



Lake Tahoe
Basin
Management
Unit
Objection
Responses

September 22

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INTRODUCTION

Multiple objections with a variety of issues were reviewed. To facilitate my review and response to the issues raised, similar issues were grouped under a general resource heading and one response provided. My review resulted in instructions for the Responsible Official on some issues.

Not all issues, however, resulted in instructions. Instead, review of these contentions regarding the Final Environmental Impact Statement (FEIS), the Land Management Plan (LMP), the Draft Record of Decision (ROD) and related planning documents established that the Lake Tahoe Basin Management Unit (LTBMU) sufficiently addressed the concerns and is in compliance with current law, regulation, and policy. These issues have been addressed at the end of this document.

WILD AND SCENIC RIVERS ELIGIBILITY AND SUITABILITY

PRIMARY OBJECTORS

Sierra Forest Legacy, Craig Thomas and Michael Graf

Steve Evans, Friends of the River

OBJECTION ISSUE SUMMARY

Objectors contend that the LTBMU failed to appropriately complete and document a comprehensive evaluation and systematic inventory of the potential for rivers on the unit to be eligible for inclusion in the National Wild and Scenic Rivers (WSR) System. They do not believe the LTBMU adequately completed and documented an eligibility determination for the Upper Truckee River tributaries. Objectors are also concerned that the LTBMU is using other protective laws such as Endangered Species Act (ESA) instead of the Wild and Scenic Rivers Act (WSRA) when determining both eligibility and suitability, “Nothing in FSH 1909.12, Ch. 82.4 requires or even suggests that the Forest Service should reject WSR protection in favor of supposed existing “equivalent” or “higher” protections.”

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Objectors contend that the suitability assessment was, “conducted without collaboration or participation by the public, uses imprecise and confusing language, incorrectly applies some suitability criteria while ignoring others, and introduces extraneous issues (grazing).” Also submitted is the concern that the revised LTBMU LMP does not provide adequate interim protection for the Upper Truckee Recommended WSR.

RECORD REVIEW FINDINGS

WHAT IS REQUIRED?

FSH 1909.12 (83.11-12, 84.11a) states if the suitability determination is delayed for separate study, “the land management plan shall provide for protection of the eligible river corridor until a decision is made on the future use of the river and adjacent lands.” FSH 1909.12 (83.1)

Forest Service Handbook (FSH) 1909.12, Chapter 80 does not require that a specific management area be created for river segments determined to be eligible or suitable for WSR designation. Instead, FSH 1909.12, section 82.52 provides that

“the special area recommendation should include the desired conditions, objectives, guidelines, and suitability of areas to be used in the design of projects and activities consistent with management guidelines of eligible or suitable rivers at FSH 1909.12, section 82.51.”

Section 5(d)(1) of the Wild and Scenic Rivers Act (WSRA) directs federal agencies, including the Forest Service, to consider and evaluate potential national wild, scenic, and recreational river areas as part of its planning processes. Forest Service Handbook (FSH) 1909.12 (81.2) provides that

“[t]he land management planning process shall include a comprehensive evaluation of the potential for rivers in an administrative unit to be eligible for inclusion in the National System....If a systematic inventory of eligible rivers...has been previously completed and documented, additional assessment and study at time of land management plan revision need only be done if changed circumstances warrant additional review of eligibility....”

FSH 1909.12 (82) provides that “[t]he assessment of a river(s) identified as having potential for wild and scenic river designation follow a three-step process: 1. Determination of eligibility; 2.

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Potential classification (wild, scenic, or recreational); and 3. Determination of suitability. With regard to suitability, FSH 1909.12 (83) states the following:

A detailed study report shall be prepared...for all other rivers identified by the Forest Service as eligible for inclusion in the National Wild and Scenic Rivers System (National System) (sec. 5(d)(1) of the act). The purpose of the study is to document the Forest Service's analysis and conclusions on the suitability of eligible rivers for designation as components of the National System.

The suitability process can either occur during the LMP revision process or can proceed as a separate National Environmental Policy Act (NEPA) process. If the suitability study occurs in the plan revision process, the following agency guidelines apply:

The [environmental impact statement] EIS...accompanying the land management plan should address suitability factors, and alternatives...related to wild and scenic river recommendation. The EIS...should discuss the existing conditions and likely environmental consequences...of wild and scenic recommendation on the identified river values and other resource activities.... Within the appendix, there should be separate river narratives for each river or river system and a detailed map of the river corridor. The detailed river narrative is a synopsis of the pertinent information related to eligibility, classification, and suitability factors. Refer to section 84.11b, exhibit 01 for the contents of the summary information document.... Information on rivers that were evaluated for potential wild and scenic river designation must be included in the appropriate [DEIS] planning documents for public review. FSH 1909.12 (83.11-12, 84.11a). If the suitability determination is delayed for separate study, "the land management plan shall provide for protection of the eligible river corridor until a decision is made on the future use of the river and adjacent lands. FSH 1909.12 (83.1).

CONCLUSION(S)

In 1998, the Tahoe National Forest and the LTBMU completed the Eight Eastside Rivers WSR Study Report and FEIS ("Eastside Rivers Study"), where two rivers in the Basin (Truckee and Upper Truckee Rivers) were found eligible. The LTBMU intended the Eastside Rivers Study (along with initial inventory work done in conjunction with the 1988 LMP) to constitute a

systematic inventory of eligible rivers and, therefore, only “changed circumstances” need to be considered during the plan revision process. The LTBMU states that TNF coordinated an initial inventory and analysis that “evaluated a total of about 600 rivers and streams [on the TNF and LTBMU] using forest-wide resource information, as well as local field knowledge.” (Revised LMP FEIS Appendix B, pg. B-1)

In 1994, Friends of the River (a member of the coalition that submitted Objection 0100) provided the following public comment on the Eastside Rivers Study draft environmental impact statement (DEIS):

“As you know, Friends of the River was instrumental in advocating a comprehensive assessment of rivers on the Tahoe National Forest and Lake Tahoe Basin Management Unit in response to the publication of the forest plans in 1990 and 1988 (respectively). We are pleased to submit comments in response to the Wild and Scenic river suitability study for the eastside rivers which were identified in the assessment....” (Friends of the River’s Eight Eastside Rivers DEIS Comments, pg. 1 (emphasis added).)

