Chapter 1

Purpose and Need for Action

Document Structure

The Forest Service has prepared this Final Environmental Impact Statement (EIS) in compliance with the National Environmental Policy Act (NEPA), and other relevant Federal laws and regulations. This Final EIS discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and alternatives to the proposed action. The document is organized into the following chapters consistent with NEPA regulations.

Chapter 1. Purpose and Need for Action

This chapter includes information on the history of the project proposal, the purpose of and need for the project, and a brief overview of the Forest Service proposal for achieving that purpose and need. This chapter also details how the Forest Service informed the public of the proposal and how the public responded.

Chapter 2. Alternatives, including the Proposed Action

This chapter provides detailed descriptions of the no-action alternative (Alternative 1), and the two action alternatives the Forest Service considered for this project, the Proposed Action (Alternative 2) and the Preferred Alternative (Alternative 3). Chapter 2 includes the integrated design features/resource protection measures for each of the action alternatives. Finally, this chapter provides a summary table of the environmental consequences associated with each alternative (details are found in Chapter 3).

Chapter 3. Affected Environment and Environmental Consequences

This chapter describes the existing conditions of the land and resources within the project area and discloses the environmental effects of implementing each alternative, including the no action alternative. This chapter is organized by resource area.

Chapter 4. Monitoring

This chapter describes the monitoring that would take place under the action alternatives.

Chapter 5. Consultation and Coordination, Acronyms and Glossary, and References Cited

This section describes the coordination and consultation with Tribes and other Federal, State, and local agencies, provides aid to the reader for scientific and agency terms and acronyms, and details the literature references cited in the body of the EIS.

Appendices

The appendix sections of the FEIS provide additional information as needed to support the analyses presented in this EIS.

- Appendix A contains a summary of the past, present and foreseeable actions that were used in the cumulative effects analysis.

- Appendix B lists the best management practices (BMP's) applicable to this project.
- Appendix C outlines criteria used to evaluate the sensitivity of stream environment zones (SEZ's) within the project area.
- Appendix D displays the soil moisture protocol.
- Appendix E contains a list of all who commented on the DEIS, a consolidation of all comments (grouped by resource or interest area), and responses to each substantive comment.

Additional documentation may be found in the *project planning record* located at the U.S. Forest Service, Lake Tahoe Basin Management Unit, 35 College Drive, South Lake Tahoe, CA 96150. Inquiries related to the South Shore project planning record may be directed to the Forest Service, LTBMU, via email at: comments-pacificsouthwest-ltbmu@fs.fed.us, or by phone: (530)543-2600.

Background

Healthy Forest Restoration Act (HFRA) Process

The Healthy Forest Restoration Act of 2003 (HFRA) authorizes projects on federal lands to reduce fuel loads and increase or maintain healthy forest conditions. It provides a foundation to work collaboratively with at-risk communities to reduce wildfire hazards caused by fuel loads within the wildland urban intermix (WUI) that exceed desired conditions as defined by the Forest Plan (HFRA Sec.102 (b)). The Act requires federal agencies to consider recommendations made by at-risk communities that have developed community wildfire protection plans (HFRA Sec. 101 (3)). An updated list of urban wildland interface communities within the vicinity of federal lands that are at high risk from wildfire was published in the Federal Register on August 17, 2001. The community of South Lake Tahoe is listed in the Federal Register as a community at-risk. The South Lake Tahoe Fire Department, Lake Valley Fire Protection District, Tahoe Douglas Fire Protection District, and Fallen Leaf Fire Department have developed community wildfire protection plans (CWPP's).

Coordination with these agencies in the development and use of their CWPP's is an important part of the HFRA analysis for this project. The community fire safe council worked with corresponding fire departments and fire protection district personnel to design these CWPP's for effective vegetation and fuels treatments and defensible space across all land ownerships, including National Forest System lands. The U.S. Forest Service, Lake Tahoe Basin Management Unit (LTBMU) collaborated with the fire districts and fire safe councils to design fuel reduction activities that are consistent with the CWPP's and provide the defensible space identified in the CWPP's where it occurs on National Forest System lands.

Land ownership patterns in the Lake Tahoe Basin present a challenge to project implementation. The CWPP's identify fuels treatment needs across multiple ownership jurisdictions (federal, state, local, and private). Approximately 65 percent of the CWPP treatments include National Forest lands. A successful fuels reduction program requires effective coordination among land management and regulatory agencies.

One purpose of HFRA is to promote collaboration that resolves issues and reduces both time and expense for preparation of environmental documentation in order to proceed with projects to reduce hazardous fuels and restore forest health in a shorter timeframe and with lower costs to the taxpayer (HFRA 2003). Pursuant to HFRA, instead of an appeal period (36 CFR 215), there will be an "objection process" before the final decision is made and after the environmental document is available (36 CFR 218). In order to be eligible to file an objection to the preferred alternative, specific written comments related to the project must have been submitted during scoping or other public involvement opportunities on this EIS (36 CFR 218.6). Individual members of organizations must have submitted their own comments to meet the requirements of eligibility as an individual, objections received on behalf of an organization are considered as those of the organization only.

