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Department of  
Agriculture

Forest  
Service

Lake Tahoe Basin  
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File Code: 1950

Date: June 22, 2012

**Subject: Meeks Creek Meadow Ecosystem Restoration**

Dear Scoping Respondents and other Individuals, Organizations and Agencies:

The USDA Forest Service Lake Tahoe Basin Management Unit (LTBMU) is seeking comments on the enclosed Revised Proposed Action for the Meeks Creek Meadow Ecosystem Restoration. The Meeks Creek Meadow Ecosystem Restoration is following the objectives of the LTBMU Land and Resources Management Plan (Forest Plan) and the 2004 Sierra Nevada Forest Plan Amendment Record of Decision (SNFPA) for restoration of stream and meadow areas. The project area encompasses the Meeks Meadow (see enclosed project area map).

Project information will be posted on the LTBMU website at <http://www.fs.usda.gov/goto/ltbmu/MeeksCreekMeadowRestoration>.

As the Meeks Creek Watershed Ecosystem Restoration continues through the NEPA environmental analysis process, the Forest Service will be lead agency. The Forest Service will work closely with the Tahoe Regional Planning Agency (TRPA) and Lahontan Regional Water Quality Control Board (LRWQCB) to meet applicable regulations.

A Decision Memo was signed for the Meeks Creek Meadow Restoration Project in June, 2010. During initial implementation activities, it was apparent that some aspects of the proposed action, specifically prescribed fire operations, could not be successfully implemented and that implementation would require an expanded project area to be thinned before the meadow burn. The Lake Tahoe Basin Management Unit concluded that the Interdisciplinary Team needed to reconvene to revise the proposed action, conduct additional surveys of adjacent land and NEPA analyses of the expanded project area, re-scope to agencies and members of the public, and complete a new Decision Memo. Through this process, the proposed action was modified to insure that the goals of the project were met while confirming the planned activities could be implemented effectively.

Project Description

This project proposes to restore approximately 300 acres of meadow habitat in the Meeks Meadow project area through treatments that thin adjacent stands and remove encroaching conifers from the meadow and are further treated with prescribed fire. The preferred method of treatment is to treat the entire meadow in one entry using a combination of mechanical equipment and hand treatment, followed by prescribed fire.

How to Comment and Timeframe

This Project is in the initial (scoping) stage of National Environmental Policy Act (NEPA) analysis. We are asking for your comments on this Revised Proposed Action. This scoping notice is intended to provide those interested in or affected by this project with an opportunity to

