (the main break-down product of borax) is a naturally occurring element that plants need. The Saddle Project Biological Evaluation for Sensitive Plants found that although application of Sporax in the Saddle Project Area may affect individuals, it is unlikely to lead to a trend toward federal listing or loss of viability for sensitive plant species. Although highly unlikely, it is possible that Sporax may be spilled on or in close proximity to sensitive plant occurrences of *Ivesia sericoleuca* or *Pyrrocoma lucida*. This possibility will be mitigated by the protection of sensitive plant occurrences of the designated flag and avoid control areas (See SMR 17 in EA *Appendix B*).

Because Sporax is a fungicide, it has the potential to affect the sensitive fungi species. None of the fungi on the Tahoe sensitive list have been found to occur within the Saddle Project Area, although surveys for fungi are not a suitable method to eliminate their presence. It is expected that mitigations to limit the spreading or spilling of Sporax, such as not using Sporax within 25 feet of surface water, not applying it during sustained rain and applying only to stumps within four hours of felling will be sufficient to reduce potential effects to a low level.

Cultural and Heritage Resources

FONSI elements #3 and #8 summarize findings regarding cultural and heritage resources. There will be no significant adverse effects expected from Alternative 1.

Fuels Management

As detailed in the Saddle Project Fire and Fuels report and summarized in EA Chapter 2, under Alternative 1, extreme fire behavior will decrease and suppression effectiveness will increase (due to lowered fire intensity and disruption of fuel continuity), which will benefit natural resources and human safety. Follow-up fuels treatments include prescribed underburning, pile and burn, removal, or mastication. Mastication, however, does not remove hazardous fuels, but instead reconfigures these fuels on site, as described in the Saddle Project Fuels Management Report. Busse et al. (2010) report that mastication treatment has a higher potential for damage to the residual stand during a fire (compared to material removal) depending on variables including soil moisture and the depth, and the arrangement and moisture content of the mastication residues. Studies indicate that fire burns more slowly through accumulations of masticated woody material; allowing heat to build to levels that are lethal to trees and other vegetation, particularly when soils are dry (Busse et al., 2010). The same authors found that masticated fuel depths of 7.5 cm or greater had the ability to produce temperatures above the lethal threshold for plants. The potentially longer fire residence time and duration of extended heat in masticated units can also adversely affect soil properties, e.g. infiltration and fertility, which in turn can adversely affect forest vegetation establishment and growth. Due to the potential for damage from fire, mastication will only be implemented where predicted residue depth will be below 6". Mastication generally results in fuel beds that have lower flame lengths and rates of spread than un-masticated fuels. However, increased residence time and fireline intensity resulting in negative effects to the residual stand could negate some of the benefits to fire suppression operations such as lowered rates of spread and flame lengths (Reiner and Decker 2009).

There also remains the potential for short-term increased rates of spread (ROS) due to increased eye-level wind and fuel under Alternative 1. In areas where thinning and piling has occurred, but prior to the burning of the piles, there may be some short-term effects related to this increased ROS. While the crown density will have been reduced to the desired level, (which reduces the fuel continuity and availability at the crown level), prior to burning piles, there will be increased fuel volume at the surface level.

Air Quality

The Saddle Project Air Quality Effects Report (incorporated by reference and available upon request) analyzed potential effects to air quality. Air emissions of concern in the Saddle Project area are inhalable particulate matter (PM10) and ozone (modeled as NO_x), as detailed in the Saddle Project Air Quality Effects Report. Ozone production varies significantly with changing atmospheric conditions and models are not available to predict ozone formation resulting from project emissions. Instead, emissions of the ozone precursor Nitrogen Oxides (NO_x) are modeled to predict the effects of Alternative 1. Fugitive dust from road use, and emissions from vehicles related to project implementation are also possible.

Prescribed burning emissions: Burning of mechanical and hand piles and prescribed underburning each contribute to air emissions. As shown in Table 1 below, Alternative 1 will produce 55.25 tons of PM10 and 12.33 tons of NO_x per year. On a short-term basis (1 to 3 days)

for a few periods each year, these prescribed fire emissions have the potential to reduce air quality. The potential for these short-term reductions in air quality are mitigated by the air quality protection measures included in Alternative 1, including the coordination with the California Air Resources Board (CARB) and Northern Sierra Air Quality Management District (NSAQMD), as discussed in detail in the Air Quality Effects Report. Alternative 1 will follow the Smoke Management Guidelines for Agricultural and Prescribed Burning contained in Title 17 of the California Code of Regulations.

Table 1. Saddle Project prescribed burning air emissions per year over 10 years

Emission	Treatment	Hand thin burn piles	Hand thin, masticate, grapple pile burn piles	Mechanical treatment burnt in pile at landing	Treatment receiving post-treatment RX burn	RX burn optional	Total treatment emissions per year
PM10 (tons)	Alt. 1	1.98	0.11	0.22	43.60	9.35	55.25
NOx (tons)	Alt. 1	0.77	0.04	0.08	9.42	2.02	12.33

These emissions are not expected to exceed Plumas or Sierra County’s maximum emission standard of 25 tons per year for ozone. Smoke from burning in the Saddle Project area near Calpine could potentially temporarily affect the Calpine community area, potentially affecting visibility, safety, and/or human health. As wind generally trends from the southwest in the Sierraville District, there is a potential for some smoke to drift north or east and affect the communities of Portola and Loyalton, and homes in the Sierra Valley. As these are more than 5 miles away, the smoke is likely to be dispersed. Mitigation of smoke impacts will consist of elements discussed in the Air Quality Effects Report, including burning under favorable atmospheric conditions; limiting acres burned daily; allowing piles to dry before ignition; and ceasing ignition if smoke dispersion conditions degrade. Monitoring of smoke transport is required by NSAQMD in the smoke management plan. Daily coordination with NSAQMD and review of a daily spot weather forecast from the Redding Fire Weather office is required prior to igniting any prescribed fire.

Fugitive dust: Fugitive dust could be caused by the development of temporarily-used roads, skidding of logs, and biomass material, hauling operations on native or aggregate surfaced roads, and road maintenance and repair activities. Dust abatement techniques will be applied as necessary to all these activities to minimize unsafe conditions and meet air quality requirements. The primary techniques used for dust abatement are:

- The application of water during operations
- Occasional application of dust palliatives, such as magnesium or calcium chloride, to roads to reduce dust as necessary

Because of the large size of the Saddle Project area, the small amount and dispersed nature of dust producing activities, and the favorable weather conditions within the normal operating season, in combination with the dust abatement techniques used, any adverse effects from dust are expected to be minimal.

Soils

The National Forest Management Act (NFMA 1976) requires that forest management practices do not permanently impair the productivity of the land. The Tahoe National Forest LRMP (USDA, 1990) provides direction for maintaining long-term soil productivity through standards and guidelines for three soil characteristics: soil porosity (measured through compaction), soil cover, and soil organic matter (LRMP, pages V-36 through V-38). The potential effects to these parameters are analyzed by the Saddle Project Soils Resource Effects Analysis Report (incorporated by reference and available upon request), and detailed information regarding the Saddle Project treatment area soils are included in the Saddle Project Record. The potential effects of Alternative 1 to soil resources are discussed below.

Soil cover: Under Alternative 1, small pockets of reduced cover could result from group selection and oak restoration treatments due to decreased needle cast. Thinning will slightly decrease soil cover. Landings and skid trails under Alternative 1 will decrease ground cover. Mastication treatments could increase soil cover, while grapple pile treatments could disturb and remove the top layers of soil. Piling is conducted to reduce the amount of slash and coarse fuels, and monitoring has shown that the overall extent where reduced cover is observed does not exceed the LRMP standards due to post-treatment scattering and incorporation of unburned fuels. Soil cover will be reduced in small areas where concentrated pile burning or where heavy concentrations of fuels burn for extended time periods. Ground cover post-treatment is subject to SMR 19, which requires mulching to various ranges depending on proximity to water sources and site slope and conditions. With site-specific prescribed burn plans, SMR 19, and Best Management Practices, prescribed burn activity areas typically meet effective soils cover requirements. Soil cover will be reduced on access routes, and watershed restoration construction areas for a temporary period.

Organic matter: Alternative 1 will remove large woody material and finer organic material to various degrees. Mechanical and manual thinning with associated piling will reduce surface duff as well as larger material. Mastication could increase surface organic material, while grapple piling will likely decrease existing and activity surface fuels. The extent and volume of large removed woody material will be guided by EA Appendix B SMR 19: *Provide for downed wood retention of 3 large wood pieces (10' length and 20" dbh, where unavailable 12" dbh will suffice) per acre. In areas not meeting downed wood requirements, incorporate burn prescription measures and contract requirements to maintain existing downed logs (preference to spring burn prescription).*

Prescribed burning will likely remove some material in higher decay classes. Given fuels reduction objectives for the area, this is considered acceptable for soil resource concerns within WUI and DFPZ acres.

Because the objective of group selection and oak restoration under Alternative 1 is to reduce ground cover to promote regeneration of desired species, litter and duff will be displaced or removed in portions of those treated areas. The need to process more material in group selection areas will necessitate more landings and therefore more organic material will be displaced. The short-term use of temporary roads will also affect organic material by clearing it on approximately 8.1 miles of roads under Alternative 1. Similarly, skid trails and landings will be cleared of large and fine matter. Forest plan standards and guidelines for soil organic matter will be met in the areas receiving group selection and oak restoration treatments.

Soil porosity and compaction

Portions of activity areas with intensive equipment operations, such as landings and skid trails, are likely to increase in compaction (the measurement for porosity). Under Alternative 1, landings and skid trails will occur on up to 15 % of the 4,560 acres of activity areas. SMRs 1 and 4 will aid in ensuring soil porosity levels on an activity area basis meet Forest plan standards and guidelines by limiting access by soil moisture, type and slope, and requiring sub-soiling. Re-using existing landings and skid trails should allow reduction in compaction levels and porosity for some cases or maintain these activity areas at existing levels when subsoiling is completed.

Under Alternative 1, radial thin with group selection activity areas 6754024, 6854043 and 6804007 have a potential risk for exceeding soil porosity standards where existing conditions are already high relative to the standard. Reduction in compaction levels and porosity may be achieved through additional subsoiling in groups or where site conditions allow per SMRs 1 and 4. Alternative 1 will not substantially change existing compaction levels in activity areas that currently exceed the compaction standard and that are re-entered. However, improvements to porosity will occur on skid trails compacted but not previously subsoiled when these areas are subsoiled, or where group selections are placed over previously compacted soils and are subsoiled. For activity areas 6804062, 6804014, 6804010, and 6804040 some improvement in porosity may be achieved over the short-term through additional subsoiling in groups or where site conditions allow per SMR 4.

Alternative 1 will use 8.1 miles of temporary roads. Short term detrimental compaction could occur on temporary roads until decommissioned (estimated to persist for 5 years in a fully compacted state on the landscape.) Under Alternative 1, reduced soil porosity could occur in watershed restoration action areas for approximately one month until site access is subsoiled or otherwise restored to original condition.

Water Resources

The Cumulative Watershed Effects (CWE) Report presents the analysis of direct, indirect and cumulative effects on water resources in addition to effects on water quality as they relate to beneficial uses. A summary of cumulative effects is summarized in FONSI element #7 Cumulative Effects and effects to water quality as they relate to beneficial uses are summarized in FONSI element #10III. Tables 2 and 3 below summarize the findings of the CWE report regarding the direct and indirect effects of Alternative 1 to Water resources.

Table 2. Water Quality: Riparian Management Objectives 1,2 and 8)			
Actions	Effects and Comparison Indicators		
Action category *	Sediment	Temperature (shade)	Nutrients
Mechanical and Manual Vegetation and Fuels Reduction Treatments ¹	Alt 1: 4,437 unit acres in activity areas that could be potentially mechanically treated and 758 unit acres that could be manually treated. Vegetation and fuels treatments were designed to avoid and minimize impact to sensitive and erosive areas, and SMRs will prevent impacts from timber processing and removal activities (designated crossings, burn Restrictions, & timing restrictions) from contributing sediment (SMRs 1, 19, 21).	Alt 1. Removal of overstocked small diameter trees near channels in up to 1,704 acres of RHCAs** may cause localized, microclimatic temperature increases, but these will not be significant.	Alt 1: 3,025 ac. potentially underburned could change soil nutrient and organic matter dynamics through volatilization and availability, although planned low-intensity fire should minimize volatilization and begin to reflect conditions of the historical low-intensity fire regime. SMR 19 requires prescribed burning to retain specific ground cover (organic matter) amounts.
Vegetative Riparian Restoration ²	Alt 1: Multiple restrictions including SMRs 3, 9 and 10 create exclusion areas, and timing removal restrictions will prevent sediment contribution.	Alt 1: With removal of conifers in 123 acres of meadows, localized, short-term temperature increases expected until riparian vegetation expands. This is not a significant effect.	Alt 1: Where soil moisture is increased along moist zones under meadow restoration treatments, there is a potential for greater nutrient update by biota in localized areas.
Transportation ³	Alt 1: 8.1 miles of temporarily-used roads with risk for sediment production; 50 road mi. maintained. Rehabilitation, and seasonal and access restrictions minimize effects as required by SMR 15. Road decommissioning and drainage improvements prevent long-term sediment delivery.	Alt 1: Actions C, K and P will re-align road segments from drainages, potentially increasing vegetation and localized shading.	Alt 1: Where sediment transport is changed, nutrients associated with sediment transport could be changed (see Sediment indicator).
Watershed Restoration ⁴	Alt 1: Short-term reduction in soil cover during action implementation increases risk for sediment runoff. SMR 20 minimizes this effect with timing restrictions. Long term benefits from restoration actions D, E, F and K to decrease in-stream erosion.	Alt 1: Plug and pond techniques with Actions A and N could improve width to depth ratios and decrease associated temperatures. Actions D, E, F, and K will improve shading with greater width to depth ratios.	Alt 1: Effects similar to those described under riparian restoration.

*For footnote information please see Table 3.3 below.

** Because no group selection units will be located in RHCAs, and radial thinning treatments will be restricted from many areas, the actual area treated in units with RHCAs will be no more than 1,345 acres (as displayed in EA Appendix D). Please see EA Appendix B SMR 11 for details about treatment restrictions. Furthermore, of the approximate 1,704 unit acres treated in RHCAs, approximately 234 of these acres will be treated with prescribed burn optional treatments. Prescribed burning in RHCAs is restricted by a suite of SMRs including SMR 19.

Table 3. Hydrologic and Riparian Function and Stability Riparian Management Objectives (2, 3, 4, 5, 6, 7, 8, and 9)			
Actions	Effects and Comparison Indicators		
Action category*	Riparian vegetation health and habitat	In-stream flows, flood discharges, and water table maintenance	Channel stability and Large wood distribution
Mechanical and Manual Vegetation and Fuels Reduction Treatments ¹	Alt 1: SMRs limit burning and piling from riparian vegetation (SMR 20), and equipment operations are subject to exclusion zones (SMR 9). Thinning in RHCAs will promote riparian vegetation to increase soil moisture and improve channel stability by increasing ground cover.	Alt 1: Up to approximately 1,704 acres of vegetation and fuels treatment are potentially in RHCAs. These treatments in RHCAs may prevent high severity wildfire along stream courses, decreasing the potential for channel instability after wildfire.	Alt 1: 1704 acs. of thinning in the RHCA will increase riparian vegetation, improving channel stability where water is held longer in the soil profile. Restrictions on crossings, exclusion areas, and requirements for woody debris retention will protect stability. Underburning will increase woody debris recruitment.
Vegetative Riparian Restoration ²	Alt 1: Meadow and aspen restoration actions will increase the vigor and function of 125 acres of riparian habitat.	Alt 1: With conifer removal, more vigorous riparian vegetation growth with increased water retention in 125 acs. of meadows and 2 acs. Aspen restoration.	Meadow restoration and enhancement actions over 123 acs., will increase riparian vegetation, improving channel stability where water is held longer in the soil profile.
Transportation ³	Alt 1: Actions J, K, D, and H will improve existing crossings and road drainage, and one temporary road intermittent crossing, will all potentially short term affect riparian vegetation but will also beneficially restore riparian connectivity. Actions C and P will beneficially re-align roads away from riparian vegetation.	Alt 1: SMRs required for road maintenance and temporary use, and road improvement actions will improve water routing and ability of channels to handle flood flows (see SMR 19) and will reduce capture of water flow by roadbeds.	Actions C and P will realign the roadbed, allowing forest growth in riparian areas in currently roaded areas, and facilitating the replacement of large wood in the riparian area.
Watershed Restoration ⁴	Alt 1: Actions A, D, and E, K and N will restore meadow and stream hydrology and function, improving riparian vegetation.	Alt 1: Improvements to flood discharges and water table maintenance due to increased residence time of ground water and increased late season stream flow from restoration actions.	Alt 1: Actions A and N will restore meadow and stream function over more than 100 acres with plug and pond, and riffle and grade control methods by supporting channel configuration or reconstructing the floodplain.

*The footnotes below list which Actions fit in each action category.

** Because no group selection units will be located in RHCAs, and radial thinning treatments will be restricted from many areas, the actual area treated in units with RHCAs will be no more than 1,345 acres (as displayed in EA Appendix D). Please see EA Appendix B SMR 11 for details about treatment restrictions. Furthermore, of the approximate 1,704 unit acres treated in RHCAs, approximately 234 of these acres will be treated with prescribed burn optional treatments. Prescribed burning in RHCAs is restricted by a suite of SMRs including SMR 19.

¹Group selection (Alternative 1 only), variable thinning, black oak restoration, radial thinning, fuelwood harvest, mastication and grapple pile, and all mechanical piling including landing piles, hand piling, pile burning and prescribed burning

²Meadow restoration and aspen restoration

³Temporary roads maintenance, reconstruction and associated drainage improvements (G, H, J, M and P).

⁴As described in the proposed action A, B, C, D, E F, K and N (Alternative 1 only).

Biological Resources

Direct, indirect, and cumulative effects for Forest Service sensitive plants, aquatic resources wildlife, aquatic resources and plants, Threatened and Endangered Species, and the Management Indicator Species are summarized below and in FONSI elements #7, #9 and #10. As detailed

below, there will be no significant adverse effects expected from Alternative 1 on these resources.