Emphasis on Reducing Conifer Density and Treating Fuels

The 2007 Angora Fire, started on National Forest System lands (NFS), burning approximately 3,100 acres and destroying or damaging more than 250 structures. This fire was a devastating fire to many people who live in the neighborhoods within the South Shore of Lake Tahoe. Lessons learned from the Angora Fire concluded that where fuels and vegetation treatments were completed prior to the fire, they worked as intended, by reducing fire intensity from a crown fire to surface fire, reducing ember spotting distances (to <50 feet), and ultimately increasing firefighters ability to take safe and "close-in" suppression actions, thus minimizing the overall potential fire damage to structures. In areas that were untreated, such as slopes and the Angora Creek Stream Environment Zone (SEZ), the fire burned as a crown fire consuming 95-100 percent of the tree crowns and surface vegetation, it created ember spotting distances as far as ½ mile, and suppression resources could not safely engage the fire due to rapid rates of spread and very high intensity caused by continuous dense stands of trees and high surface fuel loading (Murphy et al 2007). Ultimately, the areas that had prior vegetation/fuels treatments are currently in a healthier forest condition that is resilient to fire where intact stands of trees exist with lower surface fuel loads, and a diversity of surface vegetation and snags.

The LTBMU, State, and local agencies have conducted thinning and fuels reduction efforts on approximately 30,000 acres within the Lake Tahoe Basin from 2000-2010. In 2007, the Tahoe Regional Planning Agency (TRPA) published their Fuel Reduction and Forest Restoration Plan for the Lake Tahoe Basin Wildland Urban Interface (WUI). This report synthesizes the CWPPs for the seven fire protection districts (FPD) to identify Basin-wide fuel reduction needs and the resources needed to implement a Basin-wide hazardous fuels reduction Plan. The TRPA report emphasizes the need for increased efforts in treating fuels and forest thinning to protect values at risk and restore forest health (TRPA 2007, Executive Summary pg. E-4). In addition to the 2007 TRPA report, several other studies identify the need to reduce conifer density and hazardous fuel loads in the Lake Tahoe Basin. The Lake Tahoe Watershed Assessment (Murphy & Knopp, editors 2000a) found that current tree density is approximately four times that of 150 years ago. They also found a pronounced shift in the species composition of younger trees away from pine and towards fir. The proportion of less fire-resistant white fir and incense cedar has doubled over the past 200 years, while the component of more fire-resistant Jeffrey pine has declined by half. The Watershed Assessment reported that there have been few fires in the 20th century mostly due to excellent fire detection and suppression, with response time to human-caused fire among the shortest in the Sierra Nevada. It was also noted that the Lake Tahoe Basin has one of the highest fire ignition rates in the Sierra Nevada, concentrated around the urban interface. The Lake Tahoe Watershed Assessment projected that “should a fire escape initial control attempts under extreme wildfire conditions, at least 50 percent of the area in the resulting burn would likely be crown fire, with overstory tree mortality greater than 50 percent… Even a small wildfire in the basin is potentially a significant event because of the juxtaposition of high ignition potential, high density and value of human developments, and high fuel hazard” (Murphy & Knopp, editors 2000a, pg. 15). The Watershed Assessment recommended “A combination of increased fire prevention, education, and strategic fuel hazard reduction will be most effective at reducing the likelihood of damaging fire in the basin”
(Murphy & Knopp, editors 2000a, pg. 15).

In 2004, the LTBMU prepared the South Shore Landscape Analysis (USDA FS LTBMU 2004), which also identified a need for cost-effective vegetation treatments to reduce hazardous fuel loads, particularly in the WUI. Recommended outcomes are to achieve conditions that (1) reduce the size and severity of wildland fires, and (2) result in stand densities necessary for healthy forests during drought conditions. This landscape analysis warns, “The consequences of doing nothing will result in continued high vegetation densities and species composition that is out of balance… This would lead to increases in

surface, ladder, and crown fuels… with increased potential for insect infestation, disease outbreaks, and uncharacteristically severe wildfires" (USDA FS LTBMU 2004, pg. 5-43).

The LTBMU Stewardship and Fireshed Assessment used Basin-wide fire modeling to evaluate the likely effects of unplanned fires on urban areas. The Fireshed Assessment found that the most severe fires, and therefore effects, would occur in lower elevation pine and mixed conifer forests (USDA FS 2007a). Crown fires are not easily controlled and could result in potential loss of life, loss of private property, significant impacts on natural resources, including lake clarity, and loss of recreational opportunities and tourism (TRPA 2007, Executive Summary, pg. E-1). The wildfire behavior modeled and predicted (within the Fireshed Assessment, the Lake Tahoe Watershed Assessment, the TRPA Fuel Reduction and Forest Restoration Plan, and the South Shore Landscape Analysis) were verified by the intensity and severity of the 2007 Angora Fire.

The South Shore Fuel Reduction and Healthy Forest Restoration Project (known hereafter as the South Shore project) was initiated in response to public wildfire risk concerns and the existing hazardous fuel conditions. The project initiation letter established an interdisciplinary team of Forest Service specialists to evaluate opportunities to move from the existing conditions toward the conditions desired both in the Forest Plan (as amended) and in the CWPP's of communities in the South Shore area. Collaborative efforts with local Fire Districts (Lake Valley Fire Protection District, Fallen Leaf Fire Department, Tahoe Douglas Fire Protection District, and South Lake Tahoe Fire Department), TRPA, Lahontan Water Board, the Washoe Tribe of Nevada and California, and the public provided input to the Forest Service (both during meetings and in writing) that was incorporated into the project design. The Proposed Action Alternative in this document is the product of the initial efforts in collaboration.