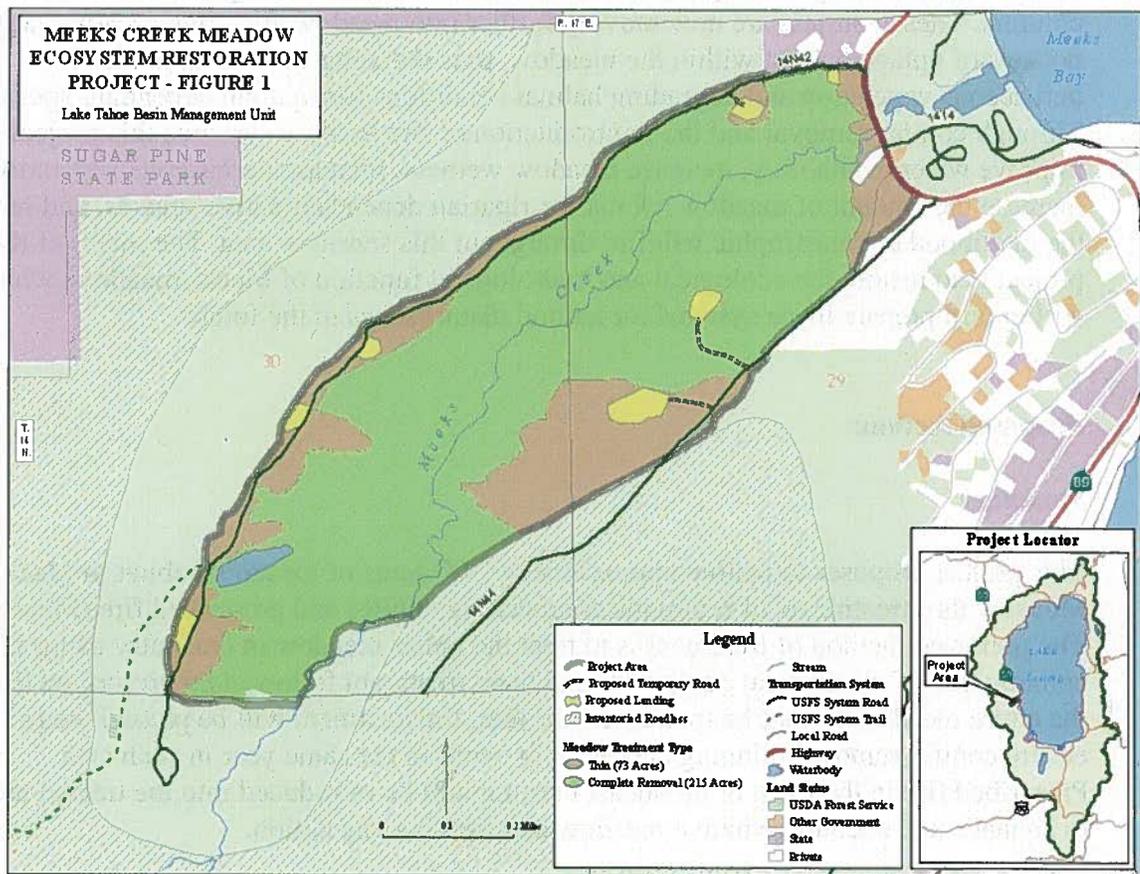


# Proposed Action for the Meeks Creek Meadow Ecosystem Restoration

USDA Forest Service Pacific Southwest Region  
Lake Tahoe Basin Management Unit  
El Dorado Co., California

## Location:

The Meeks Creek Meadow is located within the Meeks Management Area on the western shore of Lake Tahoe in El Dorado County, California in Section 29, SE ¼ Section 30 and the NW ¼ Section 31, T14N, R17E of the Homewood, California quadrangle map (Figure 1).



## Background:

Meadows play important roles in hydrology, erosion control, nutrient cycling, provision of animal food and shelter, and human recreation. Meadows are also important in maintaining hydrological processes downstream, conserving stream flows and reducing

would be excessive material resulting from hand treatments to pile and burn without resulting in hot spots of high intensity fire that wouldn't meet the project objectives.

If operating mechanically is not suitable within portions of the project area during normal operating periods, over the snow mechanical operations and/or hand treatments would be used. Material created by hand treatment would be lopped and scattered with some material removed from the area where higher conifer densities are present, and then prescribed fire would be used to complete the treatments. Hand treatments may require multiple entries, and each entry would consist of lop and scattering and removal as needed, with burning in the same season however jackpots of fuel may occur in isolated pockets.

Mechanical suitability will be determined based on the LTBMU SEZ Sensitivity Rating System, which considers a treatment unit's proximity to stream channels or other water features and accessibility, and also on soil moisture conditions at the time of operations. The completed SEZ ratings for this project indicate that the project treatments are in locations determined to be operable based only on the physical characteristics of the unit. However, the soil moisture conditions prior to on the ground operations may dictate otherwise. Several areas of depressions in the meadow identified during the ratings suggested that some portions of the project area will remain too wet to treat mechanically, particularly in wet years.

Treatment type (thinning verses complete removal of conifer) is determined by soil type and existing conifer stand conditions. Based on this information, all conifers less than 30 inches Diameter at Breast Height (DBH) will be removed within the meadow and along the meadows edge. Additionally, a buffer along the meadows edge will have all conifers removed to reduce future seed sources. Select trees 30 inch DBH or greater may be girdled to provide future snag habitat. Existing snags within the meadow, along the meadows edge, as well as within the thinned areas will not be removed unless deemed necessary to complete treatment activities. Within thinning treatments, conifers will be thinned to mimic historic stocking levels (Figure 1).

Existing landings will be used where available, and where existing landings are not available, new landings will be constructed (Figure 1). New constructed landings will be approximately 1.5 acre or less in size and existing landings will be no larger than two acres in order to safely facilitate the handling and removal of material (e.g. logs, biomass). Constructed landings may require removal of trees larger than 30 inches dbh, but removal will be minimized with choice location of landings. Landings could have potential short term visual impacts; however, all sites will be rehabilitated to a natural state post implementation. In non SEZ areas, this may include subsoiling to a minimum of 12 inches depth, reseeding of native species, and spreading slash or chip as ground cover. In SEZ areas, landings will be decommissioned by subsoiling to a minimum of 12 inches depth, reseeding with native species, and spreading meadow mowing clippings as ground cover.

The project is proposing a total of approximately 0.15 mile of temporary (or unclassified) roads (Figure 1). Some road improvements will be made for mechanical treatments on Roads

### **Hand Treatments**

Hand removals will treat live trees up to 30 inches DBH. Manageably-sized portions of felled live trees (e.g., branch wood and portions of boles smaller than 16 inches in diameter) will be lop and scattered to provide a fuel bed for prescribed burning that will be used post treatment to promote meadow vegetation. Hand treatment will be used if no other mechanical removal options exist in the project area.