Forest Service Sensitive Plants

The Saddle Project Biological Evaluation for Sensitive Plants determined that there are known occurrences of the Forest Service (FS) Sensitive plants *Ivesia sericoleuca* (Plumas ivesia) and *Pyrrocoma lucida* (sticky pyrrocoma) within the treatment areas that may be affected by Alternative 1. The Evaluation determined that because habitat for the following FS sensitive plants is present in the treatment areas (although no occurrences of these species have been found during surveys of the project area), these species may be affected by Alternative 1: *Botrychium ascendens*, *B. crenulatum*, *B. lunaria*, *B. minganense*, *B. montanum*, *Bruchia bolanderi*, *Epilobium howellii*, *Fissidens aphelotaxifolius*, *Helodium blandowii*, *Hydrothyria venosa*, *Meesia triquetra*, *M. uliginosa*. The FS Sensitive Fungi *Cudonia monticola*, *Dendrocollybia racemosa*, *Phaeocollybia olivacea* may also be present in the treatment areas. Because potential habitat exists in the project area, the absence of these fungi cannot be determined during surveys since there is no way to determine whether the underground portion of the fungus (mycelia) is present.

No direct effects are expected from Alternative 1 to Plumas ivesia or sticky pyrrocoma because flag and avoid mitigations with associated buffers (EA Appendix B SMRs 12 and 23) have been included to prevent direct impacts during unit access and tree removal. However, there is the possibility that scattered plants may be inadvertently impacted if they exist away from known sites. After silvicultural treatment in flagged areas, the Botany and Fuels staff will evaluate additional fuels reduction needs and determine the appropriate method of achieving desired fuels conditions while avoiding these sensitive plants and minimizing future spread of noxious weeds. For Alternative 1 watershed restoration Action N, pond and plug excavation actions will be located as to avoid directly affecting these species.

For the above-discussed species that have potential habitat but do not have occurrences within the treatment areas, if new occurrences are found before or during ground-disturbing activities, they will be mitigated with flag and avoid mitigations (detailed in SMR 23), preventing direct effects. For the previously-discussed fungi, the application of boron to conifer stumps could directly affect the underground mycelium of these species. It is expected that mitigations (SMR 1, 17 and EA Chapter 1) to limit the spreading or spilling of borax, such as not using boron within 25 feet of surface water, not applying it during sustained rain and applying it only to stumps within four hours of felling, will be sufficient to reduce potential effects to a low level.

Alternative 1 may indirectly affect FS sensitive plant and fungi species by changing habitat characteristics. Changed hydrological patterns and vegetation structure due to watershed and meadow restoration actions (in Alternative 1), and general tree removal may be beneficial to *Ivesia sericoleuca* and *Pyrrocoma lucida* and some riparian species as they typically prefer areas that are more open and moist, especially during the early part of the season. Under Alternative 1 these characteristics will be enhanced in many locations.

Another potential indirect effect from Alternative 1 activities is a potential increase in noxious weeds, such as cheatgrass, bull thistle and woolly mullein, that could negatively affect the frequency and abundance of native understory vegetation including FS sensitive species.

Proposed thinning and burning in some identified locations in the project area could create open micro-sites where the shade and soil cover will be reduced, making conditions for noxious weed establishment favorable. There is little scientific information available regarding threshold levels of disturbance and native species establishment necessary to resist nonnative species invasion in open, pine-dominated, fire- and drought-resilient forests (McGlone et al., 2009). It is prudent to use prescribed underburning as a tool on a case by case basis where the need is great, rather than as a panacea for fuels reduction so that the cheatgrass does not become continuous in the understory across the landscape. The botanist will be consulted during site-specific implementation planning of the “prescribed burn optional” units to ensure the risk of cheatgrass is assessed. Flag and avoid mitigations site-specific silvicultural and fuels-management treatments and noxious weed mitigations (SMRs 23 and 24) will minimize the potential for the invasion of noxious weeds into sensitive plant occurrences but not eliminate the risk of weed invasion across the Saddle Project Area.

The Biological Evaluation for Sensitive Plants concluded that the direct and indirect effects discussed above, in combination with the cumulative effects discussed in FONSI element 7, may affect individuals, but are not likely to result in a trend toward Federal listing or loss of viability for FS sensitive plants and fungi under Alternative 1.

Forest Service Sensitive Terrestrial Wildlife

Implementation of the Saddle Project Alternative 1 will not affect individuals or habitat of the great gray owl or Pacific fisher because the Saddle Project area is outside the range of the species or does not contain suitable habitat for the species.

The IDT wildlife biologist determined that the Alternative 1 will not affect bald eagles, willow flycatchers or greater sandhill cranes as described below. Since there are no known or expected bald eagles nesting within the Saddle Bald Eagle analysis area, and Alternative 1 will not affect bald eagle habitat, it was determined that Alternative 1 will have no effect on bald eagles or bald eagle habitat. As extensive surveys have not detected willow flycatchers within or adjacent to any of the proposed treatment units, and as harvest and hand work activities adjacent to meadow systems will be of short duration (1 to 2 days), they will not affect willow flycatchers if they were present. Since sandhill crane habitat (wetlands with emergent vegetation) and known and expected locations of sandhill cranes are more than ¼ mile from proposed activities, there will be no direct or indirect effects from the proposed activities under Alternative 1 on sandhill cranes or their habitat. Further details regarding these determinations are available in the Terrestrial Wildlife BE/BA, which is incorporated by reference and available upon request.

The implementation of the Saddle Project Alternative 1 may affect individuals, but is not likely to result in a trend toward Federal listing or loss of viability for the following Forest Service sensitive terrestrial species: California spotted owl, northern goshawk, American marten, Sierra Nevada red fox, California wolverine, pallid bat, Townsend’s big-eared bat, and western red bat. The analyses to support these determinations are detailed in the Terrestrial Wildlife BE/BA and are summarized below. The temporal and physical boundaries of analysis for each species is described in detail in the Wildlife BE/BA and in FONSI element #7 below, although the analysis of all species included the 17,389 acres of the Saddle Wildlife Analysis Area, which encompasses approximately 15,523 acres of forested lands, 0.5 acres covered by water, 1,512 of shrub dominated land, 92 acres grasslands, and 262 acres of wet meadow. Potential cumulative effects for each species are summarized in FONSI element #7.

California spotted owl (CSO): All activities proposed for Alternative 1 are greater than 1 mile from known or likely nesting sites (including Protected Activity Centers (PACs) and Spotted Owl Habitat Areas (SOHAs)), and will not affect these areas. There will be no direct effects to CSOs because 1) all suitable CSO habitat has been surveyed and no owls were identified within or adjacent to proposed treatments, and 2) because no PACs or SOHAs are proposed for treatment.

Alternative 1 could indirectly affect CSO habitat. Variable and radial thinning under Alternative 1 will reduce the quality of CSO habitat on approximately 429 acres of existing low quality, unoccupied nesting habitat by thinning it to become foraging habitat. Treatments on these acres will have long-term beneficial effects by preventing the potential for habitat destruction associated with high severity wildfires. Proposed underburning under Alternative 1 is expected to have a short-term negative effect to the quality of foraging habitat but will improve foraging quality of this habitat in the long-term.

Because Alternative 1 has a potential to disturb dispersing or foraging (non-nesting) spotted owls within their home range, and because Alternative 1 will reduce nesting habitat by 429 acres (9% of potential nesting acres in analysis area) of currently unoccupied low quality potential nesting habitat converted to foraging habitat, the terrestrial wildlife BE determined that implementation of Alternative 1 may affect individuals, but is not likely to result in a trend toward Federal listing or loss of viability for the California spotted owl within the planning area of Tahoe National Forest.

Northern Goshawk: The analysis area for the northern goshawk (NOGO) is approximately 31,999 acres, which includes the proposed units and a 1 mile buffer distance from the proposed units. The analysis of potential suitable goshawk habitat determined that this includes approximately 20,117 acres of suitable goshawk nesting habitat, including 2 NOGO Protected Activity Centers (PACs). Since noise from timber harvesting activities (felling trees and associated operations, decking logs, hauling, road construction, mastication, and other heavy equipment operation) will be greater than ¼ mile from known nesting stands, and all suitable habitat has been surveyed to R-5 protocol and no new goshawks were detected, the proposed activities will have a low probability of disturbing nesting individuals. Since suitable habitat has been surveyed and all known or expected resident goshawks have been protected with a PAC, and no activities are proposed within ¼ mile the known nesting areas of these PACs, it is unlikely the activities proposed under Alternative 1 will have direct effects to nesting goshawks.

Alternative 1 could indirectly affect NOGO habitat. Alternative 1 will reduce approximately 105 acres of goshawk nesting habitat as a result of meadow and aspen restoration activities. The recovery of the meadow and aspen communities are expected to increase foraging opportunities for goshawk. Underburning will reduce the density of understory trees and brush, but will not cause a reduction in the existing canopy closure (dominants and co-dominants). Under Alternative 1, the variable thinning, radial thinning, and group selection treatments may temporarily disturb foraging goshawks, but will have long term beneficial effects to the quality of foraging habitat. Variable thinning will enhance and maintain important structural habitat characteristics that increase prey diversity and open understory necessary for goshawk maneuverability. Because goshawks are known to forage on edge habitats where species diversity and abundance is more complex, and select larger trees for nesting, radial thinning and group selection treatments will increase the quality of goshawk foraging habitat, while maintaining suitable nesting habitat.

American marten: The marten wildlife analysis area includes all potentially suitable marten habitat within one mile of the Alternative 1 units, totaling 31,999 acres of publically-owned and private land. While there have been no individual martens or denning sites detected within proposed treatment units, current surveys cannot conclude marten absence. Based on analysis area habitat characteristics, it is expected that marten forage or reproduce within the Saddle Analysis Area and there is a low probability marten will be directly affected by equipment or noise under Alternative 1. The BE supports the IDT wildlife biologist's determination that due to this probability, implementation of activities under Alternative 1 may temporarily directly affect foraging martens, and could temporarily directly affect unknown denning individuals.

The IDT wildlife biologist determined that implementation of Alternative 1 may affect individuals, but is not likely to result in a trend toward Federal listing or loss of viability for American marten within the planning area of the Tahoe National Forest (Saddle Project Terrestrial Wildlife BE). Stephens and Moghaddas (2005) found that use of prescribed fire increased the density of snags greater than 15 cm DBH, and did not significantly alter coarse woody debris in decay classes 1 and 2 (less decayed material). In the same study, the authors found that fire reduced coarse woody debris in decay classes 3 and 4 (more decayed material). The use of prescribed fire will increase the fire resilience of these stands to catastrophic loss in a wildfire, and it re-introduces fire back into the system as a dynamic process. To benefit marten habitat, SMR 31 (included in EA Appendix B) will be required during project implementation, and will require the maintenance of at least 10 tons/acre of coarse woody debris in decay classes 1 and 2 (approximately 15 medium to large logs/acre) in specific treatment areas.

Sierra Nevada red fox: The Saddle Project is not expected to have measurable negative direct or indirect effects on the Sierra Nevada red fox because there are no historical or camera detections of Sierra Nevada red foxes within the Sierraville Ranger District or the Saddle analysis area, all proposed units are below 6,800 feet in elevation and Sierra Nevada red fox typically occur above 7,000 feet in elevation, and there are no proposed activities within older forested stands in the red fir zone. Implementation of Alternative 1 could temporarily disturb red foxes that were foraging or denning; however, the probability of disturbing red foxes is very low because it is unlikely they will be present in the vicinity of the project area. The IDT wildlife biologist determined that Alternative 1 of the Saddle Project may affect individuals, but are not likely to result in a trend toward Federal listing or loss of viability for Sierra Nevada red fox within the planning area of the Tahoe National Forest.

California Wolverine: The Terrestrial Wildlife BE supports the IDT wildlife biologist's determination that Alternative 1 will not have measurable direct effects on the wolverine and will have beneficial indirect and cumulative effects on wolverine habitat. While recent detections of an individual male wolverine were adjacent to the Saddle Analysis Area, the individual was well below the expected elevational range for breeding wolverines. Wolverine are not expected to utilize the areas within and adjacent to Saddle Project Area units during the summer months as the project area is well below the expected elevational range of wolverine breeding and denning habitat (above 8,000 feet). If wolverines forage in the project area, it is expected to occur only during the winter and spring when project activities will not occur.

Thinning and underburning under Alternative 1 have the potential to indirectly negatively affect the abundance and distribution of wolverine prey in the short term. However, the proposed activities will have long term beneficial effects as the stands treated will be more fire resilient and will have a higher probability of persisting in the event of a wildfire. The proposed

activities are not expected to have measurable effects on foraging wolverines because the wolverine is opportunistic in its food habits, has a large home range size and extensive daily movements. The terrestrial wildlife BE supports the IDT wildlife biologist's determination that implementation of Alternative 1 may affect individuals, but is not likely to result in a trend toward Federal listing or loss of viability for California wolverine within the planning area of the Tahoe National Forest.

Pallid, Townsend's big-eared, and western red bats: The terrestrial wildlife BE concludes that implementation of the Saddle Project may affect individuals but is not likely to result in a trend toward Federal listing or loss of viability within the planning area of the Tahoe National Forest for the pallid, Townsend's big-eared, or western red bat. Implementation of Alternative 1 may temporarily affect individual foraging, and roosting pallid bats, but is not expected to affect maternal roost sites of the pallid bat, or pallid bat prey base. For the Townsend's big-eared bat, Alternative 1 is not expected to have measurable negative effects although there is a low potential that summer roosting solitary male bats may be disturbed during thinning operations, but this disturbance will be localized and will affect individuals (not colonies). Even though some individuals may be affected, breeding habitat, population density, and maternal colonies are not expected to be negatively affected. For the western red bat, because Alternative 1 activities are at elevations above which this species typically breeds, and the actions will not directly alter roosting habitat represented by riparian hardwood trees, especially with the required adherence to RHCA guidelines within riparian areas, implementation of Alternative 1 will not adversely affect this species.

Management Indicator Species (MIS)

The Tahoe National Forest LRMP as amended by the Sierra Nevada Forests Management Indicator Species Amendment (SNF MIS Amendment) Record of Decision (USDA December 2007) guides each project to provide the wildlife habitat and other ecological conditions necessary to maintain well-distributed viable populations of Management Indicator Species (MIS) in the project area and bioregional scale, and maintain diversity of plants and animals (Tahoe National Forest LRMP as amended by the Sierra Nevada Forests Management Indicator Species Amendment (SNF MIS Amendment) Record of Decision (USDA December 2007)).

The applicable Project-Level MIS for the Saddle Project are mule deer (Oak-Associated Hardwoods and Hardwood/Conifer), yellow warbler (Riparian), mountain quail (both Early- and Mid-Seral Coniferous Forest), California spotted owl, American marten, northern flying squirrel (late-seral closed canopy), hairy woodpecker (Snags in Green Forest), Pacific tree frog (Wet Meadow), and macroinvertebrates (Lacustrine/Riverine). The Saddle Project terrestrial species Management Indicator Species Report analysis area included the habitat within each proposed treatment unit and within a ¼ mile buffer around each proposed treatment area to total 14,535 acres of both National Forest and non-National Forest land. The spatial extent of the analysis area for the aquatic species MIS includes the Carmen Creek, Fletcher Creek, Folchi Meadow and Turner Canyon subwatershed. (See Aquatics BA/BE Analysis Map 1.) The temporal scale for each MIS report extends from approximately 1980 (the beginning of the current land and Resource Management Plan) to 2013 (when the last of the HFQLG projects will be implemented).

The MIS Reports determined that Project-Level habitat impacts on any MIS will not be significant and will not contribute to Bioregional-Scale trends for any MIS. Summaries for each

habitat-population trend are provided below and details are presented in the Saddle Project MIS Reports, which are incorporated by reference.

Mule deer (oak habitat): Alternative 1 will potentially have beneficial effects to oak habitat on approximately 18 acres with oak restoration, variable and radial thinning treatments designed to benefit oak trees. Alternative 1 has no expected negative direct, indirect or cumulative effects to oak habitat. At the bioregional level, because the change in conifer canopy cover from Alternative 1 to benefit oak is a small acreage compared to oak-associated hardwood and hardwood/mixed conifer habitat in the Sierra Nevadas, it will not have measurable effects to the bioregional trends mule deer are experiencing in the Sierra Nevadas. It will not alter the existing trend in the habitat, nor will they lead to a change in the distribution of mule deer across the Sierra Nevada bioregion.

Yellow warbler (Riparian Habitat): Approximately 134 acres of the Saddle analysis area is typed as montane riparian (MRI) habitat. Alternative 1 will affect approximately 22 acres of MRI habitat through thinning of encroaching conifers and underburning. These actions will directly remove conifer overstory, but will indirectly beneficially increase resource availability and sunlight penetration to the understory riparian habitat. At the bioregional level, because the potential reduction in MRI habitat due to Alternative 1 in the bioregion will be negligible (0.006%), it was determined that Alternative 1 will not alter the existing trend in the habitat for yellow warbler, nor will implementation of Alternative 1 lead to a change in the distribution of yellow warblers across the Sierra Nevada bioregion.

Mountain quail (both Early- and Mid-Seral Coniferous Forest Habitat): Alternative 1 proposes vegetative treatments (thinning, meadow restoration and underburning) within 4,885 acres of early and mid seral habitat types (approximately 45% of the early and mid seral habitat within the Saddle Analysis Area). Approximately 59 acres of conifer forest habitat will be directly affected in meadow restoration treatments with the removal of encroaching conifers, converting this habitat type. With the variable and radial thinning treatments, the canopy closure in 493 acres of CWHR D stands (60 percent and greater canopy cover) will be converted to CWHR M (40 to 59 percent canopy cover), while maintaining the early- or mid seral habitat classification. Underburning only on 389 acres and post-silvicultural treatment (follow-up) underburning on up to 3,629 acres (likely implemented at a rate of approximately 349 acres per year over 10 years) is planned within both early and mid seral mountain quail habitats. These fuels treatments could have short term negative effects to ground vegetation and brush but will retain the seral habitat classification and will have long term beneficial indirect effects to mountain quail habitat. In conclusion, Alternative 1 will reduce approximately 59 acres of mid seral habitat through meadow restoration activities. This will equate to approximately 0.002% of the habitat in the Sierra Nevada. Alternative 1 will not alter the existing trend in mountain quail mid or early seral habitats, nor will it lead to a change in the distribution of mountain quail across the Sierra Nevada bioregion.