These comments reflect Friends of the River’s acceptance of the Eastside Rivers Study as “a comprehensive assessment of rivers on the [LTBMU].” Further, in 1998, the Eastside Rivers Study FEIS provided the following project background and summary:

“During the course of developing the [TNF] and [LTBMU’s] Land and Resource Management Plans, the public pointed out that the National Forests had not adequately inventoried their respective rivers for possible Wild and Scenic Rivers classification. A subsequent inventory was conducted and nine rivers within the Truckee River Basin were identified as potentially eligible for study” (p. S-1 (emphasis added)).

The above statements, when read together, provide support that it was the LTBMU’s intention to complete a Basin-wide comprehensive river inventory, that this evaluation was completed in the Eastside Rivers Study, and that a member of the current objector’s coalition previously agreed with this assessment.

However, the planning LTBMU record does not indicate that the Eastside Rivers Study is available or that the 1988 LMP project records provide supporting documentation on the completion of an initial inventory and analysis—including which rivers and streams were initially inventoried and how they were evaluated.

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The objector's claim that "there is no administrative record supporting the Forest Service's claim that the initial analysis of 600 streams included any streams or rivers on the LTBMU other than the upper and lower segments of the Truckee River" is accurate. As a result, the LTBMU is not in compliance with FSH 1909.12 (81.2), which describes the agency's interpretation on how to fulfill the requirements of WSRA §5(d)(1). The LTBMU has not provided documentation of a comprehensive evaluation and systematic inventory of the potential for rivers in the unit to be eligible for inclusion in the National Wild and Scenic Rivers System.

Furthermore, review of the record showed that the suitability process, analysis, and documentation used by the LTBMU for the nine Upper Truckee River tributaries, as described in the Revised LMP FEIS, was not adequate under FSH 1909.12 (83). The LTBMU's suitability study for the nine tributaries that the Interdisciplinary Team (IDT) found "potentially eligible" consisted of the Forest Leadership Team considering the suitability factors identified in FSH 1909.12 (82.41) (as documented on a one-page table in the project record), and finding all of the tributaries not suitable. FEIS 2-20, B-2 – B-3

The LTBMU found the Upper Truckee River to be eligible, identified its potential classification as "wild," and also determined it to be suitable in the 1998 Eight Eastside Rivers Study and FEIS, with the accompanying 1999 ROD recommending designation under the WSRA. The 2013 Revised LMP Draft ROD reaffirmed this original recommendation (p. R-12). This suitable river segment is currently within an Inventoried Roadless Area (IRA) and is in the Backcountry Management Area under the revised LMP. Standard and Guide (SG) 168 appropriately references FSH 1909.12, section 82.52 in the revised LMP and provides a standard to protect "the free-flowing status and the outstandingly remarkable river values" (ORVs) of this suitable river segment.

FINAL INSTRUCTIONS

- 1 Complete and document a comprehensive evaluation and systematic inventory of the potential for rivers in the unit to be eligible for inclusion in the National Wild and Scenic Rivers System. Upon completion, document other appropriate river assessment process steps as necessary, consistent with FSH 1909.12, Chapter 80 – Wild and Scenic River Evaluation. This includes documenting (1) final eligibility and/or ineligibility determinations based on the comprehensive evaluation and systematic inventory, as well as (2) preliminary classifications for

each tributary determined to be eligible. Current documentation is adequate to support the “changed circumstances” analysis for the Truckee River and Upper Truckee River segments found eligible and evaluated in the Eastside Rivers Study.

2. The LTBMU is not required to complete a suitability study for eligible rivers as part of the LMP revision process. If LTBMU decides to complete a suitability study in the LMP revision process, that study must comply with FSH 1909.12 (83-84). If LTBMU decides to delay a suitability study, “the land management plan shall provide for protection of the eligible river corridor until a decision is made on the future use of the river and adjacent lands.” FSH 1909.12 (83.1)

3. If the LTBMU decides to complete a suitability study for the upper Truckee River tributaries or any other eligible stream segments, that study must comply with FSH 1909.12 (83-84).

4. If the LTBMU decides to delay the suitability study, “the land management plan shall provide for protection of the eligible river corridor until a decision is made on the future use of the river and adjacent lands.” FSH 1909.12 (83.1).

5. Revise the existing Backcountry Management Area narrative to state that a suitable WSR (classified as wild) is located within the Management Area. Reference the map of the corridor in the revised LMP in the special areas section.

6. Clarify in the documentation that the Upper Truckee River has been found “suitable” for designation and classified as “wild.”

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WILDERNESS AND ROADLESS

PRIMARY OBJECTORS

Stephen Alastuey

Tahoe Area Sierra Club, Wilderness Committee, Fred Roberts

Sierra Forest Legacy, Sierra Club, Friends of the River, California Wilderness Coalition, Snowlands Network, Sierra Nevada Alliance, Earthjustice, et. al., Michael Graf and Craig Thomas

OBJECTION ISSUE SUMMARY

In general, the Objectors disagree with the LTBMU's decision to not recommend any new wilderness areas. They do not believe or agree that the backcountry management prescriptions will be adequate protection. Some Objectors recommend all potential wilderness areas be evaluated by the LTBMU in the FEIS Appendix C, while others believe the LTBMU has failed to offer a sufficient range of alternatives to address roadless and wilderness concerns. They also contend that the Roadless Inventory is not accurate and does not take into account a previously conducted Citizen's Inventory of Roadless areas.