### **Prescribed Broadcast Burning**

Prescribed fire will be used as a treatment to remove small conifers (<3 inches dbh) and enhance native riparian plant vigor and diversity. Broadcast burning will be used subsequent to thinning treatments, preferably immediately following vegetation treatments, for optimal success due to expected increases in the water table after conifers are removed. Fire intensity would be light to moderate and residence time would be limited. No pile burning would occur. Underburn prescriptions will be designed to avoid adverse effects on soil and water resources by planning prescribed fire to ensure that fire intensity and duration do not result in severely burned soils, through consultation with LTBMU specialists. Flame heights would not exceed two feet within 50 feet of stream courses or on wetlands unless higher intensities are required to achieve specific objectives.

### **Maintenance and Monitoring**

A maintenance plan will be developed to determine the approximate time between prescribed fire treatments, unforeseen needs for additional hand treatment, or if riparian vegetation seeding is required. If natural recruitment of aspen, cottonwood, and willow does not occur post implementation, efforts such as seeding and planting may be implemented. The timing of prescribed burns is expected to change with time and be delineated by monitoring efforts. Monitoring will include analysis of vegetative trend plots and Brown's transects. Data will be collected pre-implementation and monitored annually for three years post implementation.

### **Forest Plan Consistency:**

The NFMA analysis team completed a LRMP consistency matrix and found all components of the proposed action to be consistent with the LTBMU LRMP with implementation of the project design features included with the proposed action. The project is expected to meet the Forest-wide standards and guidelines, and the Management Area direction with the inclusion of the Resource Protection Measures below:

### **Hydrology/Soils**

A list of applicable soil and water BMPs from the Region 5 BMP Handbook (US Pacific Southwest Region, 2000) is located in Appendix A, including project specific details.

### **Vegetation Treatments**

Normal operating period is generally considered to be from May 1 through October 15 each year. However, operable conditions may be present outside of that time

8. Temporary crossings for forwarder trails on ephemeral and intermittent drainages would be constructed and removed when the channels are dry (or not flowing). Crossings on intermittent channels will be installed such that water flow and fish passage are not obstructed and would be designed (e.g. pipe size) to accommodate a 1" or greater precipitation event. Crossings would be removed before the winter season begins. If the channel is not dry at the time needed for removal (e.g. end season winterization), implement dewatering BMP's prior to crossing removal.
9. Saturated or ponded soil areas will not be crossed. Where it is necessary to cross an SEZ area with inoperable soil moisture conditions, equipment would operate over a slash mat, landing mat, or other protective material to minimize soil compaction. The Contract Administrator will determine the crossing location and method.
10. Limit mechanical equipment operations in SEZs to CTL operations or operations using equipment that has low ground pressure such as rubber-tired equipment, equipment that operates on a bed of slash, or other innovative technologies that adequately protect soil and water resources. Use the SEZ risk rating system to determine operability in all of the SEZ areas.
11. For mechanical operations, use a minimum 25 foot equipment exclusion buffer adjacent to perennial and intermittent streams, lakes and ponds when the SEZ rating system determines appropriate.
12. Prohibit tree removal methods that disturb the ground surface within 25 ft of a perennial or intermittent stream channel or other water body (e.g. lakes, ponds).
13. Where implementation monitoring finds potential for sediment delivery, contractor would rake in the berms from ruts created by end-lining.

**Vegetation removal and thinning treatments (outside of normal operating period or wet conditions)**

14. When working outside of the normal operating period, conditions must be adequate to prevent erosion, sediment delivery to water bodies, and soil compaction that would impact soil productivity or soil hydrologic function. Equipment operations would take place on portions of the treatment unit where adequate snow or frozen ground conditions are present while considering the above desired outcome. The following criteria will be applied in determining equipment operations:
  - Frozen soil operations are permitted where operated vehicles, tractors and equipment can travel without sinking into soil or landing surfaces to a depth of more than 2 inches for a distance of more than 25 feet. Temperatures must also remain low enough to preclude thawing of the soil surface.