Purpose and Need for Action

The following needs have been identified in this project area:

1. **Improve Defensible Space –** There is a need for defensible space adjacent to communities (on National Forest System lands) in the South Shore area where fire suppression operations can be safely and effectively conducted in order to protect homes and communities from wildfires. (Citygate Associates 2004; Community Wildfire Protection Plan for Lake Valley Fire Protection District, 2004; Community Wildfire Protection Plan for Fallen Leaf Fire Department, 2004, Tahoe-Douglas 2004; Murphy and Knopp, eds. 2000a; USDA FS LTBMU 2004; TRPA 2007; USDA FS LTBMU 2007a).

Figure 2. Forest Service sign within an urban lot. Photo depicts project treatments in proximity to homes and neighborhood in the Wildland Urban Interface. Located within the Bijou neighborhood, South Lake Tahoe.

2. **Reduce Risk of Catastrophic Wildfire –** There is a need to reduce tree density and surface fuel loading, because stands of trees have become overly dense and surface fuels have accumulated to such a degree that wildfires with sustained crown fire and long range spotting could quickly develop. This causes severe resource damage and threatens human life and property. Figure 3 provides an example of what this condition looks like.

Figure 3. Current fuel loading example within the South Shore project area, woody debris greater than 40 tons/acre. Location: Off Hwy 50 at Upper Truckee River.

3. **Improve Forest Health –** There is a need for restoration of forest health in the South Shore area where stands of trees have become overly dense, which subjects them to widespread forest dieback from insects and diseases. In addition, forest stands that are overly dense suffer stress from drought and competition for nutrients. (Murphy and Knopp, eds. 2000a; USDA FS LTBMU 2004; TRPA 2007; USDA FS LTBMU 2007a). Existing overcrowded stands have higher than average mortality which leads to ever-increasing fuel loads and high intensity wildfire risk.

4. **Improve SEZ Vegetation and Habitat –** There is a need for restoration of stream environment zones (SEZs), including aspen stands in the South Shore area, in order to reduce the potential for catastrophic wildfire to spread through these areas. There is also a need to promote maintenance of meadows and aspen stands consistent with the Forest Plan, in addition to the LTBMU and Pacific Southwest Research Station's "Aspen Community Mapping and Condition Assessment Report". There is also a need to provide habitat for wildlife and plant species that are dependent on SEZs and/or aspen (Shepperd et al 2006). The photo in Figure 4 is an example of aspen treatment and SEZ desired conditions for the South Shore project.

Figure 4. Desired condition within a Stream Environment Zone (SEZ) of a meadow with an Aspen Stand. Location: Heavenly SEZ Demonstration Project, Pioneer Trail at Al Tahoe Blvd.

To meet the aforementioned needs for action, the proposed action would also be consistent with Forest Plan direction, desired conditions within the WUI and achieve the following purposes:

- Maintain or improve habitat conditions for threatened, endangered, and Forest Service sensitive species of plants and animals, consistent with the Forest Plan. Within the WUI defense zone, and strategic area treatments of the WUI threat zone, achieve management direction for the desired condition of forests that "are fairly open and dominated primarily by larger, fire tolerant trees" (SNFPA pg. 40, USDA FS 2004b, (Murphy and Knopp, eds. 2000a; USDA FS LTBMU 2004).
- Assure that treatments in SEZs promote the success of riparian species while providing for coarse woody debris recruitment and stream shading needs. (SNFPA pg. 64, USDA FS 2004b).

- Protect water quality consistent with the Forest Plan, the requirements of the Clean Water Act, and the Lake Tahoe Basin Plan.
- Reduce the risk for negative impacts to soil productivity and water quality from wildfire.
- Meet scenic quality objectives and stabilize scenic resources over the long-term by reducing the risk of impacts from wildfire and achieving the desired condition of stands that "are fairly open and dominated primarily by larger, fire tolerant trees." See Figure 5 for a before and after comparison of current and desired stand conditions.
- Meet air quality standards for the Lake Tahoe Basin by reducing the risk of impacts from wildfire.
- Discourage post-treatment establishment of user-created motorized or non-motorized routes or trails.
- Address public safety during implementation of the project.

Figure 5. Examples of current (left) and desired condition (center and right) conifer stand comparison – before and after treatment. Location: Heavenly SEZ Demonstration Project (Al Tahoe Blvd at Pioneer Trail, South Lake Tahoe). Middle photo was taken immediately following treatment; Photo at right illustrates vegetation conditions 4 years after treatment.