Objectors point out that additional wilderness would benefit the area for a variety of reasons for example, ecologically, financially, and by providing a certain quality of life for future generations. Additionally, other objectors request specific areas be recommended wilderness designations, "your agency found pristine conditions at the Dardanelles and Freel that caused you to propose them for wilderness areas in Alternatives you did not select (C and D). We found those same pristine conditions in Meiss Dardanelles, Granite Chief Addition, Desolation Addition, Hell Hole and Trimmer Peak. Without the protection of wilderness status, these candidate wilderness areas will degrade from overuse during the fifteen year life of the plan until they are no longer wilderness appropriate. The loss of candidate wilderness area will be irrevocable."

Regarding roadless areas objectors state, "as both the 1982 planning regulations and the new planning rule clearly indicate, the USFS has the authority to look beyond IRAs at 'other essentially roadless areas,' at 'Newly identified areas' and at 'undeveloped areas'. It is simply

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impossible for the USFS to properly discuss roadless area issues without first determining where the roadless areas are. It is critically important that the LTBMU accurately map all roadless areas during the LRMP development process because of the many important social and ecological benefits these areas provide....Once again, we respectfully request that the USFS identify and examine all of the LTBMU's roadless lands. If the LTBMU fails to do so, the ROD, LRMP and FEIS will violate NEPA by failing to take a 'hard look' at roadless issues, by failing to include a 'full and fair discussion' of the topic and by failing to include a 'full range' of alternatives that respond to public concerns."

Objectors request the Forest Service recommend both the expanded Freel Peak Roadless Area and the Dardanelles Roadless Area, as wilderness. They also request the exclusion of mountain bikes on trails in these areas. They also contend that the non-wilderness trail corridors should be managed as backcountry.

The Objectors and an interested person from the Mountain Bike community attended both the May 20th and July 1st objection meetings. The majority of dialog centered on why wilderness designations are so important to protecting specific areas within the LTBMU boundaries. In addition to their written objections, they reiterated their concerns that the LTBMU did not take a hard look at their proposed alternatives for recommending wilderness. On May 20th, the meeting was divided between wanting recommended Wilderness in the final LMP and concern from an interested person that areas would be permanently removed from mountain biking. At this meeting, the Objectors asking for recommended wilderness agreed to take another look at compromise.

At the July 1st meeting, Objectors brought maps to the meeting and discussed options including alternatives for adjacent mountain bike trails. The interested person remained concerned about cherry stemming or breaking up the areas and explained that the mountain biking experience is best enjoyed with loops not straight back and forth trails. All agreed however that they would like to work with the LTBMU in a collaborative manner to hopefully reach a compromise.

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RECORD REVIEW FINDINGS

WHAT IS REQUIRED?

The law, regulation and/or policy these issues fall under are NEPA; 36 CFR 219.17 (1982 Planning Rule); and FSH 1909.12, Chapter 70.

FSH 1909.12, Chapter 70 (Wilderness Evaluation) describes general criteria for the potential wilderness inventory, including minimum acreage and allowable improvements, along with mapping and listing requirements. FSH 1909.12, section 71, describes site-specific considerations that should be taken into account when applying the inventory criteria:

“The application of the inventory criteria should rely on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. When delineating areas for the potential wilderness inventory; locate boundaries at prominent natural or semi-permanent human-made features to facilitate easy on-the-ground identification.”

Once potential wilderness areas are delineated, a more rigorous process is then applied to evaluate these areas for their capability, availability, and need as wilderness.

CONCLUSIONS

Recommended Wilderness

FSH 1909.12, chapter 70 describes the Forest Service process for identifying and evaluating potential wilderness in the National Forest System (NFS), and for determining whether those areas are to be recommended for wilderness designation by Congress. The LTBMU followed a process for evaluating the wilderness potential of six roadless areas on the Management Unit that is consistent with 36 CFR 219.17 (1982 Planning Rule) and Agency policy (FSH 1909.12, 70), as documented in FEIS Appendix C.

Review of the planning record shows the objector’s contentions that placing Roadless Areas in the Backcountry Management Area (MA) would result in environmental degradation and “irrevocable” loss of future consideration for Wilderness, is not substantiated. The IRAs

evaluated as potential wilderness are included in the Backcountry MA, which is managed “to perpetuate the long term roadless character of these lands.” Documentation in the record showed that Backcountry MA are managed as natural landscapes with certain activities allowed, including the use of mechanized transport (mountain bikes), maintenance of native-surface roads (though no permanent road construction), and occasional management activities to improve forest health, improve habitat and reduce fuels. These activities are designed so the natural landscape is maintained and objectives of the Backcountry MA are met.

The contention that the LTBMU did not consider a “full range of alternatives” is not supported by the planning record. There is no specific number of alternatives required or prescribed by NEPA, and the range of alternatives includes those alternatives that were analyzed as well as those eliminated from detailed study, (40 CFR 1502.14). The revised LMP disclosed effects analyses for the range of alternatives that addressed all legal and regulatory requirements and documented a level of accuracy and precision that are consistent with the methods and technology used at the program level. (FSM 1950.41)

Though the selected alternative in the draft ROD does not include any wilderness area recommendations, two analyzed alternatives did include wilderness recommendations. Alternative C proposed 14,229 acres of recommended wilderness, increasing the total on the LTBMU (assuming eventual designation by Congress) from 15.9% to 25.1%, and Alternative D proposed 29,581 of additional wilderness, increasing the forest total to 35.0%.

While the Objectors disagree with LTBMU’s decision to not recommend additional wilderness, the responsible official has the discretion to balance competing resource needs and uses. Although the rationale and analysis to support this decision is provided in the planning record it is not as clearly articulated in the draft ROD.