### **Transportation**

19. Road improvements will be needed for mechanical treatments on Roads 14N42 and 14N44. These roads are currently in level 1 maintenance status (dormant). During project implementation, road maintenance level will change to level 2 and returned to level one when project is complete. New temporary roads will be needed to service some landings. New temporary roads will be obliterated and returned to natural condition. Existing roads and trails would be utilized as fire lines to minimize new ground disturbance. Mechanical treatment activities may require some short term trail closures or forest closure orders. These closures can be potentially minimized or eliminated by utilizing flaggers.
20. All temporary roads would be returned to their original conditions under the ATMs (e.g. Forest Service trails used as temporary roads would be returned to trail width). All drain structures will be removed and natural drainage patterns will be re-established.
21. Temporary road segments in SEZs will be mulched, subsoiled to a 12 inch depth, and seeded using a native seed mix.
22. Roads will be watered for dust abatement according to Forest Service Handbook 2409.15. Determination of dust abatement will be made by contract administrator. The purpose of dust abatement is to control road surface loss, provide for road user safety, and minimize impact to adjacent resources and neighborhoods.
23. Construction will occur between May 1 and October 15 to the maximum extent possible. If grading or movement of soil becomes necessary between October 16 and April 30, a standard grading exception request will be submitted to TRPA.

### **Prescribed Fire**

24. Existing roads and trails will be used as fire line to the extent feasible. When line construction is necessary it will be completed with hand tools, to the minimum width and depth necessary to hold the fire. Minimum Impact Suppression Techniques (MIST) will be used. All line will be rehabilitated by pulling any berms created back into the line and creating water bars where necessary. Prior to construction of fire lines in meadow areas, consultation with Watershed Specialist will occur to determine the appropriate construction and decommissioning techniques to avoid soil impacts.
25. No ignitions will take place within identified stream corridors, fire will be allowed to back into corridors. Ignitions may take place within SEZs if necessary to facilitate fire spread through the area.

35. Leave existing downed trees and LWD that are in perennial or intermittent stream channels in place unless channel stability needs, as determined by an LTBMU Fisheries Biologist and/or hydrologist, dictate otherwise (LRMP STD/GD 15).

### **Rare Plants**

36. These measures are designed to protect unique plant populations and/or habitat from damage.
37. An LTBMU botanist will be notified if any R5 sensitive plant or LTBMU special interest species is identified during project implementation. Depending on the species, design features may need to be implemented. Design features could range from avoidance or may allow project activities to occur within the population or within a buffered area around the population. It is recognized that restoration activities may require short term impacts, however some species may be able to withstand these short term impacts, or in some cases these may improve the populations.
38. *Scutellaria galericulata*, a LTBMU special interest species, was identified in the project area. This species has a state rank of S2 (imperiled) and a CA Rare plant rank of 2.2 (rare, threatened, or endangered in California, but more common elsewhere fairly endangered in California). Project activities will be allowed to occur within this population, because this project is expected to improve habitat for this species. Butte et al. (2003) found that this species increased in abundance at burn sites. They hypothesized the increased population was a result of increased light from removal of the canopy. Invasive Weeds
39. *These measures* are intended to protect the native plant and animal species and associated habitat that are unique to the project area. The project design measures will be implemented to control impacts due to invasive weeds.
40. Known weed infestations will continue to be monitored and surveyed for new occurrences in portions of the project area with focus on temporary roads and landings prior to implementation. Weed infestations within the treatment area or along travel routes associated with the project area will be treated using approved methods, or flagged and avoided according to the species present and project constraints. Staging areas (e.g., for equipment, materials, or crews) will not be located in weed infested areas. As of 2011 surveys, the only invasive species known to occur in the project area is *Bromus tectorum*.
41. All off-road equipment used on this project will be washed before moving into the project area to ensure that the equipment is free of soil, seeds, vegetative material, or other debris that could contain or hold seeds of invasive weeds. Off-road equipment includes all logging and construction equipment and brushing equipment such as brush hogs, masticators, and chippers; it does not include log trucks, chip vans, service vehicles, water trucks, and pickup trucks. Equipment

transport wind speeds, in the Smoke Management Plan to facilitate venting and dispersion of smoke from populated areas.

### **Scenic**

47. Accomplish meadow restoration, and stand improvement work in a manner that closely duplicates the existing lines, forms, colors, and textures of the surrounding landscape character, to the extent practical.

### **Recreation**

48. Prepare a Project Implementation Plan to ensure that all potential effects to recreationists and users are minimized through a well-planned schedule. The Plan will address the following phases and requirements:

#### *A. Pre-Implementation Phase*

- Develop a Communication and Sign Plan that includes signage posted at the access road and trailhead that describe the purpose of the project and safe travel suggestions.

#### *B. Construction Phase*

- Due to potential safety hazards to the public inherent in the construction process, implement the following strategies: Closures and Signage: Use of heavy equipment on access routes may preclude the safe use of those routes by the public; therefore, the area should be temporarily closed. Adequately post temporary closures with signage that meets Forest Service design standard guidelines.

### **Cultural Resources**

49. Recorded Cultural sites will be flagged and avoided by project activities.
50. If previously unidentified Cultural sites are discovered during planning activities, work in the area and the Heritage Program manager will be notified to recommend a course of action.