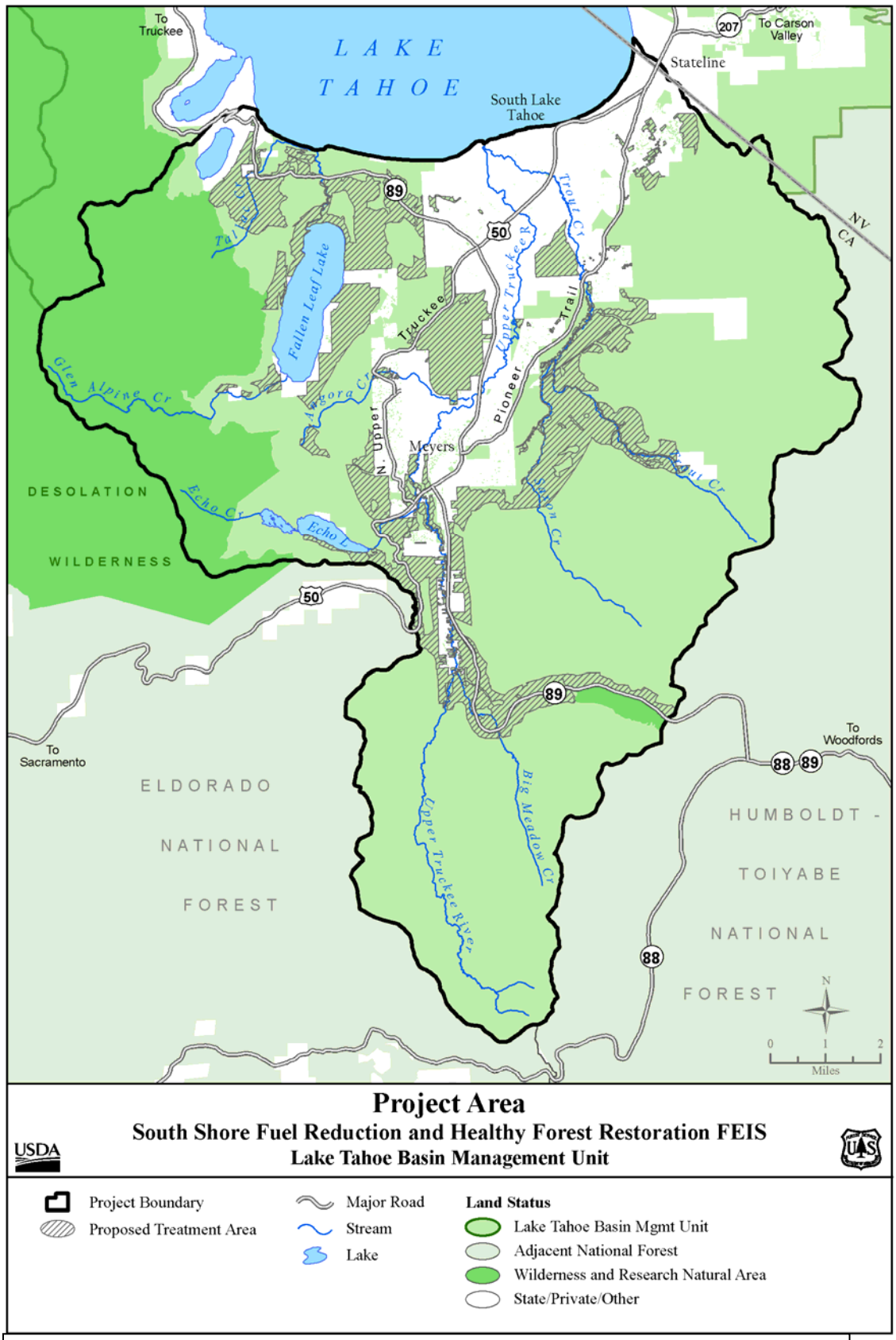

Figure 6. South Shore Project Area Map

Proposed Action

The Forest Service proposes vegetation treatments on 10,670 acres to reduce hazardous fuels, improve forest health and restore aspen stands within the South Shore Project Area. Fuel reduction would occur in all three zones of the Wildland Urban Interface (WUI): 1) On Forest Service owned urban lots within the WUI urban core, and 2) on Forest Service lands within the WUI Defense and, 3) WUI Threat Zones. The Defense Zone generally extends ¼ mile from the private land / Forest Service boundary and the Threat Zone extends approximately 1¼ miles beyond the Defense Zone. Consistent with SNFPA (USDA FS 2004, ROD p. 40), in the project area, the WUI boundaries were refined based upon site-specific topography and other features that provide logical fireline placement during suppression, such as slope breaks, roads, and streams (See Map 5).

Trees would be removed using a combination of mechanical and hand thinning methods. Mechanical methods would include using tracked and rubber-tired equipment designed to remove and process trees and vegetation. Residual fuels left following tree removal would be treated by a combination of prescribed burning, mechanical treatment (e.g. chipping and mastication) and/or removal. The proposed action also includes road crossing reconstruction at three locations. Implementation would be scheduled to start in 2011 and take approximately eight years to complete all the treatments proposed.

A detailed description of the proposed action (Alternative 2) is presented in Chapter 2.

Figure 7. Prescribed (Rx) fire follow up operation – pile burning

Decision Framework

Decision to be Made

The Responsible Official (36 CFR 218.2) is Nancy J. Gibson, Forest Supervisor, Lake Tahoe Basin Management Unit, 35 College Drive, South Lake Tahoe, CA 96150. The Forest Supervisor will review the proposed action, the other alternatives, public, agency and tribal input, and the environmental consequences in order to decide whether to:

- Implement the proposed action (Alternative 2) as described in Chapter 2
- Implement the preferred alternative (Alternative 3) as described in Chapter 2
- Implement a decision that combines a mixture elements from either Alterative 2 or 3
- Take no action at this time

The decision will be published in a Record of Decision signed by the Forest Supervisor at the conclusion of a 30 day objection period in accordance with HFRA (36 CFR 218.12).