Roadless Area Inventories

Inventoried Roadless Area maps used for the LTBMU revised LMP are current. They are the maps contained in the 2001 Roadless Area Conservation Rule (RACR) (36 CFR 294). Due to ongoing litigation, altering the published IRAs that are part of the RACR is outside the scope of the LTBMU LMP revision. The RACR made no wilderness recommendations.

Objectors requested that the LTBMU identify and examine all of the LTBMU’s roadless lands and provide a more comprehensive assessment of the various alternatives described in the

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FEIS' impacts to the roadless lands, using a list of 18 issues from the RACR FEIS. A number of areas were identified by objectors as currently unroaded and relatively undisturbed and were shown on a map as Citizen's Inventoried Roadless Areas (CIRAs). The Objectors proposed designating these as roadless areas. Some of these areas had been mislabeled in the DEIS maps and are actually IRAs; this mistake was corrected in the FEIS maps. The remaining CIRAs were analyzed in Alternative D. In addition, approximately 3,600 acres of one of the CIRAs is included in Alternative E as the Stanford Rock Backcountry MA; under this alternative, these lands would receive a level of protection similar to IRAs.

Review of the record shows that the two roadless areas specifically referenced in an objection, the Granite Chief Additions and the Desolation Additions (Pyramid), were considered by the LTBMU for their wilderness potential, but were assessed to have generally less wilderness potential in terms of "capability" than other roadless areas in the evaluation and were not ultimately included in any of the alternatives.

While the objector may disagree with the ratings the LTBMU applied to the Granite Chief and Desolation Additions throughout the wilderness evaluation process, the LTBMU utilized their professional judgment and appropriately incorporated various considerations in the evaluative process and in the development of alternatives. And based on this analysis and the other considerations described within the FEIS and planning record, it was within the responsible official's discretion to select Alternative E in the Draft ROD.

Documentation could not be found that clearly explained the rationale on why Objectors' proposal to modify the boundary of the Dardanelles and Freel Roadless Areas (to remove the conflict between wilderness designation and popular mountain bike trail use) was not considered.

FINAL INSTRUCTIONS

1. Clarify in the documentation the inventory process used to identify potential wilderness areas to be carried forward for evaluation; including rationale for what was or was not included in the inventory.
2. Enhance the rationale for the recommended wilderness decision. If areas are recommended for wilderness, clarify in the documentation how those areas will be managed.

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3. Clarify in the documentation that approximately 12,000 acres of the CIRAs were added to the Backcountry MA in Alternative D but were not analyzed for wilderness potential or considered for wilderness recommendation under that alternative.
4. In the final ROD, enhance and clarify the rationale for why Objectors' recommendations to modify the boundaries to the Dardanelles and Freel Roadless Areas were not explored further.

WINTER RECREATION AND OVER-SNOW VEHICLE USE

PRIMARY OBJECTORS

Jon Anderson

James Miller

Snowlands Network, Winter Wildlands Alliance and the Toiyabe Chapter of the Sierra Club, Bob Rowen

Sierra Forest Legacy, Sierra Club, Friends of the River, California Wilderness Coalition, Snowlands Network, Sierra Nevada Alliance, Earthjustice, et. al., Michael Graf and Craig Thomas

Marjorie Sills

OBJECTION ISSUE SUMMARY

The majority of objection issues relating to recreation emphasized motorized versus non-motorized recreation, especially in the winter season. These issues pertained to how many acres should be designated for motorized, non-motorized or mixed use. Concerns were expressed about the increased motorized recreational pressure on the Nevada side of the unit, especially in the northeast part of the LTBMU, and the effects of this on non-motorized users. One objector stated that the FEIS analysis did not analyze the effects of people moving from existing use areas to outlying use areas, if restrictions were placed on certain uses. Objectors

observe that skiers and snowshoers have been gradually displaced from the east side of Brockway Summit.

In contrast, there were concerns expressed about the diminishing motorized access in the Lake Tahoe Basin area. Objectors believe that the Forest Service has violated both NFMA and NEPA, by not reconsidering the 1988 travel management decision in the LTBMU LMP Revision.

Related issues pertain to concerns regarding air and water quality, noise, user conflicts, use and/or interpretation of National Visitor Use Monitoring (NVUM) data, and trailhead use. Objectors believe that the Recreation Opportunity Spectrum (ROS) does not adequately address winter recreation use. Objectors state that the NVUM data does not adequately capture the range of non-motorized winter recreationalists, and therefore use of the data skew the results of user satisfaction, making it appear better than it is. Objectors also contend that the analysis of over-snow vehicle (OSV) effects on natural resources such as air and water quality is inadequate.

Objectors indicate that, “in our comments on the plan revision, we raised this exact issue and a number of other OSV impacts that merit further review, including impacts to regional air quality, impacts to ambient air quality, and impacts to water quality,” the Objectors contend that in the FEIS the LTBMU analyzed OSV contributions to greenhouse gas emissions, but did not look at the primary air pollution issues of local concern (that OSVs can generate a toxic cloud at trailheads and other areas where users are trying to engage in cardio exercise, among other activities).

SUMMARY OF RECORD REVIEW FINDINGS

WHAT IS REQUIRED?

The LTBMU LMP is a programmatic document prepared pursuant to the 1982 Planning Rule. The 1982 Planning Rule (36 CFR 219.22(g) (as well as Executive Orders 11644 and 11989) states “Off-road vehicle use shall be planned and implemented to protect land and other resources, promote public safety and minimize conflicts with other uses of the National Forest System lands.” Travel Management (TM) as required by 36 CFR 212, replacing 36 CFR 295, requires site

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specific analysis and brings forward decisions made previously under 36C FR 295 detailed in the 1988 LTBMU LMP.