California spotted owl, American marten, northern flying squirrel (Late Seral Closed Canopy Coniferous Forest Habitat): The CWHR analysis identified approximately 90 acres of late seral closed canopy habitat (CWHR 5M, 5D, and 6) within the Saddle Project analysis area on national forest system land. There are approximately 130 acres of late seral habitat on non-national forest system land within the analysis area. Alternative 1 proposes vegetation treatments within approximately 75 acres of CWHR SMC6 habitat. It will retain large snags down logs per LRMP standards and guides. Alternative 1 will hand thin 18 acres, and variable and radial thin

approximately 57 acres. The mechanical treatments will not reduce late seral closed canopy acres, but could change canopy closure of 57 acres to “M”. Therefore, Alternative 1 will reduce canopy closure on 57 acres, but will not change total late seral closed canopy habitats (CWHR 5D will be changed to 5M). Thinning these acres may have long term beneficial effects, by reducing the potential for loss from wildfire and increased forest health.

Under Alternative 1, there will be no change in large snags and large logs, nor any net reduction in late seral closed canopy habitat. The change in canopy closure from “D” to “M” under Alternative 1 on 57 acres out of 220 total acres of late seral closed canopy coniferous forest habitat in the Saddle Project Area will not alter the existing trend in the habitat, nor will it lead to a change in the distribution of California spotted owl, American marten or northern flying squirrel across the Sierra Nevada bioregion.

Hairy woodpecker (Snags in Green Forest Habitat): Alternative 1 occurs in lands that have historically been timber harvested and are second growth. The landing and road system is currently in place and will be used by the activities. It is not expected any new roads or landings will be necessary to complete the proposed activities, but some existing temporary roads will be used. Information about existing levels of snags and down wood is available in the Saddle Project CWHR Report, and Alternative 1 is designed to avoid removing medium and large snags. It is not expected that this project will alter the existing trend in the ecosystem component, nor will it lead to a change in the distribution of hairy woodpecker across the Sierra Nevada bioregion.

Pacific tree frog (Wet Meadow Habitat): This broad-ranging species requires standing water for breeding; tadpoles require standing water for periods long enough to complete aquatic development, which can be as long as 3 or more months at high elevations. Saddle Project Alternative 1 will implement approximately 123 acres of thinning to remove selected conifers along the perimeters of wet meadows to restore the connectivity of the stream to the meadow and allow for more interaction of hydrologic processes in the Fletcher Creek subwatershed. These actions will directly benefit wet meadow habitat. Under Alternative 1, the thinning of the uplands and removing conifers from the meadow margins in and around the meadow systems could reduce the amount of transpiration and interception of precipitation. This could indirectly affect the location of water in the system and may manifest into an increase of soil moisture, understory productivity, runoff, and/or stream base flow. This retention of moisture will likely enhance the riparian vegetation.

Alternative 1 provides for use of mechanical equipment within RHCAs along wet meadow perimeters. Potential adverse effects (including increased soil displacement, soil compaction, and removal of soil cover on skid trails) would be mitigated through implementation of a broad suite of standard management requirements (SMRs) designed to prevent and decrease these effects. Potential adverse effects should be prevented or mitigated by SMRs 1, 3, 4, and 5, which will prevent the location of skid trails in RHCAs, prevent mechanical actions on steep slopes, require ground cover retention, and prescribe the location of used landings (see EA Appendix B). Cumulatively, Alternative 1 will add to beneficial effects being implemented in nearby projects such as the Carmen Watershed Restoration Projects. In conclusion, direct, indirect and cumulative effects to wet meadow habitat from Saddle Project Alternative 1 will not alter the existing trend in the habitat for the Pacific tree frog, nor will it lead to a change in the distribution of Pacific tree frogs across the Sierra Nevada bioregion.

Macroinvertebrates (Lacustrine/Riverine Habitat): Aquatic or Benthic Macroinvertebrates (BMI) are useful indicators of water quality and aquatic habitat condition. They are sensitive to changes in water chemistry, temperature, and physical habitat.

Treatment actions in RHCAs under Alternative 1 could affect water chemistry, temperature, or physical habitat by directly affecting water surface shade and by indirectly affecting stream flow and sedimentation. Alternative 1 proposes to treat no more than 1,345 acres within RHCAs. In addition, approximately 8.1 miles of existing roadbeds will be temporarily used under Alternative 1. To minimize potential effects to water chemistry, temperature, or physical habitat, standard management requirements (SMRs) and BMPs have been developed (Saddle Project EA Appendix B and RHCA Treatment Summary, Appendix C). With proper implementation of these protective measures, including limitations to operations within RHCAs (SMR 11) and restrictions from operating within at least 25 feet of streambanks (SMRs 9, 10), effects from the treatments should not significantly alter BMI habitat attributes identified within this analysis for aquatic species. The meadow restoration actions and road improvement actions proposed under Alternative 1 could have a beneficial effect on BMI habitat by restoring a more sustainable vegetation condition and maintain riparian habitat values. Cumulatively, the existing condition of lacustrine/riverine habitat in the project area should improve, as effects from past activities including railroad logging are being addressed today through restoration projects and changes in management techniques, and as these efforts continue, the future magnitude of these effects should be reduced. The minor and temporary effects of the Saddle Project will not add cumulatively to a level of significance to these conditions. The MIS report concludes that the direct, indirect and cumulative effects of the Saddle Project will not alter the existing trend in the habitat or aquatic macroinvertebrates at the Project level or across the Sierra Nevada bioregion.

Forest Service Sensitive Aquatic Wildlife

The IDT aquatic biologist determined that implementation of the Saddle Project Alternative 1 will not affect the following Forest Service sensitive aquatic species: northern leopard frog, foothill yellow-legged frog, Lahontan cutthroat trout, Great Basin rams-horn snail, Lahontan Lake tui chub, hardhead, California floater, or northwestern pond turtle. For these species, there will be no direct, indirect or cumulative effects because the Saddle Project is outside of the historic range of each species. The aquatic species BE supports the biologist's determination that Alternative 1 may affect individuals of mountain yellow-legged frogs but is not likely to result in a trend toward Federal listing or loss of viability for this species within the planning area of the Tahoe National Forest. The analyses that support these determinations are summarized below and detailed in the Aquatic Species BE, which is incorporated by reference.

During the course of surveys conducted for amphibians within the Saddle Project analysis area (2000-2008), no sightings of mountain yellow-legged frogs (MYLF) were recorded; however, not all habitats were surveyed. Because there is suitable habitat within the Saddle project area, the Aquatics BE concludes that Alternative 1 may affect individuals of mountain yellow-legged frogs, *Rana muscosa*, but are not likely to result in a trend toward Federal listing or loss of viability for this species within the planning area of the Tahoe National Forest.

Direct effects to MYLFs (if they were present) could occur where treatment units are in close proximity to streams and meadow habitat. For instance, individual frogs could be affected by equipment activity associated with mechanical treatments near riparian areas or meadows, and by pile burning, especially when implemented in close proximity to perennial water bodies. To

prevent direct effects, multiple Standard Management Requirements (SMRs) have been developed (see EA Appendix B). For instance, no pile burning or prescribed burn ignitions will occur within 25 feet of riparian vegetation or water courses or within 50 feet of fens and springs under SMR 20. In areas noted by the aquatics biologist as MYLF habitat or breeding areas, a limited operating period (LOP) will be implemented to prevent ground disturbing activities during a time when they are known to move away from stream courses (SMR 28). In addition, use of water drafting sites known to be used by MYLF will be restricted or modified (SMR 28).

Mountain yellow-legged frog habitat could also be affected by project activities under Alternative 1, which could indirectly affect mountain yellow-legged frogs. Stream survey data shows that many stream reaches within the analysis area currently exhibit undesirable habitat characteristics such as unstable stream banks, moderate and high percentages of fine sediment, and low quantities of coarse woody debris. While the SMRs, including equipment exclusion zones per SMRs 4 and 9, will reduce the risk for project activities to negatively affect these resources, there is still a small potential for heavy equipment use to generate fine sediment. In addition, due to the existing condition of the area as well as the Saddle project need to reduce hazardous fuels and complete the DFPZ, coarse woody debris will be reduced through a decrease in future log recruitment (by removing current small trees) and reduced associated duff layers. Proposed Action elements 3, 4, and 5 were designed to reduce this risk with consistency to the 2004 SNFPA, and SMR 19 (EA Appendix B) will mitigate risk with additional down wood retention in targeted areas.

(2) Degree to which the Proposed Action Affects Public Health and Safety

Alternative 1 will have no adverse effects on public health and safety as detailed in the Human Health and Safety analysis for the Saddle project and the *Health and Safety and Ecological Risk Evaluation for Borax Stump Treatment* (both incorporated by reference and available upon request). Occupational Safety and Health Administration (OSHA) regulations apply to silvicultural activities and road maintenance, improvement and construction, which will help prevent accidents and injuries in the course of project operations. As discussed under FONSI Element #1 above and detailed in the *Saddle Project Fire and Fuels Analysis*, Alternative 1 will create a safer firefighting environment, and will improve stand health to aid in suppression efforts by slowing fire spread, reducing the potential for crown fire, and allowing for greater connectivity of existing treatments.

Smoke from burning in the Saddle Project area near Calpine could potentially temporarily affect the Calpine community area, potentially affecting visibility, safety, and/or human health. As wind generally trends from the southwest in the Sierraville District, there is a potential for some smoke to drift north or east and affect the communities of Portola and Loyaltan, and homes in the Sierra Valley. As these are more than 5 miles away, the smoke is likely to be dispersed. Mitigation of smoke impacts will consist of elements discussed in the *Saddle Air Quality Report*, including burning under favorable atmospheric conditions; limiting acres burned daily; allowing piles to dry before ignition; and ceasing ignition if smoke dispersion conditions degrade. Monitoring of smoke transport is required by Northern Sierra Air Quality Management District (NSAQMD) in the smoke management plan. Daily coordination with NSAQMD and review of a daily spot weather forecast from the Redding Fire Weather office is required prior to igniting any prescribed fire.

A Human Health and Safety and Ecological Risk Evaluation for Borax Stump Treatment (Borax Risk Assessment) has been completed for the Saddle Project and is attached to the Forest Vegetation Report. The analysis finds that the proposed application of borax on cut conifer stumps to minimize the spread of Annosus root disease will not pose a risk to workers or the public when federal, state and local regulations and BMPs for the use of pesticides are strictly adhered to, including spill contingency planning, following label requirements, and use of personal protection equipment during application.

(3) Unique Characteristics of the Geographic Area

This element includes unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. No parklands, prime farmlands, wild and scenic rivers, or ecologically critical areas will be affected by any proposed treatments under Alternative 1. This project area has been surveyed and analyzed for historical and cultural resources. Results of that work determined that Alternative 1 will have no effect on any historical or cultural resources eligible for the National Register of Historic Places, nor will it cause the loss or destruction of any significant cultural or historical resources. The project has been designed to avoid impacts on historical and cultural resources through implementation of mitigation measures specified in *Appendix B* of the Saddle Project EA (SMRs 25, 26 and 27 and Contract Clause C6.24# - Site Specific Special Protection Measures).

(4) Degree to which Effects on the Human Environment are Likely to be Highly Controversial

While concerns were expressed by some individuals during public collaboration and scoping about the Proposed Action, the effects of this project on the quality of the human environment are not likely to be highly controversial due to the limited size of the project area, limited scope of Alternative 1 and the effectiveness of the project design features and management requirements (detailed in Chapter 2 and EA *Appendix B*) in reducing impacts on forest resources. The project is designed to improve existing conditions regarding ecological resiliency and heterogeneity, and to restore meadow, oak and aspen communities. It will more fully establish the DFPZ fire suppression abilities. Members of the public suggested the examination of an alternative that is consistent with the 2001 Forest Plan amendment; EA *Appendix F* presents how this was considered but eliminated from detailed consideration by the interdisciplinary team. While some opposition to the Herger-Feinstein Quincy Library Group Forest Recovery Act and 2004 SNFPA ROD does exist on the part of some individuals and groups, the environmental effects of this project are unlikely to be highly controversial.

(5) Degree to which the Possible Effects on the Human Environment are Highly Uncertain or Involve Unique or Unknown Risks

Alternative 1 is similar to projects that have been implemented on the Sierraville Ranger District on the Tahoe National Forest for at least the past 10 years without significant impacts. Project design elements included in Alternative 1 will reduce and minimize to the point of non-significance any impacts that might have otherwise been uncertain, unique, or unknown.

(6) Degree to which the Action May Establish a Precedent for Future Actions with Significant Effects or Represents a Decision in Principle about a Future Consideration

Alternative 1 will not establish a precedent for any future action, nor represent a decision in principle about a future consideration. The decision will apply only to the Saddle Project, as described in EA Chapter 1. Any future actions will be analyzed separately and on their own merits through additional environmental analysis and decision making in compliance with NEPA.

(7) Whether the Action is Related to Other Actions with Individually Insignificant but Cumulatively Significant Impacts

A cumulative effect is the consequence on the environment that results from the incremental effect of the action when added to the effects of other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes the other actions and regardless of land ownership on which the actions occur. An individual action when considered alone may not have a significant effect, but when its effects are considered in sum with the effects of other past, present, and reasonably foreseeable future actions, the effects may be significant.

In cumulative effects analyses, current resource conditions are used to represent the composite of past actions and natural events that have taken place within the project area. This environmental analysis does not attempt to quantify the effects of past human actions by adding up all prior actions on an action by action basis. There are several reasons for not taking this approach. First, a catalog and analysis of all past actions will be impractical to compile and unduly costly to obtain. Current conditions have been impacted by innumerable actions over the last century (and beyond), and trying to isolate the individual actions that continue to have residual impacts will be nearly impossible. Second, providing the details of past actions on an individual basis will not be useful to predict the cumulative effects of Alternative 1. In fact, focusing on individual actions will be less accurate than looking at existing conditions, because there is limited information on the environmental impacts of individual past actions, and one cannot reasonably identify each and every action over the last century that has contributed to current conditions. Additionally, focusing on the impacts of past human actions risks ignoring the important residual effects of past natural events, which may contribute to cumulative effects, just as much as the human actions. By looking at current conditions, we are sure to capture all the residual effects of past human and natural events, regardless of which particular action or event contributed those effects. Finally, the Council on Environmental Quality issued an interpretive memorandum on June 24, 2005 regarding analysis of past actions, which states, “agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions.” For these reasons, the analysis of past actions in this document is based on current environmental conditions.

The cumulative effects analysis in this EA is also consistent with Forest Service National Environmental Policy Act (NEPA) Regulations (36 CFR 220.4(f)) (July 24, 2008), which state, in part:

“CEQ regulations do not require the consideration of the individual effects of all past actions to determine the present effects of past actions. Once the agency has identified those present effects of past actions that warrant consideration, the agency assesses the extent that the effects of the

proposal for agency action or its alternatives will add to, modify, or mitigate those effects. The final analysis documents an agency assessment of the cumulative effects of the actions considered (including past, present, and reasonable foreseeable future actions) on the affected environment. With respect to past actions, during the scoping process and subsequent preparation of the analysis, the agency must determine what information regarding past actions is useful and relevant to the required analysis of cumulative effects. Cataloguing past actions and specific information about the direct and indirect effects of their design and implementation could in some contexts be useful to predict the cumulative effects of the proposal. The CEQ regulations, however, do not require agencies to catalogue or exhaustively list and analyze all individual past actions. Simply because information about past actions may be available or obtained with reasonable effort does not mean that it is relevant and necessary to inform decision-making (40 CFR 1508.7).” For these reasons, effects analyses of past actions in this part are based on existing environmental conditions.

Past, present and reasonably foreseeable future actions

Each resource specialist established geographic and temporal boundaries for their respective cumulative effects resource analysis, and determined past, present and reasonably foreseeable future effects that are relevant within their respective boundaries. The following actions were relevant to most of the resources:

Present and Reasonably Foreseeable Future Actions: The following Forest Service projects occur within the Saddle Analysis Area that has been delineated to assess cumulative effects for most of the potentially affected natural resources and riparian areas. Ongoing vegetation management activities within the analysis area on National Forest Service System (FSS) land include hazard tree reduction along primary FSS routes and fuels reduction treatments via prescribed burning under the Borda Project, which is expected to continue 1-3 years into the future before completion. The Saddle and Borda Project share common objectives for forest health and fuels reduction, however, desired conditions for forest vegetation under the Saddle Project place a stronger emphasis on ecosystem restoration. The Beckworth allotment is the only grazed allotment within the analysis area, and it is currently grazed by one band of sheep (735 sheep), and 40 cow/calf pairs. The allotment management plan was revised through the NEPA process during the Carman Watershed Restoration Project in 2000. The Brumby Project is a Sierraville FS thinning project adjacent to Calpine, and will thin approximately 154 acres. The Maybe Project, implemented by the adjacent Plumas NF Beckwourth RD, has thinned 2,345 acres, and will complete fuels management activities (burning of piles and underburning) over the next 3 years.

Ongoing and foreseeable future timber management on private land within the Saddle Project analysis area include timber harvest on 102 acres under two Timber Harvest Plans and the harvest of dead/diseased trees, Christmas trees, and fuelwood under three approved Exemptions on file with the California Department of Forestry and Fire Protection (CALFIRE). Two approved Non-Industrial Timber Management Plans (NITMP), which have no expiration date are also on file with CALFIRE. The Railroad NITMP plan covers 592 acres of Individual Tree Selection and Group Selection silvicultural systems to maintain growth and yield over time under an uneven-aged stand structure. To date one commercial entry has been made. The Coyote NITMP permits single tree selection on 2,049 acres with removal of timber products on a sustained yield basis. One harvest entry is scheduled over the next 10 years under this plan.

According to the Coyote NITMP, harvest will result in positive impacts to forest health as suppressed, intermediate or otherwise low-vigor trees are harvested, redistributing growth onto fewer, more dominant trees, leading to increased stand vigor and increased resiliency to fire, insects and pathogens.

The Sierra County Fire Safe and Watershed Council has completed fuels reduction on small private land ownerships in the vicinity of Calpine, California that complements the fuels reduction treatments completed on NFS land under the Borda Project. Future projects on these small ownerships are likely to continue within the analysis period in the vicinity of the Calpine community, depending on available funding and landowner interest.