Scope of the Decision

The scope of the decision would apply only to National Forest System lands within the South Shore project area managed by the LTBMU. This decision is within the authority delegated to the Forest Supervisor as the Responsible Official. There are no areas within designated Wilderness or Research Natural Areas proposed for treatment. Therefore approval by the Regional Forester or Station Director, respectively, is not required.

Approximately 650 acres of area considered for fuel reduction treatment are included where the WUI overlaps Inventoried Roadless Areas (IRAs) in the project area. Management of IRA's on National Forest System lands is currently the subject of conflicting Federal Court decisions. On November 5, 2009, Regional Forester Randy Moore issued a letter outlining Roadless Area Management Direction for the Pacific Southwest Region (R5) based on delegations made by the U.S. Secretary of Agriculture to the Forest Service. Based on R5 direction the South Shore project is within a class of action that requires review by the Regional Office and notification to the State of California. The State of California has not filed a petition for these IRAs under the 2003 Roadless Rule.

Revisions from DEIS/DEIR to FEIS

This FEIS complies with the National Environmental Policy Act (NEPA). Since this project was initially conceived in 2006 there have been significant events that have influenced the creation of the final document. Notably the Angora Fire (June 2007) and the subsequent recommendations made in the California-Nevada Tahoe Basin Fire Commission report issued in May 2008.

The LTBMU and Lahontan Water Board originally produced a joint Draft EIS/EIR, released in April 2009. The DEIS was compliant with NEPA and the DEIR was compliant with the California Environmental Quality Act (CEQA). At the outset of the analysis there was concern that a project of this size may have significant environmental consequences. This uncertainty lead to the decision by the Forest Supervisor and the Lahontan Water Board that a joint DEIS/DEIR would be appropriate should the analysis find the project would have significant impacts. The subsequent detailed analysis as presented in the DEIS concluded that there are no significant impacts that would result in the implementation of either of the action alternatives. Comments on the DEIS did not uncover any issues that would lead to the conclusion that the proposed action alternatives, as described with the associated extensive resource

protection measures (mitigations), would not result in significant impacts. The FEIS continues to make the finding that either of the action alternatives will not result in significant impacts. Therefore, without significant impacts further development of an EIR (under CEQA) or EIS (under TRPA) is not warranted. Since the Forest Service started with an EIS it will continue under those NEPA regulations rather than issue an Environmental Assessment, Decision Notice and Finding of No Significant Impact.

Based on a July 2011 court decision, the MOU between the TRPA and the Lahontan Water Board allowing single agency permitting for vegetation management projects is no longer valid. Consequently the Forest Service will seek the appropriate permits from both the TRPA and the Lahontan Water Board based on their respective authorities and, in the case of the TRPA, the vegetation management MOU that remains in place. This FEIS will be the basis for any environmental documentation.

Public Involvement

The initial proposed action was developed through coordination and collaboration with the Washoe Tribe of Nevada and California, the City of South Lake Tahoe Fire Department, Lake Valley Fire Protection District, Tahoe Douglas Fire Protection District, Fallen Leaf Fire Department, Lahontan Water Board, Tahoe Regional Planning Agency (TRPA), and the public during a series of nine meetings during February and March of 2007. The proposed action was mailed to interested and affected parties in July, 2007. Field trips to a series of three sites for an on-the-ground look at types of areas proposed for fuel treatments by the South Shore project were hosted by members of the interdisciplinary team on Tuesday, August 21, 2007, and Saturday, August 25, 2007, from 10 am to 2 pm. An evening open house on August 23, 2007, also provided the public an opportunity to ask questions and gather information about this project. Over 75 people visited the field sites, and seven people attended the open house. A total of seven written comment letters were received.

As a result of this initial scoping and during the preliminary environmental analysis phase there were public and other agency concerns due to the complexity of the proposal over such a large project area. Since it was uncertain if a Finding of No Significant Effect could be made the Forest Supervisor decided to prepare an environmental impact statement and forego an environmental assessment. After a number of collaborative meetings with the TRPA and Lahontan Water Board, the Forest Supervisor in cooperation with Executive Director (Lahontan Water Board) elected to prepare a joint draft environmental impact statement/draft environmental impact report (DEIS/DEIR) in accordance with NEPA and CEQA.

Scoping was done in accordance with 40 Code of Federal Regulations (CFR) part 1501.7 – Scoping. The Notice of Intent (NOI) to prepare an EIS was published in the Federal Register on January 16, 2008. The comment period on the proposed action extended 30 days from the date the NOI was published in the Federal Register.

The CEQA-required notice of preparation, notice of completion, site map, and supplemental potential environmental effects and mitigations measures paper were mailed to the State clearinghouse, responsible agencies and interested persons on January 14, 2008. The comment period for these documents extended 30 days from the date they were mailed. One additional letter was received in response to this scoping effort.