CONCLUSIONS

NEPA regulations require an agency preparing a FEIS to assess and consider comments and to respond in one of several ways, namely by modifying its analysis or by explaining why the comments do not warrant further agency response (40 CFR 1503.4).

The comment analysis and response process is explained in FEIS Appendix N, pp. 2-3. Comments that were made by different commenters on the same subject were grouped and summarized into public concern (PC) statements that captured the essence of like comments. For example, PC# 321 states that the Forest Service should work to resolve the conflicts associated with winter recreation. Similarly, PC# 387 states that the Forest Service should work to minimize conflicts between commercial OSV operations and human-powered recreationists. Several similar statements were received—and the responses integrated—during the public comment period. See FEIS, Appendix N, pp. 94-104 for an expanded discussion.

Review of the planning record showed adequate analysis of the issues raised in the objections regarding recreation. For instance, as disclosed in the FEIS, the current trend of growth in dispersed winter recreation is associated with increased competition for parking, crowding, and conflict between non-motorized and motorized recreationists (FEIS, Chapter 3, p. 387). Similar impacts are expected to occur in dispersed recreation areas as more users share the same general forest or trail system, which could result in an increase in user conflicts between motorized and non-motorized users.

In addition, the planning record shows that the LTBMU took a hard look at air quality in regards to OSV management. The LTBMU area falls under the jurisdiction of both California and Nevada for air quality management. Impacts are expected to decrease once the California state emission standards take effect. The Lake Tahoe Basin is also currently in attainment for ozone and NOx. Even excluding prescribed and wildfire emissions, the largest contributors to OSV emissions, were disclosed as being a small fraction of total ozone and NOx emissions in the Basin. The analysis shows OSV use does not significantly impact regional air quality (NOx, Ozone); the largest impacts are at the staging areas and very localized. The planning record

further indicates that the FS maintains an IMPROVE monitoring station that has been in place for more than 10 years, and it does not show a regionally elevated particulate level.

The LTBMU included an analysis of the effects of OSV use on water quality in Section 3.4.24 - Water Quality and Section 3.4.22 - Soils (3.4.22) of the FEIS, and concluded that the consequences were not significant.

The NVUM is a science-based survey. Timing and locations for visitor contacts and surveys follow a defined stratified random sampling protocol. Records indicate that snowshoeing and snow-play were included in non-motorized activities for the survey on the LTBMU and included as part of the information and analysis.

Assessing the impacts of OSV noise on other users, including at trailheads and heavy use areas, and the propagation of such impacts to adjoining non-motorized areas is generally done on a site specific basis and therefore was determined to be outside the scope of the revised LMP. Similarly, assessing air quality and water quality impacts at trailheads would also require site specific analysis which is outside the scope of the revised LMP.

Review of planning record regarding air quality, water quality and noise pollution demonstrated that the level of analysis required at the programmatic level for a forest plan revision, was adequate.

The ROS classes provide planning guidance. Forest Service policy states to use the ROS system guidelines to describe recreation opportunities and coordinate with other recreation suppliers. The LTBMU carried forward the decision made in the 1988 LMP for seasonal ROS classifications concerning OSV use. Review of the planning record demonstrated that this approach was adequate for a programmatic forest plan analysis.

This revised LMP brings forward decisions made in the 1988 LTBMU LMP in accordance with 36CFR 212, as documented on the Map 18 for OSV use. Future changes to travel management will require site specific analysis with public involvement and appropriate NEPA as required in 36 CFR 212.

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FINAL INSTRUCTIONS

1. Continue the collaborative approach to resolving winter travel management issues in the LTBMU. If the existing collaborative group can resolve issues and reach agreements with respect to non-motorized and motorized winter recreation areas in LTBMU, the forest shall consider the results of such an agreement in an alternative in its environmental analysis under Subpart C, Travel Management as required by 36 CFR 212.

SKI AREA PERMITS

PRIMARY OBJECTORS

Heavenly Mountain Resorts, Andrew Strain, Lead Objector

OBJECTION ISSUE SUMMARY

Heavenly Mountain Resort is concerned about several issues regarding their permit with the Forest Service and how the revised LMP for the LTBMU may impact their business.

Heavenly contends the revised LMP improperly impedes their current rights with regard to terrain inside its established ski area Special Use Permit Boundary. They believe that SG100 results in de-facto modification of the permit boundary of existing ski area permits by restricting development inside the permit without following the procedures for modifying or terminating existing permits. The contention is tied to SG100 in the preferred alternative, which limits the expansion of ski area operational boundaries to 200 acres. According to Heavenly whether this expansion limit is LTBMU-wide or per ski area and how such a limit would be implemented is not clearly articulated. Heavenly further contends this SG displaces the master development plan system set in place by 36 CFR 251.54(e).

Heavenly does not believe the LTBMU revised LMP should adopt a Whitebark Pine species refuge area inside their permit and operational boundaries.

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Heavenly asks the Forest Service to clarify that LTBMU revised LMP direction does not apply to activities outside of the LTBMU (specifically that it does not apply to that portion of Heavenly located on the Humboldt-Toiyabe National Forest).

SUMMARY OF RECORD REVIEW FINDINGS

SKI EXPANSION AND SG100

Conclusions: Review of the record revealed that the documentation does not support implementation of SG 100(d) “ski area & slope” expansion in the preferred alternative, limiting development to 200 acres.

FINAL INSTRUCTIONS

- Remove “ski area & slopes” expansion limits of 200 acres from SG 100(d). Continue to work with permittees on permit authorization and implementation pursuant to applicable laws, regulations and policies.