Notable past actions: Watershed restoration activities on national forest lands within the analysis area have been completed under the Carman I Project, and are planned under the Carman II Watershed Restoration Projects. These projects are designed to restore the hydrologic function of watersheds that have been significantly degraded by historic grazing practices, railroad and road construction and timber harvest. Completion of these projects will effectively raise the water table to historic levels, and restore hydrologic function of the Carman Valley, Knuthsen and Folchi Meadows, as overland flow is returned to historic channels. Implementation of plug and pond and other techniques to date have already yielded positive results on restoring meadow vegetation and function. Meadow restoration and enhancement, including aspen restoration, as proposed by the Saddle Project will contribute cumulative beneficial effects toward restoring the role of meadows in moderating flow through storage of water in soils, vegetation, and subsurface aquifers. These beneficial effects include a reduction in peaks and extension of late season flow, which create favorable conditions for the reestablishment of meadow vegetation.

In 2003 the Borda Project was developed by the Forest Service in the eastside pine forest type near Calpine to establish the initial Defensible Fuels Profile Zone (DFPZ). The project was a first-step effort to reduce overstocked conditions and hazardous fuels conditions along the most accessible terrain, such as areas along major roads and areas adjacent to Calpine. Prescribed burning activities are still being completed in the project area.

Soils

As detailed in the Saddle Soils Report, there are no foreseeable cumulative effects from Alternative 1 to soil cover or organic material (large woody debris or coarse or fine organic material) due to acceptable existing conditions and resource protection measures that will prevent effects associated with implementation of Alternative 1. Soil porosity (measured as compaction) in several localized areas is at risk of cumulative effects; although as described below, this risk is mitigated by protection measures.

Legacy compaction from previous actions currently exists in group selection treatment units 6804062, 6804014, 6804010, and 6804040. In these units, the extent of compaction exceeds the Forest Plan standard and guideline for soil porosity. Activity area 6804040 has legacy compaction levels that exceed the standard and guideline (>15% of the activity area). However, the extent of compaction in this unit has a low potential to affect soil productivity primarily due to the gravelly components in these major soils. Much of the compaction in this unit is attributed to recreational use adjacent to the road. Three other activity areas 6754024, 6854043 and 6804007 have a high legacy compaction and are at risk for exceeding compaction standards. Of these units, only activity area 6854043 has a risk of impairing productivity and that risk is

considered low based on soil texture. In conclusion, although one unit currently exceeds the soil porosity standard and three others are at risk of exceeding the standard, impairment to long-term soil productivity is not expected in these four units under implementation of Alternative 1.

Under Alternative 1 these existing compaction levels could be maintained or may be improved through implementation of Standard Management Requirement (SMR) 19. With implementation of Alternative 1, there will be a reduction in the existing compaction extent when; 1) existing compacted skid trails not previously sub-soiled are sub-soiled, or 2) where group selections placed over previously compacted soils are sub-soiled.

Hydrology: Cumulative Watershed Effects

Cumulative watershed effects are the combined effects of past, present, and future land management activities within a watershed that may affect the watershed's hydrologic structure or process. The Forest Service's Pacific Southwest Region uses a standardized analysis process to assess the potential risk of cumulative watershed effects resulting from management activities (FSH 2509.22). This cumulative watershed effects analysis compares (a) the existing level of land disturbance within a watershed with (b) an estimate of the upper limit of watershed tolerance to disturbance, referred to as the Threshold of Concern (TOC). The level of land disturbance is measured using Equivalent Roaded Acres (ERAs), in which all disturbances are equated to an acre of road. The cumulative watershed effects analysis then recovers these disturbances over some period of time following a specified recovery curve. The existing ERA of a watershed is compared to the TOC to provide an assessment of the potential for cumulative watershed effects. The Saddle Project Cumulative Watershed Effects Assessment (CWEA) details the ERA methodology and analysis for this project. (Refer to the CWEA Report and attachments for more information, which are incorporated by reference and available upon request).

The spatial boundary for the CWEA analysis was selected to capture the full extent of the watersheds that drain the project area and surrounding upland areas. Saddle Project area discharges to the Sierra Valley from the headwaters of the Middle Fork of the Feather River; this discharge defines the spatial boundaries of the CWEA. The headwater watersheds include the Berry Creek Catchment and the Carman Creek Catchment at the HUC 6 level. Within the Berry Creek Catchment, drainages that were assessed for disturbance at the HUC 7 level include Turner Canyon, Fletcher Creek and an Unnamed Tributary to Sierra Valley. Within the Carman Creek Catchment drainages that were assessed for disturbance at the HUC 7 level include West Fork Carman Creek, East Fork Carman Creek, and Folchi Meadows. Eleven acres are proposed for treatment near the apex of the drainage divide between the Headwaters of the North Yuba River and the Sierra Valley Watershed. Because the vegetation treatment is near the divide and because there are no considerable up-gradient disturbances to impact this area, no change in the ERA ratio will result from this action and it is not further considered in the ERA analysis. The maximum potential ERA/TOC ratios by watershed are presented in Tables 4a and 4b.

Within the Berry Creek Catchment, the Unnamed Tributary to the Sierra Valley and the Turner Creek watersheds were determined to have ERA ratios below 0.64. However, the proposed treatment in Fletcher Creek was determined to exceed the TOC with a ratio of 1.34 under Alternative 1. Within the Carman Creek Catchment, the West Fork Carman Creek and Folchi Meadows drainages have ERA ratios below 0.71. However, the proposed treatment in the East Fork Carman Creek will exceed the TOC with a ratio of 1.12 under Alternative 1.

Cumulative Effects Risk Assessment

Site-specific factors related to assessing the cumulative effects and considering the estimated risk are described in the following paragraphs.

Table 4a: Results for the Saddle Project Affected Watersheds ERA/TOC ratios: Sierra Valley HUC 6 Catchment – Berry Creek

HUC 7 Drainage (acres)	Existing 2011 ERA/TOC Pre-project	Maximum Future ERA/TOC	Risk of Cumulative Effects
Turner Creek (4394.4)	0.5	Alt 1:0.64	Unlikely
Unnamed Tributary (4352.8)	0.41	Alt 1:0.51	Unlikely
Fletcher Creek (4354.8)	0.80	Alt 1: 1.34	Alt 1: Moderate Alt 3: Low
The maximum ratios are based on maximum ERAs over the years analyzed.			

Table 4b: Results for the Saddle Project Affected Watersheds ERA/TOC ratios: Sierra Valley HUC 6 Catchment – Carman Creek

HUC 7 Drainage (acres)	Existing 2011 ERA/TOC Pre-project	Maximum Future ERA/TOC	Risk of Cumulative Effects
East Fork Carman Creek (5701.9)	0.70	Alt 1:1.12	Alt 1: Low Alt 3: Unlikely
West Fork Carman Creek (4979.3)	0.43	Alt 1:0.71	Unlikely
Folchi Meadows (4305.6)	0.25	Alt 1:0.28	Unlikely
The maximum ratios are based on maximum ERAs over the years analyzed.			

The Equivalent Roaded Area analysis indicates the 7th field HUC exceeds threshold in Fletcher Creek and in the East Fork of Carman Creek. A brief synopsis of the relationship of risk and known information regarding these two watersheds are discussed below. Each area's risk analysis is also discussed and compared by alternative in the following paragraphs.

With additional restoration implemented in the East Fork of the Carman Creek area, the TOC will increase based on improved channel hydrology. The change in the TOC will effectively reduce the ERA when channel recovery occurs. Currently, plans to implement the restoration designs in the East Fork, West Fork of Carman Creek and in Folchi Meadows are underway. Implementation of portions of the reaches proposed to be restored are expected within 2 to 5 years; however, as implementation is based on funding it is uncertain when implementation of identified areas needing restoration will occur. Due to the uncertainty of timing of implementation and due to recovery time following implementation (approximately 5-10 years), these benefits are not incorporated into the ERA analysis. Without restoration, the ERA estimate results for this watershed remain above threshold for four years following the first year of implementation of Alternative 1. The ERA relationship with the TOC could result in the ERA below threshold, depending on timing of restoration versus project implementation.

Alternative 1 shows there is a risk of cumulative effects by the Equivalent Roaded Area method for the 7th field HUC in Fletcher Creek and the East Fork of Carman Creek exceed the threshold. The risk of cumulative effects from implementing the proposed action in Fletcher Creek is determined to be moderate under Alternative 1 based on the resulting TOC/ERA ratio of 1.34. The risk of cumulative effects from implementing the proposed action in the East Fork Carman Creek drainage is low under Alternative 1 based on the resulting TOC/ERA ratio of 1.14. Alternative 1 meets the RMO direction by improving hydrologic processes that reduce sediment, and improve hydrologic function for flood routing, channel stability and riparian health.

The following site-specific factors are expected to moderate the risk in the Fletcher Creek Drainage:

- The north facing aspect at the southern extent of the watershed has moist springs and available water that can result in healthy root system and riparian vegetation surrounding the drainages,
- The fractured bedrock substrate in this watershed may contribute to reduction in cumulative effects from mechanisms related to subsurface water movement and soil storage capability, and
- Management requirements minimize the potential for impacts.

These factors could aid in quicker stability of the system following project implementation and as the current stream channel conditions are in relatively good condition with riparian vegetation surrounding the drainages and have fair access to the floodplain, the system may provide an additional resiliency minimizing potential cumulative effects.

The following site-specific factors are expected to moderate the risk in the East Fork of Carman Creek Drainage:

- The existing conditions of the stream channel due to historic actions are already in a degraded environment that will be improved with restoration of the meadows.
- Implementation of proposed restoration activities will provide improved future watershed conditions not accounted for at this time.
- Management requirements minimize the potential for impacts.
- Where Carman Creek Restoration actions are implemented before the first large precipitation event following treatment, the risk of cumulative effects could further be reduced.

Project design features, including BMPs and other management requirements described in EA Appendix B, along with regional BMP monitoring practices reduce the potential for impacts for sediment increases above background levels in proposed vegetation treatment units. The proposed actions will meet the requirements set within the purview of the Central Valley Regional Water Quality Board, and the monitoring plan required by the Central Valley Water Quality Board. Water quality measures used to control sediment production and transport and to reduce the potential for sediment increases above background levels will achieve the objective for the highest water quality consistent with maximum benefit to the people of the State.

Aquatic Wildlife

The spatial extent of the aquatic wildlife cumulative effects analysis area included the following subwatersheds: East Fork of Carmen Creek, West Fork of Carmen Creek, Carmen Creek, Fletcher Creek and Turner Canyon. This analysis area was chosen since it considers the riparian habitats associated with the proposed Saddle Project, and the overall conditions of the watershed that the mountain yellow-legged frog (MYLF) may inhabit. The temporal scale for future foreseeable actions extends from the present to 2020. While multiple reaches on National Forest land were surveyed and no MYLF were identified, similar surveys could not be conducted on private land. In addition, the report concluded that because there is suitable habitat present, there may be direct or indirect effects to unknown MYLF within the analysis area. The Aquatics report concluded that the proposed activities of Alternative 1 in RHCAs, in conjunction with ongoing recreational activities and livestock grazing, may affect MYLF, if they are present. It determined that the meadow restoration activities of Alternative 1 may also pose short-term, minor effects to MYLF, although the protection measures restricting mechanical equipment access, and requiring specific implementation timing and site conditions will decrease potential effects to an insignificant level. In addition, if MYLF are detected in the project area, SMR 28 will limit project implementation to favorable times for MYLF species. In the long term, the Saddle Project in conjunction with the Carman watershed restoration projects will have beneficial effects by restoring meadow habitat.

Terrestrial Wildlife

Potential contributing factors to cumulative effects on wildlife were considered within a 31,999 acre Saddle Wildlife Analysis Area. FONSI element #1 FS Sensitive Terrestrial Wildlife summarizes the potential direct or indirect effects. None of the potential cumulative effects summarized below will be significant effects. The following information is available in detail in the Saddle Project Wildlife BE.

California spotted owl (CSO): The CSO cumulative effects analysis spatially included all Home Range Core Areas, Protected Activity Centers, Habitat Areas and suitable habitat within 1.5 miles of the proposed treatment units. Temporally, it analyzed between 1980 to 2012. There could be potential cumulatively beneficial effects to CSO habitat from prescribed fire on approximately 1,512 acres under Alternative 1 (Maybe 433 acres, Brumby 134 acres, and Saddle 946 acres). The cumulative effects from thinning will be a reduction of 542 acres of nesting habitat (Brumby 114, Saddle 429) converted to foraging habitat for Alternative 1. There will also be a potential beneficial cumulative effect from thinning by increasing prey visibility and CSO maneuverability of 801 acres (Brumby 134 acres, Saddle 667). There will not be a cumulative reduction of suitable CSO habitat.

Northern goshawk: The goshawk cumulative effects analysis spatially included all goshawk PACs and potentially suitable goshawk habitat that may be affected by proposed activities, and suitable habitat within 1.5 miles of the proposed units. Temporally, cumulative effects were analyzed between 1980 to 2012. Alternative 1 will reduce approximately 105 acres of goshawk nesting habitat as a result of meadow and aspen restoration activities. The Brumby Project will reduce the quality of goshawk habitat on 152 acres by thinning it to approximately 40% canopy cover with subsequent underburning. Under the Maybe Project, underburning will not change the CWHR classification, but is expected to improve foraging habitat on 778 acres by increasing the maneuverability of foraging goshawks and increase the prey detectability. The cumulative effect

of these three projects is a relatively small reduction in habitat quality (compared to the existing amount of suitable habitat) and a beneficial increase in foraging habitat. *American marten*: The marten cumulative effects analysis spatially included all potentially suitable habitat within 1 mile of the proposed units. Temporally, cumulative effects were analyzed between 1980 to 2012. Cumulatively, the Brumby Project will have minimal short term indirect effects to the quality of preferred marten habitat on 128 acres. The Maybe Project will add cumulatively to a short term reduction in the quality of preferred marten habitat within the Saddle Project analysis area of approximately 343 acres. In sum, there will be a cumulative reduction in the amount of preferred marten habitat of 24 acres with meadow restoration in Alternative 1; see FONSI element #1. There will be a cumulative short term reduction in the quality of preferred marten habitat on 1,511 acres. This effect will not be significant in the context of existing potentially suitable marten habitat on 31,999 acres of publically-owned and private land (in light of reasonably foreseeable future actions on private lands described above) within the cumulative effects analysis area.

Sierra Nevada red fox: The red fox cumulative effects analysis spatially included all potentially suitable habitat within in the 31,999-acre wildlife analysis below 6,800 feet. Temporally, cumulative effects were analyzed between 1990 to 2010 but also included historical logging projects before 1990. Large snags and down logs will be retained within the treatment units of the Saddle Project as well as other Forest Service projects implemented in the cumulative effects analysis area. The Brumby Project and the Maybe Project do not plan or are not expected to negatively affect any meadows within Sierra Nevada red fox habitat, and therefore will not add cumulative effects to the indirect effects on Sierra Nevada red fox habitat associated with Alternative 1, as previously disclosed under FONSI Element #1.

Wolverine: The wolverine cumulative effects analysis spatially included all potentially suitable habitat within in the 31,999-acre wildlife analysis area with elevations between 6,800 and 4,950 feet, including potentially suitable habitat 1 mile from proposed treatments. Temporally, the cumulative effects analysis considered vegetation and disturbance activities from 1980 to current known activities, and included reasonably foreseeable activities that are expected to continue (such as recreation) or are planned (private and USFS vegetation treatments) to approximately 2012. As previously discussed, Alternative 1 will have long-term beneficial effects on wolverine habitat as treated stands will be more fire resilient with a higher probability of persisting in the event of a wildfire. Similar effects are associated with treatments under the Borda and Maybe Projects as well as reasonably foreseeable future activities on private lands (as previously described). Hence, implementation of Alternative 1 is not expected to result in adverse cumulative effects on the wolverine.

Pallid bat, Townsend's big-eared bat, western red bat: The Forest Service's ongoing and planned thinning projects (Brumby and Maybe Projects) are all designed to retain large trees by thinning from below. Therefore, the thinning prescriptions will not add cumulatively to habitat loss, and will not disturb potential day roost sites for pallid bat. There are no caves, mines, or buildings planned for removal or decommissioning from these projects. For the Townsend's big-eared bat, since there are no expected direct or indirect effects to Townsend's big-eared bat, there will be no cumulative effects. For the western red bat, the proposed activities are not expected to have measurable direct, or indirect effects to western red bats or their habitat. Since there will be no direct or indirect effects there will be no cumulative effects on this species.

Management Indicator Species (MIS)

FONSI element #1: Beneficial and Adverse Impacts discloses the determinations by the MIS Report regarding cumulative effects.

Botanical Resources

As discussed in FONSI element #1, The Saddle Project Biological Evaluation for Sensitive Plants determined that there are known occurrences of the Forest Service (FS) Sensitive plants *Ivesia sericoleuca* (Plumas ivesia) and *Pyrrocoma lucida* (sticky pyrrocoma) within the Alternative 1 treatment areas that may be affected by Alternative 1. The Evaluation determined that because habitat for the following FS sensitive plants is present in treatment areas (although no occurrences of these species have been found during surveys of the project area), these species may be affected by Alternative 1: *Botrychium ascendens*, *B. crenulatum*, *B. lunaria*, *B. manganense*, *B. montanum*, *Bruchia bolanderi*, *Epilobium howellii*, *Fissidens aphelotaxifolius*, *Helodium blandowii*, *Hydrothyria venosa*, *Meesia triquetra*, *M. uliginosa*. The FS Sensitive Fungi *Cudonia monticola*, *Dendrocollybia racemosa*, *Phaeocollybia olivacea* may also be present in the treatment areas. Because potential habitat exists in the project area, the absence of these fungi cannot be determined during surveys since there is no way to determine whether the underground portion of the fungus (mycelia) is present. The geographical boundary for cumulative effects to the FS sensitive plant species is the eastside Tahoe National Forest because these species are rare but widely ranging within California or around the world. The temporal boundaries of the cumulative effects analysis range from the beginning of intensive land use in the project area (the early 1900s) to the foreseeable future projects. The Sensitive Plant BE evaluated projects and activities listed in the past, present and reasonably foreseeable future actions section above.