Two joint Lahontan Water Board and Forest Service scoping meetings were held; one on January 23, 2008 from 10:00 am to noon in the Board Room at Lake Tahoe Community College, 1 College Dr. South Lake Tahoe, CA; and the second on February 14, 2008 from 1:00 to 3:00 pm at the Lahontan Water Quality Control Board office, 2501 Lake Tahoe Blvd, South Lake Tahoe, CA.

However, because there were no substantive changes to the proposed action initially scoped in July 2007; those who previously submitted comments on this project were not required to resubmit them. Scoping comments submitted previously on this project were retained and treated the same as those received subsequent to the publication of the notice of intent and notice of proposal.

The Notice of Availability for the Draft EIS/EIR was published in the Federal Register and a legal notice was published in the Tahoe Daily Tribune on April 10, 2009. The 45-day comment period closed on May 26, 2009. Copies of the Draft EIS/EIR were mailed to the interested and affected public, as well as to required federal and state agencies on March 26, 2009. Copies of the Draft EIS/EIR were posted at the El Dorado County Clerk's office, the South Lake Tahoe public library, and at the LTBMU Forest Supervisor's office and visitor's centers. A total of 20 letters of comment were received on the Draft EIS/EIR; one from the Washoe Tribe of Nevada and California, three from government agencies, two from fire protection organizations, seven from environmental groups, and seven letters from individuals. All comments from these letters were sorted, grouped by subject, and analyzed. The Response to Comments is found in Appendix E of this FEIS document.

Issues

Scoping comments from the public, other agencies, and the Washoe Tribe of Nevada and California provided information used to define issues and formulate possible alternatives to the proposed action that responded to the issues. The Forest Service separated the issues into two groups: significant and non-significant issues. Significant issues are defined as concerns as to the effects that would be caused by implementing the proposed action that require additional alternative development to insure a reasoned decision can be made. Non-significant issues are identified as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. The Council on Environmental Quality (CEQ) NEPA regulations explain this delineation in 40 CFR, part. 1500, "…identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)…" A list of non-significant issues and reasons why they were found to be non-significant may be found in the South Shore project record, document E-2. Significant issues that were identified from the comments received during scoping on the proposed action are given below. These were used to frame alternatives.

Issue: Watershed Impacts

There was a concern whether implementation of the proposed action would result in adverse direct, indirect and/or cumulative effects to watershed conditions. Commenters expressed concern that the proposed action resulted in a risk to water quality and watershed condition due to the extent of the area and/or method of treatment in or near sensitive areas. There was particular concern about the cumulative effect of proposed activities in watersheds (HUC7) where the equivalent roaded acres (ERA) already exceed the threshold of concern (TOC).

How this concern was addressed:

An alternative to the proposed action was created (Alternative 3) which reduces the amount of total acres proposed for treatment. In addition, Alternative 3 proposes fewer acres of mechanical treatment methods shifting treatment to hand thinning. Proposed changes are primarily in sensitive areas (e.g stream environment zones). Changes in the amount and method of treatment resulted in corresponding changes in the follow up treatments such as the amount of prescribed burning. In response to the concern regarding the watersheds that already are over the TOC, Alternative 3 also redistributes the treatment acres proposed in each of these watersheds over all the years of the project as compared to the proposed

action to reduce the maximum treatment acres in these watersheds in a given year, thereby reducing cumulative impacts.

Issue: Wildlife Areas

There was a concern that fuel reduction activities that reduce canopy closure would degrade California spotted owl and northern goshawk nesting and foraging habitat.

How this concern was addressed:

Alternative 3 responds to this concern by changing treatments based on evaluation of the following: spatial extent of northern goshawk and California spotted owl PACs, WUI zone (defense or threat), type of treatment proposed (mechanical or hand), stand survey data, and type of fire behavior predicted. Generally, the intensity of treatments proposed was reduced in PACs where models showed existing conditions were predicted to support only surface fires. There is one less PAC treated in Alternative 3.

Forest Plan Consistency

The South Shore project analysis area extends from Cascade Lake on the northwest to the Heavenly Mountain Resort Special Use Permit boundary and the Nevada State line on the northeast, and from Lake Tahoe on the north to the LTBMU boundary on the south (Map 2). Table 1-1 lists the acres by ownership in the project analysis area.

Table 1-1. Acres of Ownership in Project Analysis Area

Ownership	Acres
Private Ownership	8,088
Other (State, County)	8,121
National Forest System lands	70,581
Total Project area, all ownerships	**86,790**

The proposed action and alternatives are guided by the LTBMU Land and Resource Management Plan (Forest Plan or LRMP) (USFS LTBMU 1988), as amended by the Sierra Nevada Forest Plan Amendment (SNFPA, USDA FS 2004b) and other amendments.

The LRMP, as amended, has been reviewed in consideration of the South Shore project. This project is responsive to guiding direction contained in the Plan, is consistent with the standards and guidelines contained in the Plan, and is consistent with the requirements for management prescriptions. The analysis for consistency with the Forest Plan is contained in the project planning record. The analysis for consistency with the Riparian Conservation Objectives (RCO) described in the SNFPA is contained in the RCO Analysis Report (PR# J14).