WHITEBARK PINE REFUGES

Conclusions: Review of the record indicated that direction for Whitebark pine was addressed in the FEIS and revised LMP. There are specific desired conditions, objectives and design criteria for Whitebark Pine that including SG93, “Management actions are consistent with habitat and population recovery objectives outlined in conservation strategies and recovery plans [Guideline].” The LTBMU does not make determinations about when recovery is needed – recovery plans are developed by the US Fish and Wildlife Service only after a species is listed as Threatened or Endangered. Candidate species such as Whitebark Pine do not have recovery plans. The US Fish and Wildlife Service, however, encourages conservation efforts for candidate species because they are, by definition, species that may warrant future protection under the ESA (USFWS 2011). These efforts are usually developed in conjunction with other agencies and groups. Individual agreements or plans such as the 2013 Memorandum of

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Understanding (MOU) between the LTBMU and Heavenly are included in this process and generally incorporated into the strategy development versus overridden by it. Accordingly, designating Species Habitat Areas for Whitebark Pine is appropriate.

FINAL INSTRUCTIONS

1. Clarify documentation regarding terms “recovery” and “recovery plan” and how they are used, strictly as they relate to the Endangered Species Act (ESA).
2. Clarify documentation regarding use of the term: “Conservation Strategy” as used only to describe broad scale strategies (usually at least Basin-wide) intended to proactively prevent the listing of species under ESA. It is appropriate to designate species habitat areas for Whitebark Pine.
3. Change the name Species Refuge Area to Special Status Species Habitat Area.

JURISDICTIONAL BOUNDARIES

Conclusions: Regarding Heavenly’s concern about LTBMU jurisdiction, the revised LMP applies only to NFS lands within the LTBMU. Figure 1 on page 3 of the Revised Plan depicts a map of the LTBMU.

As stated on pages 1-4 of the FEIS, “...the environmental analysis considers a broader area. Wildlife species ranges often extend beyond the administrative boundaries. Similarly, coordination with neighboring Forests and other jurisdictions is important for vegetation management, wildfire suppression, and fuel reduction. Analysis of cumulative effects considers lands and other plans outside the administrative boundary.”

The FEIS does specifically identify that Heavenly Mountain Resort acres listed in the analysis do not include those on the Humboldt-Toiyabe NF (FEIS, Ch. 3, p. 3-418).

In the response to comments for the DEIS, the question of management direction for two other ski areas was raised. In response to that comment the LTBMU stated, “Ski area permit boundaries are described in the special use permits. The Revised LMP does not alter any special use permits currently in effect. The FEIS has been clarified by removing information that may have been confusing.”

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FINAL INSTRUCTIONS

- Clarify in all documentation that the LTBMU revised LMP only pertains to the portion of NFS lands for the Special Use Permit for the Heavenly Ski Area which spans the LTBMU, and not the lands administered by the Humboldt-Toiyabe National Forest.

FIRE MANAGEMENT

PRIMARY OBJECTORS

Lake Tahoe Basin Fire Chiefs, Michael Brown, and Ben Sharit

Harold Singer

Center for Biological Diversity and the John Muir Project, Earth Island Institute, Justin Augustine

OBJECTION ISSUE SUMMARY

The Fire Chiefs bring forth several objection issues related to management of fire within the Wildland Urban Interface (WUI) and ask for additions, clarification or changes to the LTBMU LMP's standards and guidelines (SGs) and desired conditions (DCs). Collectively, they want to ensure that the LTBMU's priorities are preventing and managing wildfires both within the WUI and the backcountry. They are concerned that LTBMU will place too much emphasis on protecting species dependent on old growth and post fire habitat, consequently allowing wildfires to burn more intensely jeopardizing public safety and private property.

Other Objectors disagree with the LTBMU's interpretation of recent science and trends regarding the increase of fire severity and suggest that the LTBMU is erroneous in their conclusions for how best to emphasize the management of wildfire in wild lands and fuels

reduction by setting the protection of communities within the WUI as the first priority for fire management. Citing new studies, they strongly urge the LTBMU to refocus their energy and money to revise DCs and SGs to reflect an emphasis on fire protection in the WUI, while allowing for natural fire events to occur with the ecosystem and provide enough protection measures for protection of post-fire habitat. Objectors contend the LMP fails to provide an adequate, science-based monitoring and adaptive management plan responsive to the critical fire management issues on the LTBMU.

Objectors are concerned that the revised LMP does not acknowledge Nevada defensible space standards published in the International Wildland Urban Interface Code, 2009 at NAC Sec. 477.281

All Fire Chiefs are concerned about the proposed use of Minimum Impact Suppression Tactics (MIST) in backcountry and roadless areas adjacent to homes and communities. They believe that while unplanned fire may be considered beneficial for the ecosystem and forest health, ensuring public safety and protection of property should be the first priority, and are opposed to use of unplanned fire within the WUI Threat Zone, as allowed in the revised LMP. Objection issues included concern over flame lengths, defensible space, and potential for high severity fires (red fir), contending that DC34 "ignores the WUI for high severity fire in red fir forests."

They also contend that the revised LMP has no quantifiable standard for fuels reduction on urban lots. The result is that projects being implemented today do not have surface fuel prescriptions and therefore will not modify fire behavior to acceptable levels. They believe both the SGs and DCs in the revised LMP need to be more specific.

Other Objectors espouse a different perspective and are concerned that fire will not be used as a management tool, where applicable. They note that while the revised LMP allows for unplanned ignitions outside the WUI, that there appears to be too many reasons not to utilize this tool. The objectors quote, "They (the LTBMU) believe that one way to ensure the failure of being able to take advantage of this major opportunity to increase scale of restoration is to not have planned for it."

These Objectors believe that the LTBMU's contention that an increase of wildfire severity is on the upswing is not true and provide examples of current research validate their position. "A recent study published in September 2013 in the International Journal of Wildland Fire found that there is not a trend toward increased fire intensity in the Sierra Nevada (Hanson and Odion

2013.) The study is the first to include all of the available fire data for the Sierra Nevada, and recommends shifting Sierra fire management away from a focus on reducing extent or severity of fire in Wildlands, and to instead focus on protecting human communities from fire. ...”