The Saddle Project Sensitive Plant BE found that *Botrychium ascendens*, *B. crenulatum*, *B. lunaria*, *B. manganense*, *B. montanum*, *Bruchia bolanderi*, *Epilobium howellii*, *Fissidens aphelotaxifolius*, *Helodium blandowii*, and *Hydrothyria* have a low potential to be cumulatively affected by Saddle Project. Although none are known to occur in current and future project areas including Billabong, Outback, Dingo, Kangaroo, Dinkum, Sagehen, Mix, or Transmission Line 132, there is a potential for future detections, although there is a low likelihood of being affected. The species *Meesia triquetra* and *Meesia uliginosa venosa* have a potential to be cumulatively affected, as may they occur adjacent the fens or riparian vegetation that are targeted by the Outback and Dingo Projects, and in allocations in those project areas. While they have not been detected in the Saddle Project area there is possibility that they exist adjacent to the meadows or riparian features targeted for restoration actions. The direct and indirect impacts to *Pyrrocoma lucida* and *Ivesia sericoleuca* in the Saddle Project and other projects are expected to be cumulatively minor and possibly beneficial because few are present in projects, and the watershed and meadow restoration actions planned to occur may provide more water to the occurrences.

Fire and Fuels

The area for the fire and fuels cumulative effects analysis is the project area and its relation to adjacent fuels projects. Approximately 71% of the acres proposed for treatment by Alternative 1 contribute to the Defensible Fuel Profile Zone (DFPZ). Ongoing and planned prescribed burning under the Borda Project, and follow up fuels treatments under Alternative 1, in conjunction with

those proposed on the Plumas NF and private land within the analysis area will lead to reduced fire effects, including decreased fire severity, damage to residual trees, suppression costs and post-fire rehabilitation needs. By expanding the DFPZ network that was initiated by the Borda Project and by HFQLG projects on the adjacent Plumas National Forest, implementation of Alternative 1 will have cumulatively beneficial effects, including: connectivity with existing or planned DFPZs, improvements in the safety and suppression capabilities of firefighters, and reduction in the potential fire severity and extent on National Forest and private land within the analysis area. Under Alternative 1 the effectiveness of the mechanically-thinned units will last for more than 20 years. The contributions of the hand/mastication/grapple treated units in Alternative 1 will add to the efforts on adjacent private and public land to reduce fire severity and improve the safety and efficacy of fire suppression efforts, lasting approximately 13 to 15 years. After that time, another treatment will likely be needed in the majority of the proposed treatment units, to reduce conifer density and potential accumulations of hazardous fuels.

Vegetation

In recognition of the vital role that fire plays in forest ecosystems and the radical departure from the historic fire regime, the Saddle Project Vegetation Analysis area for cumulative effects on forest vegetation is delineated by prominent landscape features surrounding the project area that could profoundly affect wildfire behavior and act as barriers to fire spread. The analysis area is delineated as follows: to the west by the ridgeline that separates the Sierraville and Yuba River Ranger Districts, to the south and southeast by State Route 49, to the east by the Sierra Valley floor, and to the north by a ridgeline that separates the Plumas and Tahoe National Forests as it descends toward the Sierra Valley. The analysis area encompasses approximately 23,235 acres.

The cumulative effects of implementing Alternative 1, in conjunction with ongoing and foreseeable future forest management projects on National Forest and private land will result largely in beneficial cumulative effects on forest heterogeneity and resiliency throughout the analysis period, particularly where mechanical treatment and product removal is proposed. Together, the efforts to thin overstocked conifer stands on private and public land will increase forest resiliency against density-dependent mortality factors e.g., drought, insects, disease, parasites and fire. These efforts are particularly important in reducing the potential for widespread conifer losses across the landscape, under a changing climate. Group selection harvest will complement efforts by the Coyote NITMP on private land to introduce a new age class and initiate uneven aged structure to forest ecosystems, thereby increasing age/size class heterogeneity. The cumulative benefits of hand/mastication/grapple piling and burning, in conjunction with fuels reduction activities on all other ownerships are not as great as under mechanical/removal treatments, due to the lower harvest diameter limit. The harvest limit of ≤ 11 " dbh reduces: the duration of treatment efficacy, and the ability to provide a favorable microclimate for the most vigorous and most fire resistant trees, through the removal of larger diameter, less fire-resistant species.

Air Quality

Prescribed underburning under the Borda Project is anticipated to be completed in 2012 and 2013 by the Sierraville Ranger District. It is anticipated that the Plumas National Forest will complete underburning and burning of piles under the Mabie Project through 2014. Prescribed burning follows strict timing and weather restrictions, will follow the Smoke Management Guidelines for Agricultural and Prescribed Burning contained in Title 17 of the California Code

of Regulations, and coordinates with NSAQMD and review of a daily spot weather forecast from the Redding Fire Weather office is prior to igniting any prescribed fire. Because of mandatory restrictive elements described in element 1 as well as project design measures there will be no cumulative effects to Air Quality due to the Saddle Project.

Application of Borate compounds

The analysis boundaries for the application of boron coincide with the vegetation management boundaries. The Saddle project will be implemented within the next 5 years. Cumulative impacts from borax treatment of cut stumps are not expected within the project area, as boron generally dissipates within one year or less of application. Past applications of boron to cut stumps, such as during previous timber harvest activities within the past 10 years will have been implemented at a rate similar to that proposed by the Saddle Project and potential effects will not be measurable at the present time, due to the dissipation of the product. No other projects associated with the HFQLG Pilot Project are currently planned within the analysis area. Adverse effects associated with borax application from future timber harvest activities on private land are not expected to be significant, since private landowners will be required to comply with all applicable county, state and label requirements.

(8) Degree to which the Action May Adversely Affect Properties Listed in or Eligible for the National Register of Historic Places, or May Cause Loss of Significant Scientific, Cultural or Historic Resources

Project implementation will have no impact on districts, sites, highways, structures, or significant scientific resources. A record search, field survey, resource inventory, and Heritage Resource Report (TNF02227/R2009051700013) have been completed for this project, under provisions of the Programmatic Agreement with the advisory council on Historic Preservation and the California State Historic Preservation Office (SHPO), in compliance with Section 106 of the National Historic Preservation Act. Assessment of historical and cultural resources within the project area indicates implementation of this project will not affect any heritage resource eligible for listing in the National Register of Historic Places, nor will it cause loss or destruction of any significant cultural or historical resources. Known prehistoric or historic sites will be protected through flag and avoidance during project implementation. If any new heritage resources are discovered during project implementation, operations will cease in the area of new discovery until adequate protection measures were agreed upon with SHPO.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973

Threatened and endangered species (T&E): The Fish and Wildlife Service is contacted every 90 days to obtain a current list of threatened, endangered, proposed, and candidate species that may be present on the Tahoe National Forest. The most recent list was dated April 25, 2011 and is available for review at the Sierraville District Office. Biological Assessments (BAs) document the assessment of the potential effects of this project on federally listed threatened or endangered aquatic, plant and terrestrial wildlife species and their habitat. In the Saddle Project Plant BE/BA, the Eastside botanist determined that there are no direct, indirect, or cumulative effects to T&E plant species anticipated for this project because none are known to occur on the Tahoe

National Forest at this time. In the Saddle Project Wildlife and General Aquatic Resource BE/BAs, the Wildlife and Fisheries/Aquatics Biologists determined that the Saddle Project Alternative 1 will not affect the T&E species valley elderberry longhorn beetle, California red-legged frog, mountain yellow-legged frog (Federal Candidate species *Rana sierra*) or Lahontan cutthroat trout or their designated critical habitat because the project is outside the range of the species or due to a lack of suitable habitat.

(10) Whether the Action Threatens a Violation of Federal, State, or Local Law or Requirements Imposed for the Protection of the Environment

The Environmental Assessment, its appendices and documents incorporated by reference and available upon request consider the best available science to insure the scientific integrity of the discussions and analyses. Specifically, the EA and its associated documents identify methods used, reference scientific sources relied on, discuss responsible opposing views, and disclose incomplete or unavailable information per 40 CFR, 1502.9 (b), 1502.22, 1502.24.

This project complies with the Clean Water Act through use of "Best Management Practices" designed to minimize or prevent the discharge of both point and non-point source pollutants from Forest roads, developments and activities. Under the Clean Water Act regulations, the Forest Service is required to obtain permits from the Central Valley Regional Water Quality Control Board (RWQCB). The Forest Service is working with the RWQCB to secure the appropriate permit(s) for this project, as discussed in Section III of this element below.

I. National Forest Management Act

Alternative 1 is fully consistent with the management direction, including Standards and Guidelines, in the Tahoe National Forest Land and Resource Management Plan (LRMP, 1990), as amended by the HFQLG FEIS ROD (1999) and the HFQLG FSEIS ROD (2003), and the 2004 SNFPA FSEIS ROD (2004) and Sierra Nevada Forests Management Indicator Species Amendment (2007). Alternative 1 is designed to implement HFQLG Forest Recovery Pilot Project objectives. The LRMP and its amendments were developed in accordance with the National Management Act of 1976 (16 USC 1604 (i) and 36 CFR 219.10 (e)).

The LRMP Management Areas that apply to the Saddle Project are:

- MA 007 – Calpine
- MA 001 – Carman
- MA 008 – Chapman
- MA 013 – Forty-Niner

The primary LRMP resource management goals and objectives that guide the proposal include:

1. Achievement of the goals and objectives of the Herger-Feinstein Quincy Library Group Forest Recovery Act (1998) and the HFQLG Forest Recovery Pilot Project. (2004 SNFPA ROD, page 11)

Alternative 1 is designed to be consistent with the management direction for the HFQLG Pilot Project defined in the Sierra Nevada Forest Plan Amendment (SNFPA) FSEIS ROD (2004) on pages 66 through 69. It will contribute toward achievement of the goals and objectives of the

HFQLG Pilot Project, including implementation of resource management activities and riparian management of the HFQLG Forest Recovery Act.

2. Protecting old forest ecosystems and associated species. (2004 SNFPA ROD, page 31)

The old forest conservation goals and strategies in the Tahoe National Forest LRMP guide management to increase the frequency of large trees, and increase the structural diversity of vegetation, while protecting, increasing and perpetuating desired conditions of old forest ecosystems and conserving species associated with these systems.

The silvicultural prescriptions under Alternative 1 follow 2004 SNFPA ROD, and emphasize establishing structural diversity in both DFPZ and ITS areas. The Radial thinning prescription will accelerate the development of large size trees, and the variable thinning will establish and enhance structural diversity in otherwise second-growth, fairly homogenous stands. No trees greater than 30" dbh will be removed under Alternative 1, and no changes in CWHR size classifications are expected, with the exception of units in which removal of the smallest trees may raise the average tree size. For example, in thinning units characterized by predominantly small diameter trees, removal of the smallest trees is expected to raise the average tree size from CWHR size class 3 to size class 4, and in meadow enhancement units, the removal of the smaller diameter trees is expected to raise the average residual tree size from CWHR size class 4 to 5. Approximately 75 acres of Alternative 1 unit acres are in areas designated as CWHR eastside pine size class 6. Of these, approximately 57 unit acres have a dbh cut limit of 30", and the remainder are hand thinning units. All acres are in land allocation Threat Zones (under the 2004 SNFPA ROD), and all but 0.0.5 acres are within the DFPZ. Treating these units to prevent adverse effects of wildfire to the community of Calpine by establishing some of the suppression advantages of DFPZs is a priority for these units in addition to the benefits of emphasizing structural heterogeneity. More information about this CWHR classification is available in the Saddle Project Forest Vegetation Analysis Report and the Saddle Project CWHR and down wood and snag information Report (each incorporated by reference and available upon request).

3. Providing the wildlife habitat and other ecological conditions necessary to maintain well-distributed viable populations of Management Indicator Species (MIS) in the project area and bioregional scale, and maintain diversity of plants and animals (Tahoe National Forest LRMP as amended by the Sierra Nevada Forests Management Indicator Species Amendment (SNF MIS Amendment) Record of Decision (USDA December 2007)).

The MIS Reports determined that Project-Level habitat impacts on any MIS will not be significant and will not contribute to Bioregional-Scale trends for any MIS. Summaries for each habitat-population trend are in FONSI element 1 Beneficial and Adverse Impacts, and details are presented in the Saddle Project MIS Reports, which are incorporated by reference.

4. Protecting aquatic, riparian and meadow ecosystems and associated species. (2004 SNFPA ROD, pages 31 and 67)

The Proposed Action (Alternative 1) is designed to protect and improve plant and animal diversity in the aquatic, riparian and meadow ecosystems. It includes measures to protect riparian resources, snags, woody debris, and unique and sensitive plants, and sensitive wildlife. Meadow and riparian communities will be restored, and fuel hazards will be reduced in RHCAs. EA Appendix C discusses how the Proposed Actions meet the Riparian Management Objectives as summarized in Appendix L of the HFQLG-FEIS (1999).

5. Reducing the threat to communities and wildlife habitat from large, severe wildfires. (2004 SNFPA ROD, pages 34 and 35)

The purpose and need of the Saddle Project is tied closely to the need to reduce hazardous fuels and facilitate wildland fire suppression efforts in and around the community of Calpine, and to increase the safety and effectiveness of fire suppression efforts while adding continuity to the previously constructed nearby DFPZ treatments. The thinning prescriptions and fuel management actions under Alternative 1 will decrease forest vegetation density and fuel levels to allow for the safe application of prescribed fire with acceptable levels of fire-related tree mortality. Under the Proposed Action (Alternative 1), approximately 3,349 acres will be treated with vegetation and/or fuels management prescriptions within the DFPZ network, and 2,693 acres will be treated within the Calpine Wildland Urban Interface (WUI). Alternative 1 emphasizes the strategic placement DFPZ treatments to more effectively provide effective wildfire suppression capabilities.

6. Maintaining visual quality objectives for the Carman, Calpine, Chapman and Forty-Niner Management Areas. (LRMP, page V-153)

Visual Quality Objectives (VQOs) in the Carman Management Area (MA) require partial retention as viewed for State Route 89 but emphasize watershed restoration and habitat improvement considerations throughout the MA. Calpine MA VQOs require retention to preserve the existing scenic quality and the character of its scenic backdrop, particularly as seen from State Route 89. Chapman MA VQOs require partial retention as viewed from State Route 49 but permit modification in the Saddle Project area. Forty-Niner requires retention as viewed from State Route 49 but permits partial retention in the small segment (12 acres) of the Saddle Project area.

Marking guidelines for the Proposed Action (available in the Forest Vegetation Analysis, which is incorporated by reference and available upon request) pay special consideration to preserve or enhance the character of its scenic backdrop in retention and partial retention areas. Prescriptions under the Proposed Action (Alternative 1) along State Route 89 and near the community of Calpine are carefully designed to ensure VQO requirements are met while achieving the project purpose and needs of creating a safer fire suppression environment and improving forest ecosystem resiliency, health and heterogeneity.

7. Partners In Flight North American Landbird Conservation Plan.

Under the National Forest Management Act (NFMA), the Forest Service is directed to, “provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives.” (P.L. 94-588, Sec 6 (g) (3) (B)). The January 2000 USDA Forest Service (FS) Landbird Conservation Strategic Plan, followed by Executive Order 13186 in 2001, in addition to the Partners in Flight (PIF) specific habitat Conservation Plans for birds and the January 2004 PIF North American Landbird Conservation Plan all reference goals and objectives for integrating bird conservation into forest management and planning. Opportunities to promote conservation of migratory birds and their habitats in the project area were considered during development and design of the Saddle project, and the project completed a Migratory Landbird Conservation Report to assess the effects of the Saddle Project on migratory birds. This report is incorporated by reference and available upon request.

8. Vegetation Management Requirements

The Proposed Action meets the National Forest Management Act (NFMA) requirements detailed in FSM 1921.12 – Vegetation Management Requirements from NFMA section 1921.12a – Timber Management Requirements. A responsible official may authorize project and activity decisions on National Forest System lands to harvest timber only where:

A. Soil, slope, or other watershed conditions will not be irreversibly damaged.

Alternative 1 includes resource protection measures and SMRs including BMPs, contract provisions, and other project specific design features to protect riparian areas, minimize soil erosion and compaction. Multiple watershed restoration actions will improve the existing condition of the watersheds at the project level. Road repair and maintenance has been designed to improve watershed conditions, and temporary roads will be closed and decommissioned after use.

B. There is assurance that the lands can be adequately restocked within five years after final regeneration harvest (FSM 1921.12g).

Group selection harvest on approximately 54 acres under Alternative 1 are the only areas where restocking applies. These group selection units will be implemented to promote uneven-aged management and diversity in stands. The district silviculturist has advised that these units will be adequately restocked from a combination of planting and natural regeneration within 5 years following harvest. Aspen restoration treatments have a purpose of restoring the health and vigor of aspen stands and improving associated wildlife habitat, and meadow restoration treatments have a purpose of restoring riparian ecological systems to the areas invaded by lodgepole pines due to past management practices and fire suppression.

C. Streams, streambanks, shorelines, lakes, wetlands, and other bodies of water are protected from detrimental changes in water temperatures, blockages of water courses, and deposits of sediment where harvests are likely to seriously and adversely affect water conditions or fish habitat.

Alternative 1 is designed to meet the Riparian Management Objectives (RMOs) on page L-4 of the HFQLG-FEIS (1999), as summarized in the Riparian RHCA Treatment Summary (EA Appendix C). Resource Protection Measures and Standard Management Requirements (EA Appendix B) are designed to achieve RMOs, and all proposed treatments in RHCAs are designed to minimize disturbance of riparian vegetation, soils and other aquatic habitat elements.

D. The harvesting system to be used is not selected primarily because it will give the greatest dollar return or the greatest unit output of timber.

The harvesting systems proposed under the Saddle Project Proposed Action were selected to meet multiple resource objectives, including the objectives of the HFQLG Pilot Project. Specifically, the Need for Action is to: Create a safer, more effective fire suppression environment and connect the existing shaded fuelbreaks in and around the Saddle Project Area, improve forest ecosystem resiliency and health, to restore forest heterogeneity, to restore black oak, and quaking aspen from conifer encroachment, to restore the hydrologic connectivity and species composition of meadows, and to improve site-specific watershed conditions. Although

economic objectives are part of the Purpose for Action, harvesting systems were not selected primarily to give the greatest dollar return or the greatest unit output of timber.

E. A Responsible Official may authorize projects and activities on NFS lands using cutting methods such as clearcutting, seed tree cutting, shelterwood cutting, and other cuts designed to regenerate an even-aged stand of timber, only where certain conditions defined in 16 U.S.C. 1604 (g)(3)(F) are met.