Laws, Regulations, and Policies

All resource management activities described and proposed in this document would be implemented to the extent that they are consistent with applicable Federal law, United States Department of Agriculture (USDA) regulations, Forest Service policies, and applicable provisions of State law. The major laws and their applicability to the proposed action are as follows:

Clean Water Act (Public Law 92-500)

All Federal agencies must comply with the provisions of the Clean Water Act. The Clean Water Act regulates forest management activities near federal waters and riparian areas. The proposed action meets the terms of the Clean Water Act for non-point sources of pollution, primarily pollution caused by erosion and sedimentation.

Clean Air Act (Public Law 84-159)

The following documents provide guidance and direction for smoke management to protect air quality: (1) Interim Air Quality Policy on Wildland and Prescribed Fires, issued by the Environmental Protection Agency in 1998; (2) Memorandum of Understanding between the California Air Resources Board (CARB) and the USDA FS, signed on July 13, 1999; and (3) Smoke Management Guidelines in Title 17 of the Code of Federal Regulations.

The project area lies within the Lake Tahoe Air Basin and the El Dorado Air Quality Management District. As a matter of regional policy, a smoke management plan would be submitted to and approved by El Dorado Air Quality Management District, who would issue a Burn Permit to the LTBMU prior to any burning that would occur within the South Shore project area. Several communities lie within proximity of the areas where prescribed burning is proposed to occur. Adherence to the smoke management plan for pile and understory burning would reduce negative impacts to communities. By adhering to a smoke management plan approved by the LTBMU Forest Supervisor and the El Dorado Air Quality Management District, particulate matter emissions from pile or understory burning would not violate California Ambient Air Quality (CAAQ) emission standards.

Dust abatement would be accomplished by applying water to roads, and landings, at a frequency that would control dust.

Environmental Justice (Executive Order 12898)

Executive Order 12898 requires that all federal actions consider potentially disproportionate effects on minority and low-income communities especially if adverse effects to environmental or human health conditions are identified. Adverse environmental or human health conditions created by any of the alternatives considered would not affect any minority or low income neighborhood disproportionately.

The activities proposed in all alternatives were based solely on the existing and desired condition of the vegetation, sensitivity of the environment, and practical treatment access in response to the Purpose and Need. In no case was the treatment prescription design based on the demographic makeup, occupancy, property value, income level or any other criteria reflecting the status of adjacent non-federal land. Federally owned lands proposed for treatment are distributed throughout the project area, and are intermixed with non-federal lands. Reviewing the location of the proposed treatments in any of the alternatives in relationship to non-federal land, there is no evidence to suggest that any minority or low income neighborhood will be affected disproportionately. Conversely there is no evidence that any individual, group or portion of the community will benefit unequally from any of the actions in the proposed alternatives.

Endangered Species Act of 1973 (Public Law 93-205)

Section VII of the Endangered Species Act requires Federal agencies to consult with the United States Department of the Interior Fish and Wildlife Service (USFWS) and/or the United States Department of Commerce National Marine Fisheries Service (NMFS), whichever is appropriate, during project planning when Threatened or Endangered species, or their associated critical habitat, may be affected by a project. Informal consultation was completed for the South Shore project because Lahontan cutthroat trout, a Threatened species, or their associated habitat, could potentially be affected by this project (see Chapter 3, Aquatic Wildlife).

A discussion also occurred concerning whether technical assistance should be requested for the Candidate species mountain yellow-legged frog. Both FWS and the LTBMU agreed that although mountain yellow-legged frog habitat may exist within the project analysis area, recent amphibian surveys support that the species does not occur within the project treatment area; therefore technical assistance would not be required.

Federal Insecticide, Fungicide, and Rodenticide Act; (7 U.S.C. 136 as amended)

This act as amended is the authority for the registration, distribution, sale, shipment, receipt, and use of pesticides (collective for insecticides, fungicides, and rodenticides). The Forest Service may use only pesticides registered or otherwise permitted in accordance with this act. In addition, the Forest Service in Region 5 must comply with California State laws and regulations regarding pesticides. Also, Forest Service policy in Region 5 is to use only EPA and California-registered pesticides. The action alternatives include the use of an EPA registered borate compound on cut stumps that are 14 inches diameter and greater for the prevention of annosus root disease. The borate compound is considered a fungicide.

Migratory Bird Treaty Act of 1918 as amended (16 USC 703-712)

The original 1918 statute implemented the 1916 Convention between the United States and Great Britain (for Canada) for the protection of migratory birds. Later amendments implemented treaties between the United States and Mexico, Japan, and the Soviet Union (now Russia). Specific provisions in the statute include the establishment of a Federal prohibition, unless permitted by regulations, to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention . . . for the protection of migratory birds . . . or any part, nest, or egg of any such bird." Because forestlands provide a substantial portion of breeding habitat, land management activities within the Lake Tahoe Basin Management Unit can have an impact on local populations, and are addressed in the terrestrial wildlife sections of Chapter 3.

National Forest Management Act of 1976 [NFMA] (Public Law 94-588)

The National Forest System lands affected by the South Shore project are subject to management direction in the 1988 LTBMU Land and Resource Management Plan (LRMP) as amended by the 2004 SNFPA ROD. The LRMP, as amended, guides management of all National Forest lands and resources within the South Shore project area. It includes direction for forest management, goals and objectives, area management direction, and standards and guidelines. As stated above, the South Shore project complies with the LRMP.