Objectors believe the LTBMU is missing an opportunity to increase potential for fire use in the WUI Threat Zone under Alternative E, but are disappointed there will not likely be much use of lightning fire in the WUI Threat Zone. They believe this is yet another case where the LTBMU Monitoring Plan lacks specific indicators and measures to assess the value and opportunity for increased fire treatment in the Threat Zone as a viable restoration tool.

One Objector believes SG91 should be eliminated in regard to the Threat Zone because it would allow important habitat to be reduced in density and structure when the best available science shows that owls need and prefer dense, complex, forest. The concern is that the Threat Zone exception would cover an extremely broad area that is not supportable or retain a viable habitat for owls.

Another Objector does not believe that the LTBMU adequately analyzed air quality impacts within the Basin and allowing fires to burn will add to existing problems. They ask that the LTBMU consider an alternative to prescribed fire treatments that would result in lower particulate emissions that may include significantly more biomass removal or other action resulting in less material that would be left to burn in a prescribed fire.

He would like to see a new standard and guideline that requires biomass removal in excess of that needed for ground cover or total mass per acre (includes standing and on-ground material except in situations where access would create other environmental concerns or effects). He notes that typically burn piles remain for 3 to 5 years before they are burned. This creates a window of opportunity that is currently not utilized to reduce air emissions further.

SUMMARY OF RECORD REVIEW FINDINGS

WHAT IS REQUIRED?

Fire management activities are implemented in accordance with policy outlined in the Forest Service manual for wildland fire suppression FSM 5130 clearly states, “The primary criteria for choosing fire suppression strategies and tactics are to ensure the safety of the public and

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firefighting resources while minimizing suppression costs, resource loss, environmental damage, and the threat of wildland fire escaping onto non-Federal lands.”

CONCLUSIONS

Review of the record demonstrated that public and fire fighter safety is paramount to all decisions made regarding fire. The LTBMU revised LMP does not require a particular fire suppression tactic be used when managing fire in WUI, non-WUI, IRA, etcetera; just that the fire manager selects a safe tactic that will minimize impacts and meet the objectives of the fire consistent with the LMP.

The LTBMU revised LMP is a programmatic document. Managing unplanned ignitions for resource benefits is a tactical site-specific, time-specific, decision made by the fire manager and the line officer. The decision is made with respect to the specific wildfire situation which would include consideration of fuels, weather, topography, resources available, and resources at risk. The decision is opportunistic; if the conditions are not favorable, or likely to change, that tactic is not used. Managing a wildfire for resource benefits can be applied as a tactic for managing a whole fire or just a portion of the fire. It may be used for the entire run of a fire or perhaps only for a single shift. Coordinating wildfire response with local fire protection districts and departments is standard procedure.

Documentation in the planning record shows that all fuels projects are designed to modify fire behavior and reduce hazards to communities. The RACR prohibits mechanized treatments in Congressionally designated IRAs, necessitating hand treatments in these areas. However, other Backcountry MA, such as the proposed Stanford Rock Backcountry MA, would not necessarily have the same restrictions as long as proposed treatments are otherwise consistent with the LMP. The RACR also specifies that competing priorities may not override the management priorities set forth in the rule.

In regards to concerns expressed in the objections that wildfire is not mentioned in the natural hazards desired condition, even though wildfire is perhaps the greatest natural hazard in the Lake Tahoe Basin, the LTBMU LMP recognizes the gravity of the wildfire hazard and provides specific DCs, strategies, and SGs related to wildfire. The natural hazards DC is intended to cover natural hazards that are primarily geologic in nature.

Wildfire has a unique role of being both a natural hazard and an ecological process. In the LTBMU revised LMP, wildfire was primarily addressed as an ecological process. The purpose of DC3 is to identify and map hazards and either circumvent them or alter activities and developments to reduce the risk of the hazard. In some contexts, wildfire can be addressed this way. There may be some areas, or time frames, where the threat of wildfire is too great to allow activities or developments. Additionally there is a growing body of science about how to better design developments to be resistant to wildfire, which may allow for future adaption of the LMP maps.

Despite Objectors' contention that the FEIS and LMP do not take the best science into consideration, especially those studies suggesting that high intensity fires are not increasing in the area, there is no available evidence that the LTBMU did not utilize available scientific information.

Biomass removal can be considered as an option in fuels projects, as described on page 53 of the Strategies section in the revised LMP. This strategy is included to address air quality impacts. Biomass removal has the added benefit of reducing treatment costs while supporting local economies.

The LTBMU may consider using Energy Release Component (ERC), for example: "Design fuel reduction activity to effectively reduce fire behavior under conditions of at least 90% of historic ERC values." The objector's suggestion may work as a guideline for certain areas like WUI and urban lots. The guideline could be written to require a specific objective related to fire behavior or an explanation of what comparable objective the treatment will be designed for. Stand conditions and fire weather can be highly variable.

SG22 refers to defensible space. The 100 foot defensible space is designed to be considered in combination with the desired vegetation and fuel conditions described elsewhere in the LMP. When the desired conditions for Forest Vegetation, Fuels, and Fire Management are considered as a whole, the 100 foot defensible space is probably sufficient. However, SG22 may be improved to clarify that the 100 foot area is intended to be represented as horizontal distance, and not as a slope distance.

DC26 refers to a desired condition in the WUI map zone. The 100 foot defensible space is designed to be considered in combination with the desired vegetation and fuel conditions also described in DC26. The map is used to inform the desired conditions described elsewhere in

this section (such as DC21 and DC22). When the desired conditions for Forest Vegetation, Fuels, and Fire Management are considered as a whole, the 100 foot defensible space is probably sufficient. However, DC26 may be improved to clarify that the 100 foot area is intended to be represented as horizontal distance and not as a slope distance

The concern raised by an objector regarding the WUI map is valid. The WUI is a shifting landscape pattern. Conveying the expectation that the map will change over time will help inform the public and future land managers.