1. For clearcutting, it is the optimum method; or where seed tree, shelterwood, and other cuts are determined to be appropriate to meeting the objectives and requirements of the relevant plan (16 U.S.C. 1604 (g)(3)(F)(i)).

- No clearcutting, seed tree or shelterwood cuts are proposed by Alternative 1, since even-aged timber management is not part of the Proposed Action.

2. The interdisciplinary review has been completed and the potential environmental, biological, aesthetic, engineering, and economic impacts have been assessed on each advertised sale area and the cutting methods are consistent with the multiple use of the general area (16 U.S.C. 1604 (g)(3)(F)(ii)).

- The ID Team has reviewed the Saddle Project, as documented in supporting analyses (incorporated by reference and available upon request), and has assessed the environmental impacts of the proposal. Standard road maintenance will be needed and specified in the contract. An economic analysis of the project indicates that the project will contribute to jobs and wages that will contribute to the community stability of the local rural economy. Thinning from below, group selection, and aspen restoration are consistent with the multiple use of the general area (Calpine, Carman, Chapman, Forty-Niner Management Areas) that is outlined in the Tahoe National Forest LRMP as amended. The proposed silvicultural treatments are consistent with the forest plan standards and guidelines.

3. Cut blocks, patches, or strips are shaped and blended to the extent practicable with the natural terrain (16 U.S.C. 1604 (g)(3)(F)(iii)).

- The group selection harvest proposed by Alternative 1 will involve small forest openings less than 2 acres in size, and will be implemented as part of an uneven-aged management prescription. Please see “Maintaining visual quality objectives for the Carman, Calpine, Chapman and Forty-Niner Management Areas” above for more information.

4. Cuts are carried out according to the maximum size limit requirements for areas to be cut during one harvest operation (FSM 1921.12e).

- Group selection harvest will create forest openings less than 2 acres in size, as authorized by the 2004 SNFPA ROD.

5. Timber cuts are carried out in a manner consistent with the protection of soil, watershed, fish, wildlife, recreation, esthetic resources, cultural and historic resources, and the regeneration of timber resources.

- The ID Team has developed Resource Protection Measures and Standard Management Requirements, including BMPs, which will be incorporated into project Timber Sale or Service Contracts to protect the environment and assure that any potential impacts are minimized (See EA Appendix B Saddle Project SMRs).

- *Weeds:* The Weed Risk Assessment (incorporated by reference and available upon request) concludes that there is a low risk of introducing “A” and “B” rated noxious weeds into the Saddle Project area if SMRs and resource protection measures, such as the requirement for clean equipment, are followed (See EA *Appendix B* SMRs 23 and 24), and if the temporarily-used existing roads and roadbeds are closed and obliterated promptly after project implementation.

The Weed Risk Assessment states that the “C” rated weeds (wooly mullein, cheatgrass and bull thistle) are so widespread the Forest Service does not endorse state or county-funded eradication or containment efforts except in nurseries or seed lots and perhaps new isolated occurrences. However, the “shrub patch mitigation” (SMRs 23 and 24) is designed to curb the potential to spread of “C” rated nonnative cheatgrass by reducing the prevalence of underburning in the shrub patches that are most prone to cheatgrass invasion. It is expected that the shrub patch mitigation will reduce the risk of spreading “C” rated cheatgrass from high to moderate. The potential to spread of “C” rated non-natives, such as bull thistle and woolly mullein, will also be moderate, but these weeds are known to be less competitive with native vegetation than cheatgrass.

- *Tree Disease:* Alternative 1 will cause an unnaturally large number of freshly cut stumps, which increases the potential avenue of spread of Annosus root disease via interconnected roots (personal communication, Woodruff, 2008). Application of borax to cut conifer stumps ≥ 14 ” dbh will create a barrier that minimizes the potential for spores of the fungus *Heterobasidion annosum* to colonize freshly cut stumps.

6. *Stands of trees are harvested according to requirements for culmination of mean annual increment of growth (16 U.S.C. 1604 (m); FSM 1921.12f; FSH 1909.12, ch. 60).*

- The culmination of mean annual increment requirements apply only to even-aged management at the time of regeneration harvest. Alternative 1 does not include regeneration harvest. The group selection harvest under Alternative 1 consists of small forest openings less than 2 acres in size, and will be implemented as part of an uneven-aged management prescription.

II. HFQLG Riparian Management Objectives

The Final Environmental Impact Statement for the Herger-Feinstein Quincy Library Group Forest Recovery Act (FEIS-HFQLG-FRA) Record of Decision and SNFPA ROD (2004), which directs forest management within the HFQLG Pilot Project Area, requires the adoption of riparian management direction as described by the Scientific Analysis Team’s (SAT) Guidelines. Specifically, the HFQLG-EIS presents 10 Riparian Management Objectives (RMOs) that may not be adversely affected by any planned resource management activity. The RHCA summary determined that the Saddle Project design, in combination with standard management requirements, resource protection measures and best management practices, will achieve each RMO. *Appendix C* (RHCA Treatment Summary) contains a detailed assessment of how proposed treatments within RHCAs respond to the 10 RMOs identified on pages L-4 through L-5 in Appendix L of the HFQLG FEIS.

III. Water Quality Control (Basin Plan)

The Saddle Project has incorporated management requirements and monitoring to meet the water quality objectives for beneficial use as established by the Central Valley Regional Water Quality

Control Board in the Water Quality Control Plan for the Central Valley Regions, and the Federal Clean Water Act. It will comply with the Water Quality Objectives and Prohibitions contained in the Basin Plan and will meet the requirements for obtaining a Timber Harvest Waiver. It is eligible for the applicable waiver because:

- 1) The EA, associated appendices and documents incorporated by reference are the product of an interdisciplinary team's review of the project. Best Management Practices and additional control measures were developed during the review process to assure compliance with water quality control plans.
- 2) The IDT conducted a Cumulative Watershed Effects (CWE) assessment (incorporated by reference and summarized in FONSI element #7).
- 3) The proponent will develop a Water Quality Monitoring Plan including Forensic Monitoring in the Fletcher Creek and East Fork Carmen Creek watersheds and Effectiveness Monitoring during permit application to specify the actions that will be taken during and after implementation of the proposed actions to ensure that water quality objectives are met.
- 4) The EA is consistent with NEPA requirements for public comment.
- 5) Beneficial uses will be maintained and will achieve the highest water quality consistent with maximum benefit to the people of the State. The water quality objectives for beneficial uses that could potentially be affected by the Saddle Project include sediment, temperature and turbidity, also to a lesser degree pesticides (Boron) and oil and grease. Best Management Practices will be implemented, and extensive Standard Management Requirements and Resource Protection Measures have been created to prevent impacts to beneficial uses (see EA Appendix B). Expanded discussions on temperature, aquatic habitat and sediment are in the CWE assessment and EA Appendix C: Saddle Project - RHCA Treatment Summary, under the Riparian Management Objectives.

IV. Title 17 of the California Code of Regulations

Saddle Project post-harvest fuels management will be guided by the Smoke Management Guidelines for Agricultural and Prescribed Burning contained in Title 17 of the California Code of Regulations. Burn plans will be designed and all fuel reduction burning will be implemented in a way to minimize particulate emissions. The prescribed fire planner will coordinate with the local Air Quality Coordinator to design an appropriate smoke management plan. Burning permits will be acquired from the Northern Sierra Air Quality Management District. The Air Quality District will determine the days when burning is allowed. The California Air Resources Board (CARB) provides daily information on "burn" or "no burn" conditions. Prescribed fire implementation staff will coordinate daily and seasonally with other burning permittees both inside and outside the forest boundary to help meet air quality standards. Because of the mitigation measures applied, impacts on air quality are expected to be minimal.

ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES

A pre-decisional objection opportunity was offered for this project under 36 CFR 218. No objections were submitted.

IMPLEMENTATION DATE

The project may be implemented immediately upon the signature of this Decision Notice.

Contact Person

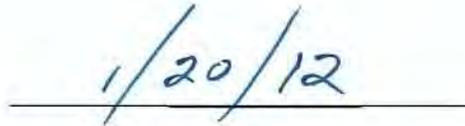
For additional information concerning this project, please contact: Karie Wiltshire, Project Coordinator, Sierraville Ranger District, P.O. Box 95, Sierraville, CA 96126, phone: (530) 994-3401 ext. 6680, email: kwiltshire@fs.fed.us



TOM QUINN

Forest Supervisor

Tahoe National Forest



Date:



USDA FOREST SERVICE
 Tahoe National Forest
 Sierraville Ranger District
 February 2, 2010



Saddle Project Scoping - DFPZ, WUI, & Locator Map

Map 1

- Proposed Treatment
 - Defensible Fuel Profile Zone (DFPZ)
 - Wildland Urban Intermix (WUI)
- | Ownership | Transportation |
|---------------------|----------------|
| National Forest | Highway |
| Non-National Forest | Improved Road |
| District Boundary | Dirt Road |

Scale = 1:67,000

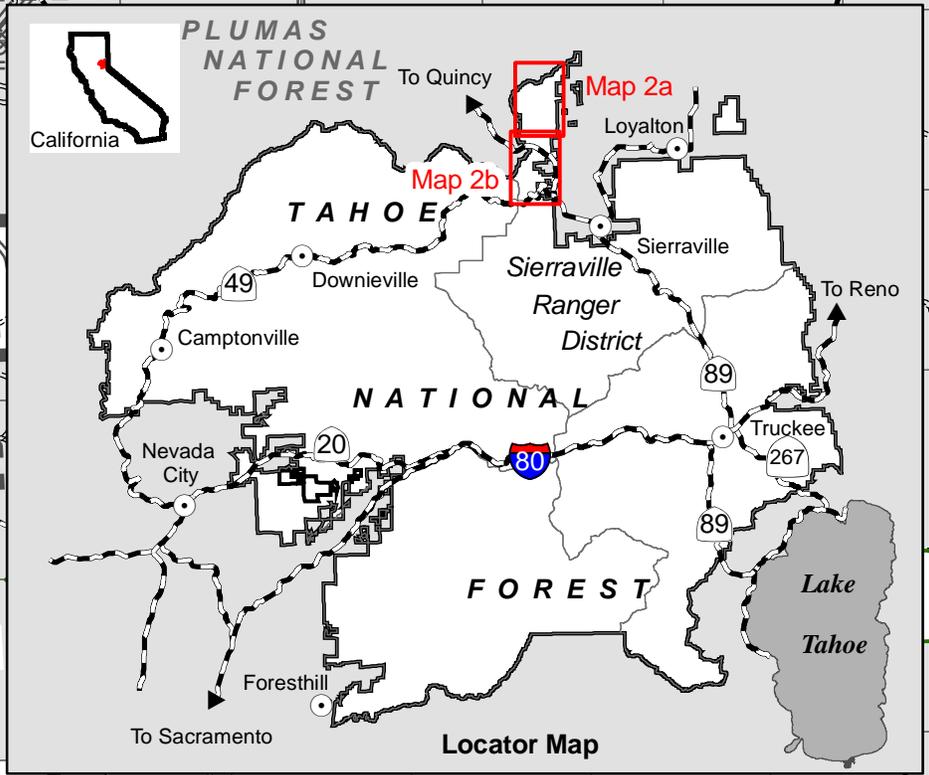
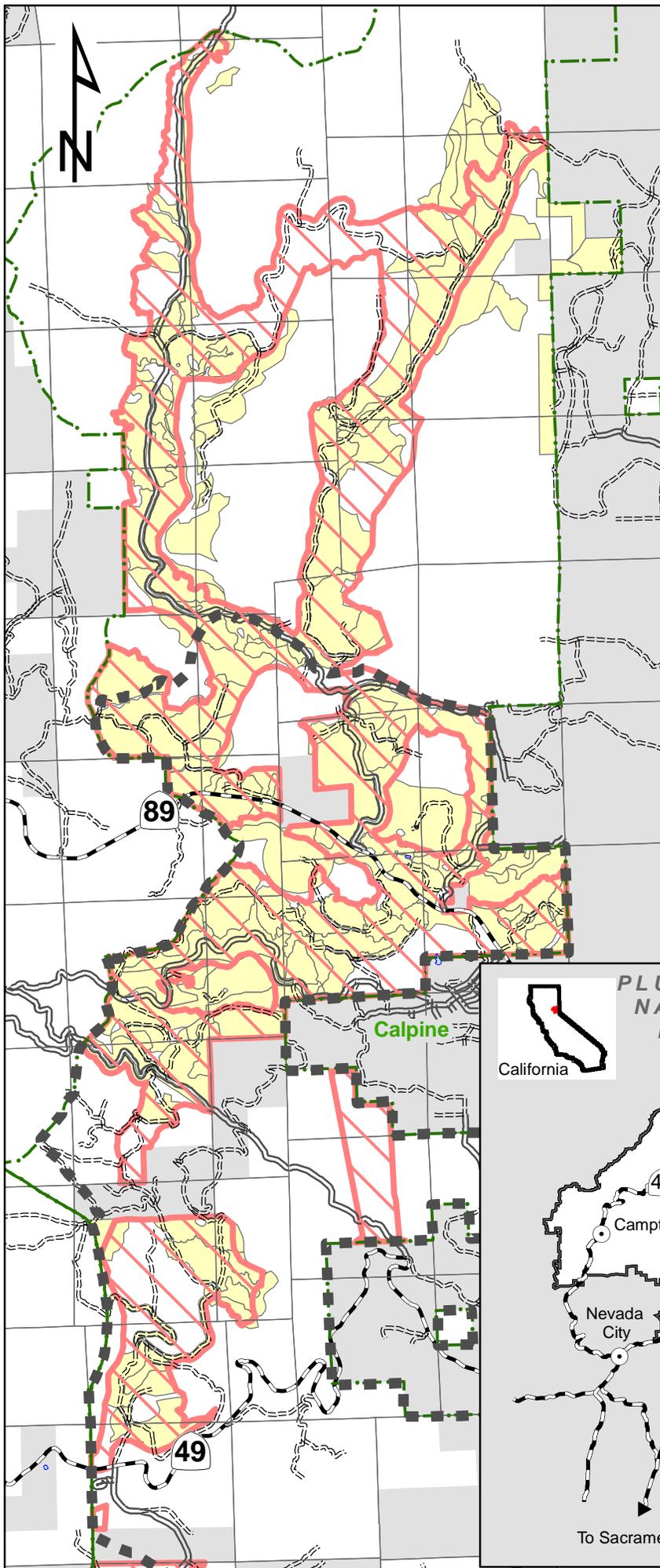


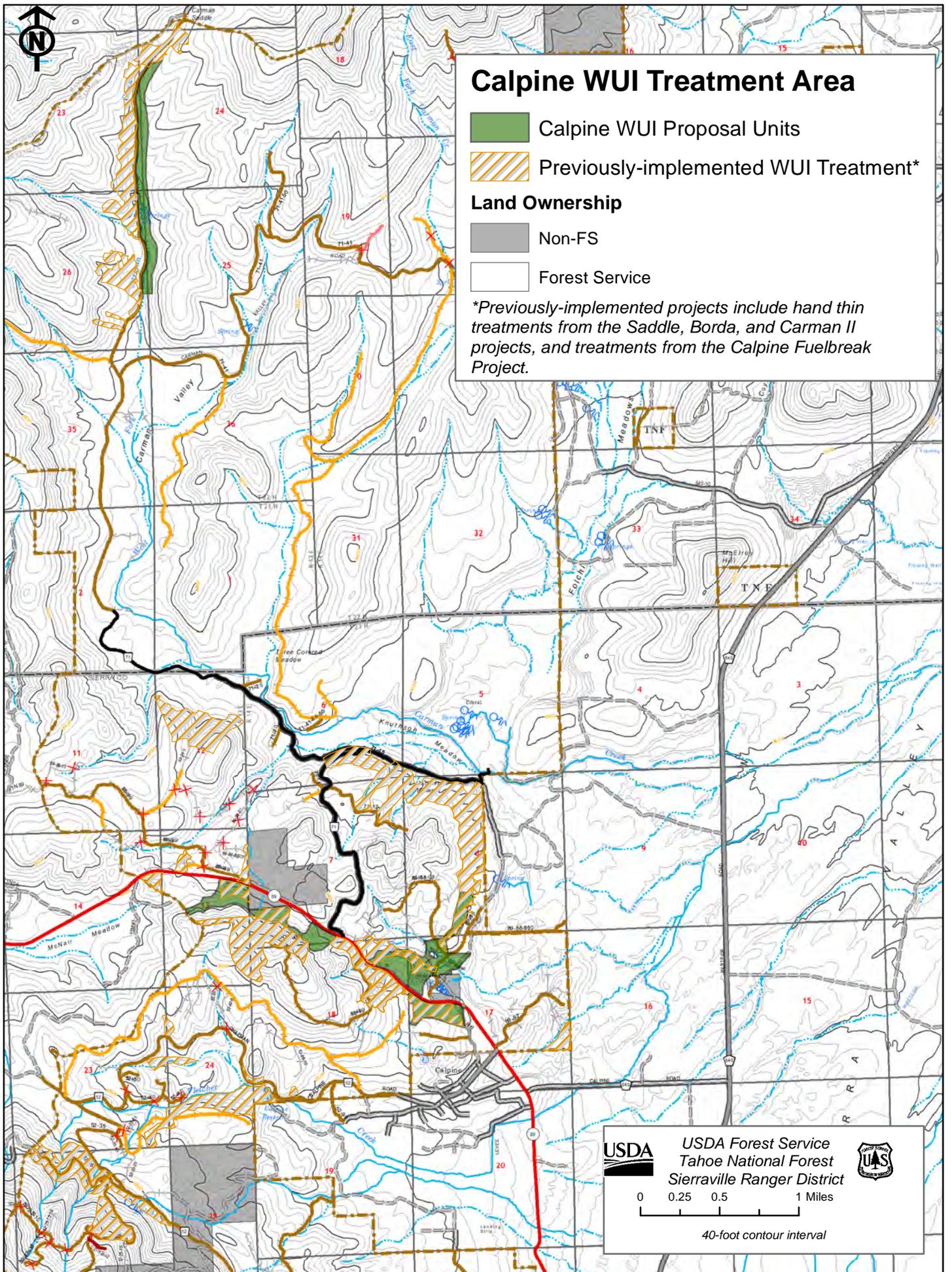
Data Source: Tahoe National Forest Geospatial Database.
 Streams from USGS NHD.