National Environmental Policy Act of 1969 [NEPA] (Public Law 91-190)

NEPA requires that Federal agencies complete detailed disclosure on proposed actions and alternatives to the proposed action that may significantly affect the quality of the human environment. The purpose of an environmental impact statement is twofold: 1) to provide decision makers with a detailed accounting of the likely environmental effects of a proposed action and any alternatives prior to adoption of an action, and 2) to inform the public and allow it to comment on those environmental effects. This EIS analyzes the alternatives and discloses their effects in detail. The procedural requirements of NEPA have been met.

National Historic Preservation Act (Public Law 89-665)

The proposed action is in conformance with regulations of the National Historic Preservation Act (NHPA), 1966, as amended (P.L. 89-665, 80 Stat.915); the National Environmental Protection Act (1969), Archaeological Resources Protection Act of 1979 (ARPA), Native American Grave Protection and Repatriation Act (1990: P.L. 101-601), and American Indian Religious Freedom Act (1978: P.L. 95-341), and as called for by the 1996 First Amended Regional Programmatic Agreement Among The U.S.D.A. Forest Service, Pacific Southwest Region California State Historic Preservation Officer, And Advisory Council On Historic Preservation Regarding The Process For Compliance With Section 106 Of The National Historic Preservation Act For Undertakings On The National Forests Of The Pacific Southwest Region (Regional PA), and the 2004 Interim Protocol for Non-Intensive Inventory Strategies for Hazardous Fuels and Vegetation Reduction Projects (Interim Protocol).

United States District Court, Eastern District of California Ruling – 11/4/09

On November 4, 2009 Judge Morrison C. England issued a Memorandum and Order requiring that fuels projects that are under the 2004 Sierra Nevada Forest Plan Amendment and were not approved prior to November 4, 2009 must include a detailed consideration of a noncommercial funding alternative. The South Shore Project is compliant with this order because both of the action alternatives (Alternative 2 and 3) represent noncommercial funding alternatives as described in the Court Order. Implementation of either alternative is not based, nor depends on, the commercial sale of wood fiber (e.g., saw timber, fuelwood and/or biomass). The prescriptions for tree removal and vegetation management are based solely on fuels and forest health objectives as described in Chapter 2 and not on any value in the products removed. It is not an objective of the South Shore Project to generate revenue (Chapter 1, Purpose and Need). It is anticipated that most of the funding for implementation will come from sources such as the Sierra Nevada Public Lands Management Act. However, this does not mean that wood fiber products will not be sold as a spin-off of project operations. Should markets exist at the time of implementation for wood fiber products, the Forest Service may elect to dispose of project generated fuels via sale to meet the ecological goals of the project. The potential revenues are displayed in Chapter 3, Economic Conditions and Effects.

Permits and Coordination

The Forest Service is actively consulting and coordinating with Federal, State, and local agencies, and tribes that have an interest in the project or could have a role in reviewing and/or providing permits or other approvals for aspects of the project. This includes coordination with Federal, County, and State of California regulatory agencies, including air quality management districts and water quality control boards.

El Dorado Air Quality Management District

Permits would be required from the El Dorado Air Quality Management District prior to prescribed burning.

Water Quality Control Plan for the Lahontan Region (Basin Plan)

The Basin Plan includes waste discharge prohibitions applicable within the Lake Tahoe Basin (Basin Plan section 5.2). 'Waste' includes, but is not limited to waste earthen materials (such as soil, silt, sand, clay, rock, or any other organic or mineral material) and any other waste as defined in the California Water Code section 13050(d). The Lahontan Water Board can grant exemptions to the prohibitions against discharges or threatened discharges attributable to new development or permanent disturbance in SEZs for erosion control projects, habitat restoration projects, wetland rehabilitation projects, SEZ restoration projects, and similar projects, programs, and facilities, if all of the following findings can be made:

> (a) The project, program, or facility is necessary for environmental protection or public health and safety;
>
> (b) There is no reasonable alternative, including relocation, which avoids or reduces the extent of encroachment in the SEZ; and
>
> (c) Impacts are fully mitigated.

Based on the analysis presented in the FEIS, the South Shore Project meets the above criteria, and is eligible for enrollment in the 2009 Timber Waiver from Lahontan Water Board. Since this project will take several years to complete, the Forest Service will apply for enrollment under the 2009 Timber Waiver (or any successor waiver) and/or for permits prior to on-the-ground operations. The Lahontan Water Board would complete appropriate additional CEQA documentation required for any phase they find not eligible for the 2009 Timber Waiver. This adaptive approach will ensure that any necessary permitting is streamlined and contemporary with project operations.

Tahoe Regional Planning Agency (TRPA)

Since January 2009 the TRPA and the Lahontan Water Board have had a MOU that allowed one of the agencies to be the singular regulating agency. This was in compliance with the recommendations of the 2008 California-Nevada Tahoe Basin Fire Commission for streamlining the permitting process. Under this MOU the Lahontan Water Board was designated as the permitting agency for the South Shore project. However in July 2011 the MOU between these agencies was found to be invalid by a state court, consequently the project will also need TRPA review. The TRPA and Forest Service, LTBMU have a MOU for vegetation management projects. The provisions of this MOU will apply to the South Shore project.