Projection: UTM Zone 10, NAD83, GRS 1980.

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 All lines are approximate.

c:\ws\fuels\Saddle Eastside Zone.sh





Calpine WUI Treatment Area

- Calpine WUI Proposal Units
- Previously-implemented WUI Treatment*

Land Ownership

- Non-FS
- Forest Service

**Previously-implemented projects include hand thin treatments from the Saddle, Borda, and Carman II projects, and treatments from the Calpine Fuelbreak Project.*

USDA **US Forest Service**
Tahoe National Forest
Sierraville Ranger District

0 0.25 0.5 1 Miles

40-foot contour interval

716000

717000

718000

719000

720000

721000



USDA FOREST SERVICE
Tahoe National Forest
Sierraville Ranger District
February 2, 2010



Saddle Project Scoping - North

Map 2a

Proposed Prescription*

- Mechanical Radial Thin with Group Selection
- Mechanical Variable Thin with Group Selection
- Mechanical Variable Thin
- Hand Thin
- Hand Thin/Masticate/Grapple Pile
- 6754021 Unit Number
- Prescribed Burn Only

- Watershed Restoration Actions with Identifier
- Oak Restoration
- Aspen Restoration
- Meadow Restoration
- Defensible Fuel Profile Zone (DFPZ)**

Transportation

- Highway
- Improved Road
- Dirt Road
- Existing Temporarily Used Road

Ownership

- National Forest
- Non-National Forest

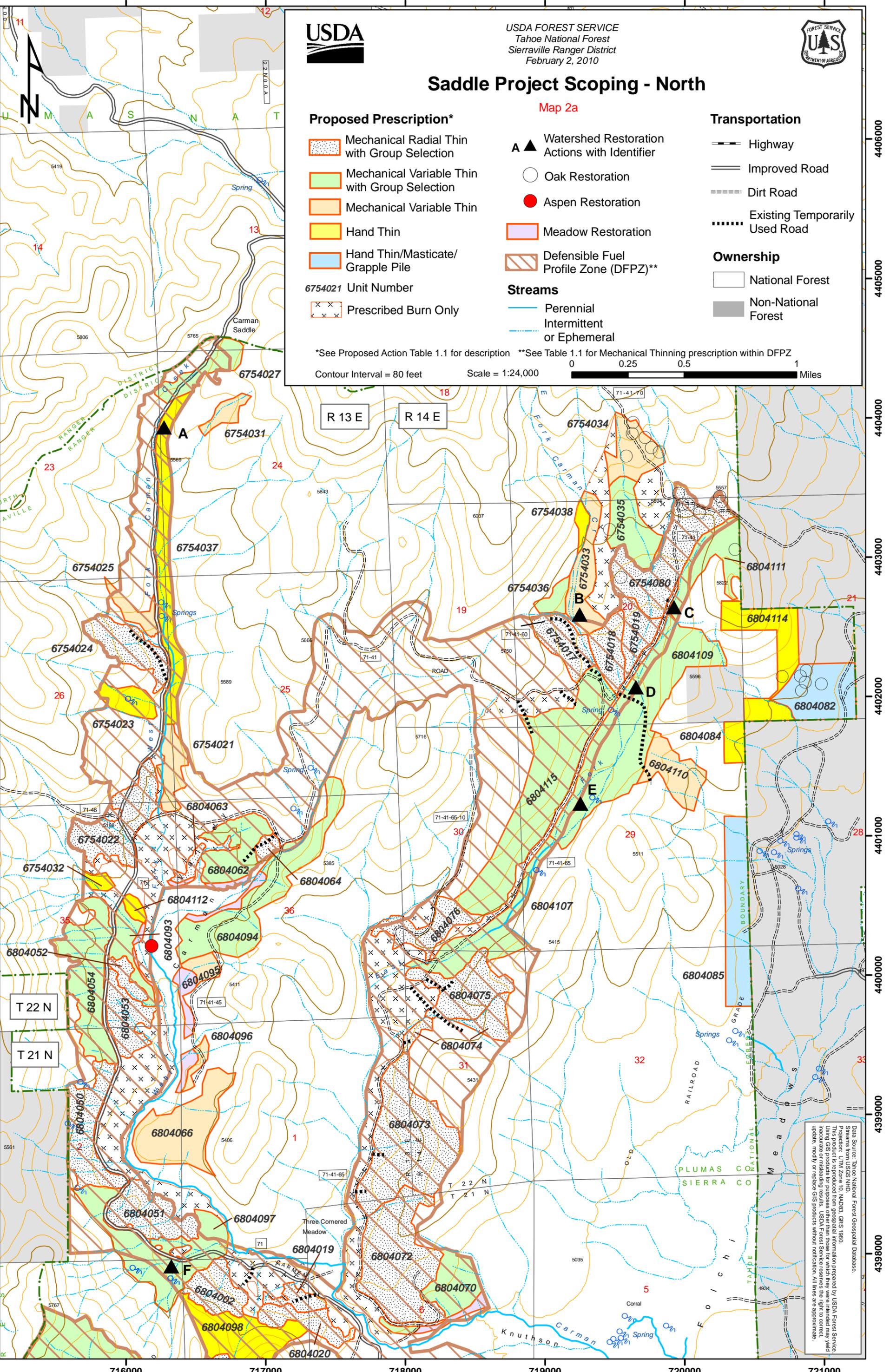
Streams

- Perennial
- Intermittent or Ephemeral

*See Proposed Action Table 1.1 for description **See Table 1.1 for Mechanical Thinning prescription within DFPZ

Contour Interval = 80 feet

Scale = 1:24,000



4406000
4405000
4404000
4403000
4402000
4401000
4400000
4399000
4398000

Data Source: Tahoe National Forest Geospatial Database.
Streams from USGS NHD.
Projection: UTM Zone 10, NAD83, GRS 1980.
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716000 717000 718000 719000 720000 721000



DRAFT

USDA FOREST SERVICE
Tahoe National Forest
Sierraville Ranger District
September 26, 2011

DRAFT



Saddle Project EA - North - Proposed Action (Alternative 1)

Map 2a

Proposed Prescription*

- Hand Thin
- Hand Thin/Masticate/Grapple Pile
- Mechanical Radial Thin with Group Selection
- Mechanical Variable Thin
- Mechanical Variable Thin with Group Selection

- 6754021 Unit Number
- Prescribed Burn Optional

PB04 Prescribed Burn Unit Number

*See EA Table 1.1 for prescription description & EA Appendix D
**See EA Section 1.4.1 for Mechanical Thinning within DFPZ prescription

Contour Interval = 80 feet

Scale = 1:24,000

Streams

- Perennial
- Intermittent or Ephemeral

- Watershed Restoration Actions with Identifier
- Oak Restoration
- Aspen Restoration
- Meadow Restoration

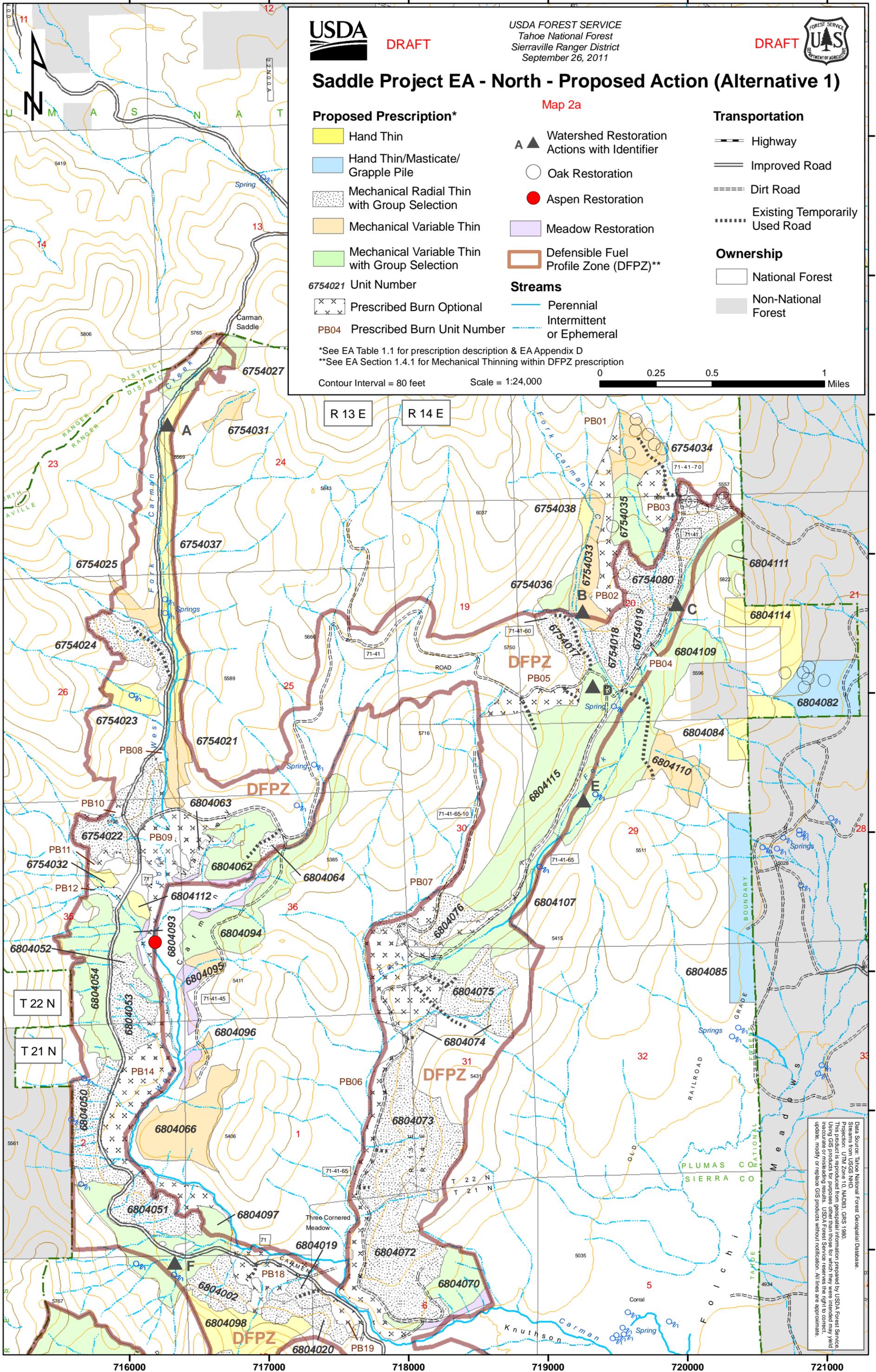
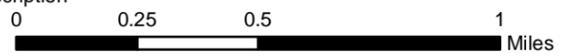
- Defensible Fuel Profile Zone (DFPZ)**

Transportation

- Highway
- Improved Road
- Dirt Road
- Existing Temporarily Used Road

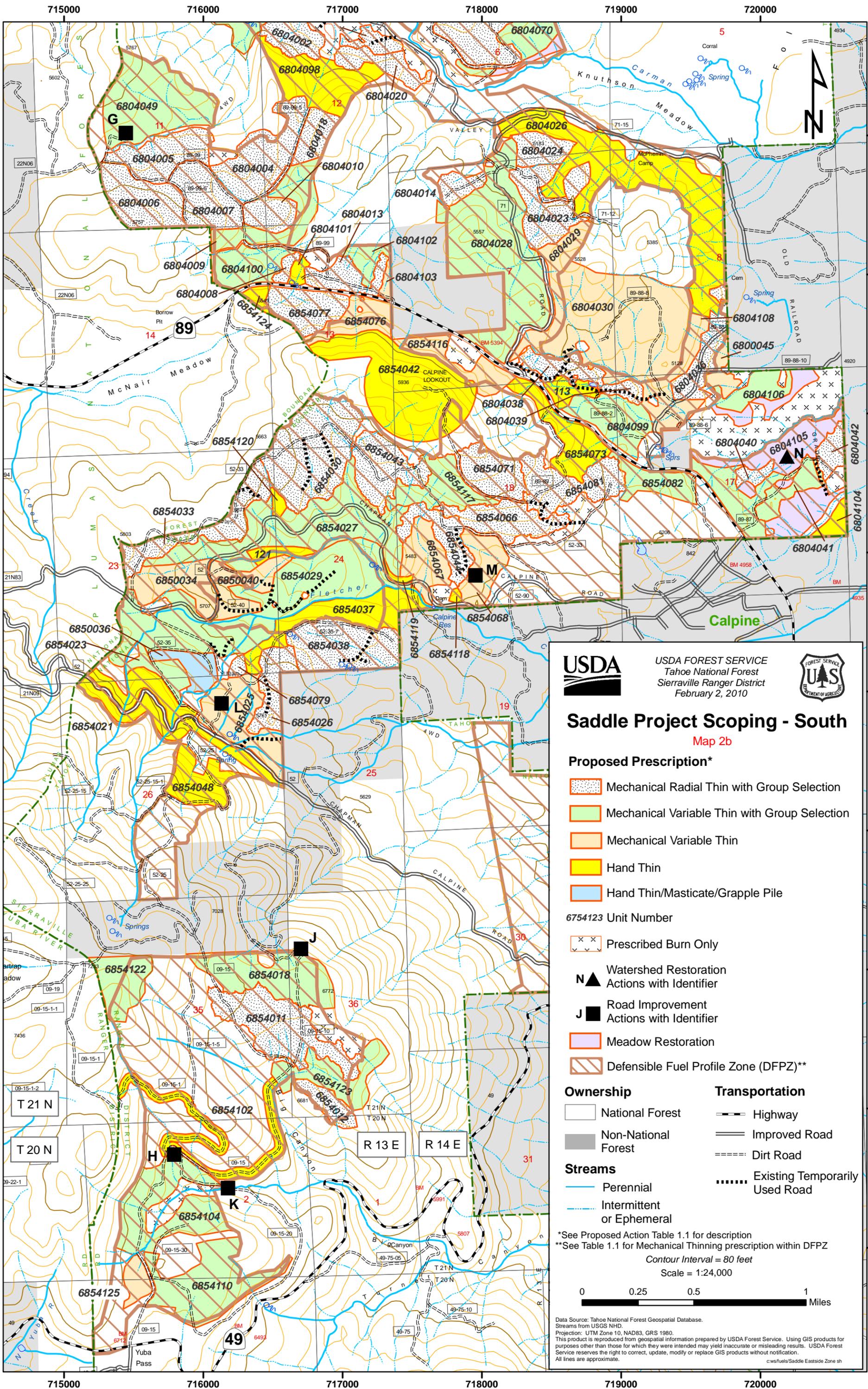
Ownership

- National Forest
- Non-National Forest



Data Source: Tahoe National Forest Geospatial Database
 Streams from USGS NHD
 Projection: UTM Zone 10, NAD83, GRS 1980
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716000 717000 718000 719000 720000 721000



USDA **FOREST SERVICE**
 Tahoe National Forest
 Sierraville Ranger District
 February 2, 2010

Saddle Project Scoping - South

Map 2b

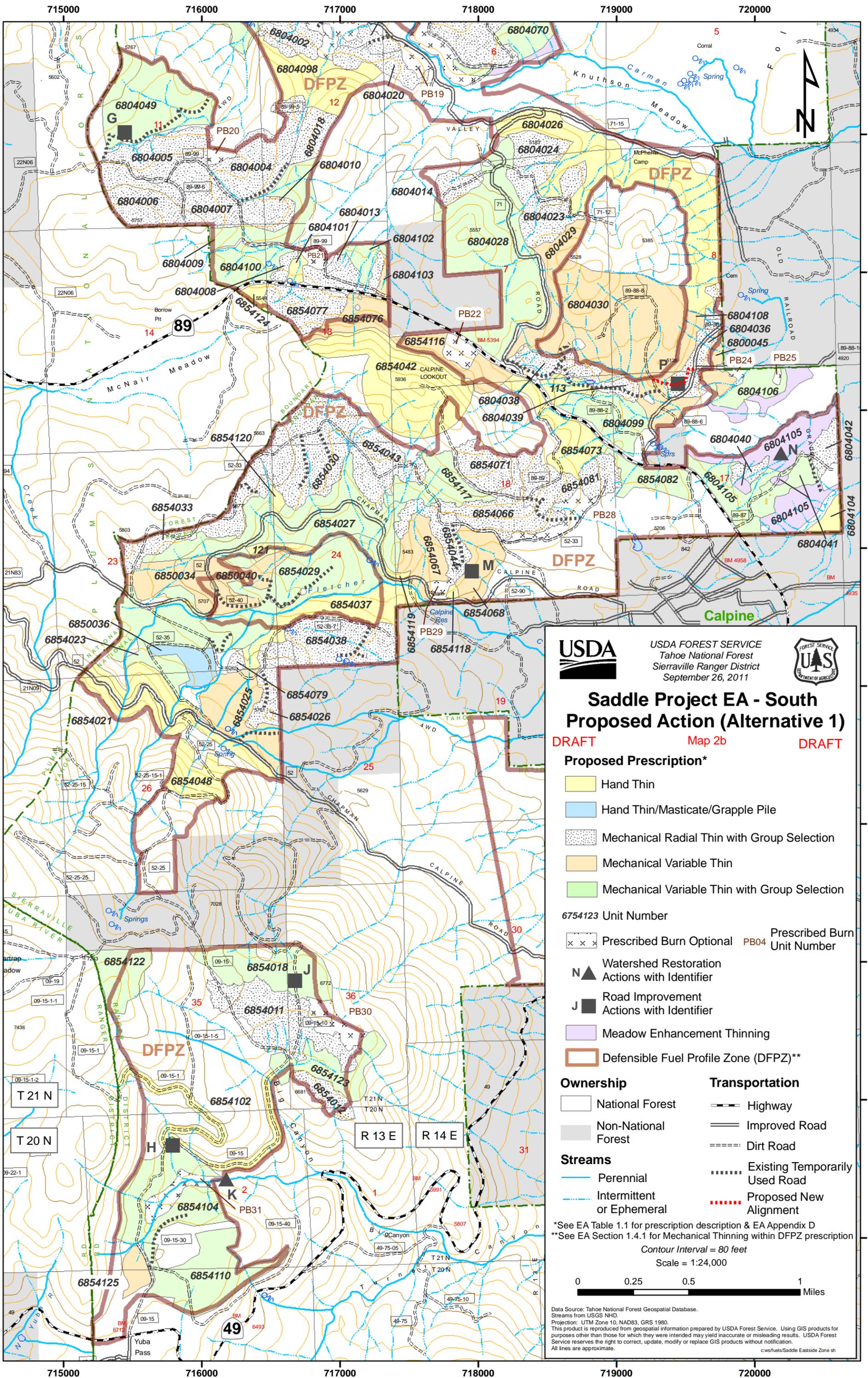
- Proposed Prescription***
- Mechanical Radial Thin with Group Selection
 - Mechanical Variable Thin with Group Selection
 - Mechanical Variable Thin
 - Hand Thin
 - Hand Thin/Masticate/Grapple Pile
- 6754123 Unit Number**
- Prescribed Burn Only
 - Watershed Restoration Actions with Identifier
 - Road Improvement Actions with Identifier
 - Meadow Restoration
 - Defensible Fuel Profile Zone (DFPZ)**

- Ownership**
- National Forest
 - Non-National Forest
- Transportation**
- Highway
 - Improved Road
 - Dirt Road
 - Existing Temporarily Used Road
- Streams**
- Perennial
 - Intermittent or Ephemeral

*See Proposed Action Table 1.1 for description
 **See Table 1.1 for Mechanical Thinning prescription within DFPZ
 Contour Interval = 80 feet
 Scale = 1:24,000

0 0.25 0.5 1 Miles

Data Source: Tahoe National Forest Geospatial Database.
 Streams from USGS NHD.
 Projection: UTM Zone 10, NAD83, GRS 1980.
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 All lines are approximate.





USDA FOREST SERVICE
Tahoe National Forest
Sierraville Ranger District
September 26, 2011



Saddle Project EA - South Proposed Action (Alternative 1)

DRAFT Map 2b **DRAFT**

Proposed Prescription*

- Hand Thin
- Hand Thin/Masticate/Grapple Pile
- Mechanical Radial Thin with Group Selection
- Mechanical Variable Thin
- Mechanical Variable Thin with Group Selection

6754123 Unit Number

- Prescribed Burn Optional PB04 Prescribed Burn Unit Number
- Watershed Restoration Actions with Identifier
- Road Improvement Actions with Identifier
- Meadow Enhancement Thinning
- Defensible Fuel Profile Zone (DFPZ)**

Ownership

- National Forest
- Non-National Forest

Streams

- Perennial
- Intermittent or Ephemeral

Transportation

- Highway
- Improved Road
- Dirt Road
- Existing Temporarily Used Road
- Proposed New Alignment

*See EA Table 1.1 for prescription description & EA Appendix D
**See EA Section 1.4.1 for Mechanical Thinning within DFPZ prescription

Contour Interval = 80 feet
Scale = 1:24,000

0 0.25 0.5 1

Miles

Data Source: Tahoe National Forest Geospatial Database.
Streams from USGS NHD.
Projection: UTM Zone 10, NAD83, GRS 1980.
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All lines are approximate. c:\sw\fuels\Saddle_Eastside_Zone.sh



Unit north of the Community of Calpine, CA - Displaying Overstocked Conditions

Unit West of CA HWY 89 adjacent to private land with heavy surface fuels and ladder fuels



Unit east of CA HWY89
adjacent to private lands
displaying heavy ladder
fuels





Unit West of CA
HWY 89 with
heavy surface
fuel
accumulation



United States
Department of
Agriculture

Forest
Service

Sierraville
Ranger
District

317 South Lincoln St.
Sierraville, CA
96126
530 994-3401

File Code: 1509

Date: February 18, 2016

Sierra Nevada Conservancy
Attention: Lynn Campbell
11521 Blocker Drive, Suite 205
Auburn, CA 95603

Dear Lynn,

The purpose of this correspondence is in support of documentation required by the Sierra Nevada Conservancy for the Sierra Nevada – Watershed Improvement Program Proposition 1 Grant Applications specific to Land Tenure.

The Tahoe National Forest – Sierraville Ranger District in partnership with the Sierra County Fire Safe & Watershed Council is submitting a Grant application for the Calpine WUI Forest Health Improvement Project. The project is located in its entirety on National Forest System lands. If the Sierra County Fire Safe & Watershed Council is successful in receiving a Proposition 1 Grant for the March 1, 2016 cycle, the Tahoe National Forest – Sierraville Ranger District is committed to developing and finalizing a legal instrument of which would authorize the grantee to conduct the project and authorize the grantee and grantor access to the project site to facilitate project implementation, post project work and monitoring. The Tahoe National Forest – Sierraville Ranger District would develop and finalize the instrument (MOU and/or Participating Agreement) of which would authorize 10 years of access for the Sierra County Fire Safe Council - Grantee and would authorize the Sierra Nevada Conservancy monitoring access for 25 years. Our goal, upon a successful grant award for the Calpine WUI Forest Health Improvement Project, is the finalization of a MOU and/or Participating Agreement within 45 days of award.

If you have any questions regarding this information, please feel free to contact Eric Petterson or myself at 530-994-3401 for further information regarding potential instruments for Land Tenure Agreements associated with implementation of the Calpine WUI Forest Health Improvement Project.

Sincerely,

//Quentin L. Youngblood
QUENTIN L. YOUNGBLOOD
Sierraville District Ranger





FS Agreement No. _____

Cooperator Agreement No. _____

MEMORANDUM OF UNDERSTANDING
Between The
SIERRA COUNTY FIRESAFE & WATERSHED COUNCIL
And The
USDA, FOREST SERVICE
TAHOE NATIONAL FOREST

This MEMORANDUM OF UNDERSTANDING (MOU) is hereby made and entered into by and between the Sierra County Firesafe & Watershed Council, hereinafter referred to as “SCFSWC,” and the USDA, Forest Service, Tahoe National Forest, hereinafter referred to as the “U.S. Forest Service.”

Background: The Tahoe National Forest and the Sierra County Firesafe & Watershed Council have a long history of working together in “all lands” natural resource management to achieve coordinated fuels reduction projects on both public and private lands within the Upper Feather River and Upper Little Truckee River Watershed. As opportunities for partnerships with other organizations present themselves, it is desirable for the U.S. Forest Service and the SCFSWC to formally document this relationship.

Title: Sierra County Fire Safe & Watershed Council and Tahoe National Forest Memorandum of Understanding for Ecological Restoration

I. PURPOSE: The purpose of this MOU is to document the cooperation between the parties to implement fuels reduction, watershed restoration, habitat improvement, and other restoration activities in accordance with the following provisions.

II. STATEMENT OF MUTUAL BENEFIT AND INTERESTS:

Recent trends in increased size and scale of wildfires have amplified the need to increase pace and scale of forest restoration. The need for action far exceeds currently available funding for either private or federal land restoration.

The US Forest Service, Region 5 has leadership direction to reduce the threat of catastrophic wildfire, and restore ecological processes on public forest lands to provide for multiple ecosystem services. The leadership intent emphasizes using partnerships to take an “all lands” approach to increasing the pace and scale of fuel reduction and ecological restoration. In particular, the Tahoe National Forest has an interest in expanding its capacity to implement fuel reduction and restoration projects, particularly within the Wildland Urban Interface and priority watersheds with sensitive resources.



The SCFSWC mission is to reduce the loss of natural and human made resources caused by wildfire in the Wildland Urban Interface surrounding communities in Sierra County. The SCFSWC mission, Firewise Community programs, and pre-treatment projects on private lands align well with the US Forest Service's "all lands approach", fuels reduction focus, and ecological restoration intent.

Opportunities such as the recent Proposition 1 bond measure approved by California voters could provide a source of funding for fuel reduction and restoration projects. A portion of the Proposition 1 funds is managed through the Sierra Nevada Conservancy, a California state agency focused on cross-jurisdictional protection of natural resources including forests and waters in the Sierra Nevada. While funds may be allocated to projects on federal lands, federal agencies must develop collaborative partnerships with cooperating organizations like the Sierra County Fire Safe Council to qualify.

Both the US Forest Service and the SCFSWC gain mutual benefits in expanding capacity and pursuing opportunities to reduce hazardous fuels on National Forest System Lands in Sierra County. There is mutual benefit for both the US Forest Service and SCFSWC to collaborate on fuel treatments which reduce potential fire behavior and severity and provide options for resource management in the Wildland Urban Interface surrounding communities. This MOU acknowledges/confirms a relationship for the Tahoe National Forest and the Sierra County Fire Safe & Watershed Council to pursue grant and other funding opportunities to complete restoration projects thereby expanding capacity and opportunities to accomplish shared management goals on national forest lands.

Nothing in this MOU conveys commitment of funding or resources from either party. If funding becomes available for specific projects in the future, appropriate agreements will be developed at that time.

In consideration of the above premises, the parties agree as follows:

III. THE SCFSC SHALL:

- A. Coordinate with the U.S. Forest Service to identify fuels reduction and forest restoration opportunities in the Upper Feather River and Upper Little Truckee River watersheds.
- B. Partner with the U.S. Forest Service on grant applications which both organizations consider appropriate for grant funds to be used on national forest system lands in Sierra County, understanding that implementation of specific projects where the Forest Service either gives or receives funds will require separate funding agreements.

IV. THE U.S. FOREST SERVICE SHALL:



- A. Provide SCFSWC with access to Tahoe National Forest lands for purposes of project planning, implementation and monitoring, subject to federal law and any use restrictions affecting the general public. A 10-year period is considered to be needed to ensure that SCFSWC can follow projects from beginning to end, and this duration of access is a requirement of Sierra Nevada Conservancy grants to be addressed in project specific implementation agreements between the USFS and the SCFSWC. The U.S. Forest Service has and expects to retain management responsibility and control of the project area over the long term, extending to and beyond the 25 years required for SNC monitoring, providing SNC with the ability to access these public lands.
- B. Identify national forest system lands available for fuels reduction and forest restoration, targeting lands not subject to restrictions to the general public.

V. IT IS MUTUALLY UNDERSTOOD AND AGREED BY AND BETWEEN THE PARTIES THAT:

- A. This MOU does not confer change in ownership or control of national forest system lands, however it is understood that project accomplishment and monitoring will depend on a 10-year period of access by SCFSWC to national forest system lands subject to federal law and considerations of public, SCFSWC, and Forest Service employee public health and safety.
- B. PRINCIPAL CONTACTS. Individuals listed below are authorized to act in their respective areas for matters related to this agreement.

Principal Cooperator Contacts:

Cooperator Program Contact	Cooperator Administrative Contact
Name:	Name:
Address:	Address:
City, State, Zip:	City, State, Zip:
Telephone:	Telephone:
FAX:	FAX:
Email:	Email:

Principal U.S. Forest Service Contacts:

U.S. Forest Service Program Manager Contact	U.S. Forest Service Administrative Contact
Name:	Name:
Address:	Address:
City, State, Zip:	City, State, Zip:
Telephone:	Telephone:
FAX:	FAX:



Email:	Email:
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C. ASSURANCE REGARDING FELONY CONVICTION OR TAX DELINQUENT STATUS FOR CORPORATE ENTITIES. This agreement is subject to the provisions contained in the Department of Interior, Environment, and Related Agencies Appropriations Act, 2012, P.L. No. 112-74, Division E, Section 433 and 434 regarding corporate felony convictions and corporate federal tax delinquencies. Accordingly, by entering into this agreement acknowledges that it: 1) does not have a tax delinquency, meaning that it is not subject to any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, and (2) has not been convicted (or had an officer or agent acting on its behalf convicted) of a felony criminal violation under any Federal law within 24 months preceding the agreement, unless a suspending and debarring official of the United States Department of Agriculture has considered suspension or debarment is not necessary to protect the interests of the Government. If fails to comply with these provisions, the U.S. Forest Service will annul this agreement and may recover any funds has expended in violation of sections 433 and 434.

D. NOTICES. Any communications affecting the activities covered by this MOU given by the U.S. Forest Service or Sierra County Fire Safe & Watershed Council is sufficient only if in writing and delivered in person, mailed, or transmitted electronically by e-mail or fax, as follows:

To the U.S. Forest Service Program Manager, at the address specified in the MOU.

To , at 's address shown in the MOU or such other address designated within the MOU.

Notices are effective when delivered in accordance with this provision, or on the effective date of the notice, whichever is later.

E. PARTICIPATION IN SIMILAR ACTIVITIES. This MOU in no way restricts the U.S. Forest Service or Sierra County Fire Safe & Watershed Council from participating in similar activities with other public or private agencies, organizations, and individuals.



- F. ENDORSEMENT. Any of Sierra County Fire Safe & Watershed Council's contributions made under this MOU do not by direct reference or implication convey U.S. Forest Service endorsement of Sierra County Fire Safe Council's products or activities.
- G. NONBINDING AGREEMENT. This MOU creates no right, benefit, or trust responsibility, substantive or procedural, enforceable by law or equity. The parties shall manage their respective resources and activities in a separate, coordinated and mutually beneficial manner to meet the purpose(s) of this MOU. Nothing in this MOU authorizes any of the parties to obligate or transfer anything of value.

Specific, prospective projects or activities that involve the transfer of funds, services, property, and/or anything of value to a party will require the execution of separate agreements and are contingent upon numerous factors, including, as applicable, but not limited to: agency availability of appropriated funds and other resources; cooperator availability of funds and other resources; agency and cooperator administrative and legal requirements (including agency authorization by statute); etc. This MOU neither provides, nor meets these criteria. If the parties elect to enter into an obligation agreement that involves the transfer of funds, services, property, and/or anything of value to a party, then the applicable criteria must be met. Additionally, under a prospective agreement, each party operates under its own laws, regulations, and/or policies, and any Forest Service obligation is subject to the availability of appropriated funds and other resources. The negotiation, execution, and administration of these prospective agreements must comply with all applicable law

Nothing in this MOU is intended to alter, limit, or expand the agencies' statutory and regulatory authority.

- H. USE OF U.S. FOREST SERVICE INSIGNIA. In order for Sierra County Fire Safe & Watershed Council to use the U.S. Forest Service insignia on any published media, such as a Web page, printed publication, or audiovisual production, permission must be granted from the U.S. Forest Service's Office of Communications. A written request must be submitted and approval granted in writing by the Office of Communications (Washington Office) prior to use of the insignia.
- I. MEMBERS OF U.S. CONGRESS. Pursuant to 41 U.S.C. 22, no U.S. member of, or U.S. delegate to, Congress shall be admitted to any share or part of this agreement, or benefits that may arise therefrom, either directly or indirectly.
- J. FREEDOM OF INFORMATION ACT (FOIA). Public access to MOU or agreement records must not be limited, except when such records must be kept confidential and would have been exempted from disclosure pursuant to Freedom of Information regulations (5 U.S.C. 552).



K. TEXT MESSAGING WHILE DRIVING. In accordance with Executive Order (EO) 13513, “Federal Leadership on Reducing Text Messaging While Driving,” any and all text messaging by Federal employees is banned: a) while driving a Government owned vehicle (GOV) or driving a privately owned vehicle (POV) while on official Government business; or b) using any electronic equipment supplied by the Government when driving any vehicle at any time. All cooperators, their employees, volunteers, and contractors are encouraged to adopt and enforce policies that ban text messaging when driving company owned, leased or rented vehicles, POVs or GOVs when driving while on official Government business or when performing any work for or on behalf of the Government.

L. PUBLIC NOTICES. It is the U.S. Forest Service's policy to inform the public as fully as possible of its programs and activities. Sierra County Fire Safe & Watershed Council is encouraged to give public notice of the execution of this MOU and, from time to time, to announce progress and accomplishments. Press releases or other public notices should include a statement substantially as follows:

" of the U.S. Forest Service, Department of Agriculture, ."

may call on the U.S. Forest Service's Office of Communication for advice regarding public notices. is/are requested to provide copies of notices or announcements to the U.S. Forest Service Program Manager and to The U.S. Forest Service's Office of Communications as far in advance of release as possible.

M. U.S. FOREST SERVICE ACKNOWLEDGED IN PUBLICATIONS, AUDIOVISUALS AND ELECTRONIC MEDIA. Sierra County Fire Safe Council shall acknowledge U.S. Forest Service support in any publications, audiovisuals, and electronic media developed as a result of this MOU.

N. NONDISCRIMINATION STATEMENT – PRINTED, ELECTRONIC, OR AUDIOVISUAL MATERIAL. Sierra County Fire Safe Council shall include the following statement, in full, in any printed, audiovisual material, or electronic media for public distribution developed or printed with any Federal funding.

In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability. (Not all prohibited bases apply to all programs.)

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964



(voice and TDD). USDA is an equal opportunity provider and employer.

If the material is too small to permit the full statement to be included, the material must, at minimum, include the following statement, in print size no smaller than the text:

"This institution is an equal opportunity provider."

- O. TERMINATION. Either party, in writing, may terminate this MOU in whole, or in part, at any time before the date of expiration (see paragraph R below).
- P. DEBARMENT AND SUSPENSION. Sierra County Fire Safe & Watershed Council shall immediately inform the U.S. Forest Service if they or any of their principals are presently excluded, debarred, or suspended from entering into covered transactions with the federal government according to the terms of 2 CFR Part 180. Additionally, should Sierra County Fire Safe & Watershed Council or any of their principals receive a transmittal letter or other official Federal notice of debarment or suspension, then they shall notify the U.S. Forest Service without undue delay. This applies whether the exclusion, debarment, or suspension is voluntary or involuntary.
- Q. MODIFICATIONS. Modifications within the scope of this MOU must be made by mutual consent of the parties, by the issuance of a written modification signed and dated by all properly authorized, signatory officials, prior to any changes being performed. Requests for modification should be made, in writing, at least 30 days prior to implementation of the requested change.
- R. COMMENCEMENT/EXPIRATION DATE. This MOU is executed as of the date of the last signature and is effective through _____ at which time it will expire, unless extended by an executed modification, signed and dated by all properly authorized, signatory officials.
- S. AUTHORIZED REPRESENTATIVES. By signature below, each party certifies that the individuals listed in this document as representatives of the individual parties are authorized to act in their respective areas for matters related to this MOU. In witness whereof, the parties hereto have executed this MOU as of the last date written below.

Bill Nunes, Chair

Sierra County Fire Safe & Watershed Council

Date



Date
U.S. Forest Service,

The authority and format of this agreement have been reviewed and approved for signature.

Date
U.S. Forest Service Grants Management Specialist

Burden Statement

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0217. The time required to complete this information collection is estimated to average 3 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.