Objectives 44 and 45 for fuels reduction on Santini-Burton parcels are indeed vague and could use some clarification. In regards to the Lincoln IRA, the FEIS used strong language that indicated that community protection is the number one priority, even in the Lincoln IRA (page 3-233).

DC34 needs to be read in combination with DC25, DC33, and DC35 to understand how it applies to Red Fir stands in the WUI. Clarifying DC34 would strengthen the DC.

The FEIS concludes that the total impact of managing fires for resource benefits will not be significant based on the number of lightning-caused fires over the last decade and the numerous constraints that, combined, offer few opportunities to use that tactic. Part of the confusion appears to be a misunderstanding of the difference between lightning strikes and lightning-caused wildfires.

An objector believes that the LTBMU Monitoring Plan should have requirements for 1) annual “fire plans” and 2) tracking the use of managing wildfire for resource benefits. Both these items are required for implementation of the National Fire Plan and therefore do not need to be repeated by the LTBMU, as they are already occurring.

FINAL INSTRUCTIONS

1. Add specifications for flame length and fire weather conditions in the WUI similar to those in the 2004 Sierra Nevada Framework Plan Amendment ROD.
2. Enhance the language in the revised LMP regarding community protection and priority of protection when choosing suppression tactics in all management areas.

3. Clarify in the documentation that unplanned ignitions do not include any human-caused ignitions, but only natural ignitions, such as lightning fires. Clarify that all human-caused ignitions would be immediately suppressed, regardless of their location.
4. Add the California and Nevada defensible space regulations In the Other Sources of Information section in the fire management SGs.
5. Clarify that more than 100 feet of defensible space may be needed depending on site conditions.
6. Clarify that ownership and land use vary throughout the WUI and through time. Management practices are applied and adjusted according to jurisdiction
7. Clarify how adjacent management area direction applies to Santini-Burton and Urban Forest parcels.
8. To understand DC34 as it applies to Red fir stands in the WUI, it needs to be read in combination with DC25, DC33, and DC35. To provide additional clarity, add a clause: "Where this type overlaps the WUI, fires occur as surface fire due to fuels treatments," as was done in DC31. Add this clause to the corresponding Jeffrey Pine DC.

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POST FIRE HABITAT

PRIMARY OBJECTORS

Center for Biological Diversity and the John Muir Project, Earth Island Institute, Justin Augustine

Sierra Forest Legacy, Craig Thomas and Michael Graf

Fire Chiefs

OBJECTION ISSUE SUMMARY

Objectors are concerned about post fire management for species habitat such as the Black Backed Woodpecker and the California Spotted Owl. They contend that the protection of wildlife habitat should be second only to public safety and the protection of buildings and would prefer stronger standards regarding snag retention, canopy closures, and increased protection of habitat corridors by, “require retention, through a forest-wide standard (not a guideline), of at least 90% of any moderate/high-severity burn areas (except for public safety reasons—i.e., hazard trees that could hit public roads or buildings) which are created by fire, wildland or otherwise, outside of the Defense Zone, and retain the maximum possible amount of such habitat that can be retained in the Defense Zone while ensuring protection of homes.”

Objectors focus on commercial logging and removal of post fire snags as detrimental to the Black-Backed Woodpecker and the California Spotted Owl, and state that spotted owls are indeed using post fire habitat, contrary to current science used by the Forest Service. The Objectors question the data and subsequent conclusions used regarding tree mortality and believe the LTBMU did not take a hard look, as required by NEPA. They are concerned that the plan wrongly emphasizes forestry objectives over ecology by promoting the reduction of fire, beetles, and disease. They state that the risks/harms of commercial logging are either not considered, or are improperly minimized, and that this violates NEPA’s hard look standard because numerous scientific studies document significant harm to rare, imperiled, and/or at-risk wildlife species resulting from commercial logging.

Objectors are concerned that extensive salvage and reforestation after wildfires would degrade or destroy complex early seral habitats important to many bird and mammal species which

depend on snags and shrubs. The Objectors suggest that the LTBMU consider projects that create “openings of varying sizes and shapes that retain reserve trees and clumps to produce spatial and structural heterogeneity in forest stands, and should give greater weight to openings from 2 to 7 acres. Forest structure should vary over the landscape in relation to topographic variables of slope, aspect, and slope position.”

Objectors have proposed changes to the revised LMP including:

- Require maintenance of at least 4,000 acres of snag habitat at all times.
- Require retention of at least 90% of any moderate/high-severity burn areas outside the defense zone (excluding hazard trees)
- Implement a limited operating period (LOP) to support Black-Backed Woodpecker reproduction
- Revise SG86 to prohibit redrawing or retiring Protected Activity Centers (PAC)s for three years following high- intensity burns
- Add a DC, strategy, and objective to retain complex early seral in a relatively undisturbed condition which would result in more resilient forest stands.

SUMMARY OF RECORD REVIEW FINDINGS

CONCLUSIONS

Reference Species: The Objectors emphasize the importance of referring to species that require the highest snag densities to ensure that those species’ requirements are met. They feel the Black-Backed Woodpecker is the most snag dependent avian species and it is therefore important to make specific reference to it. The LTBMU has chosen the Black-Backed Woodpecker as a management indicator species (MIS) for the ecosystem component of snags in burned forests because data indicates Black-Backed Woodpeckers are strongly associated with snags created by mid- and high-severity fires. As a result of this information, a 10 forest bioregional monitoring effort for Black-Backed Woodpecker was created, sampling all fires of a

least 124 acres (50 ha) of conifer forest that burned beginning in 2009 and occurred within the 10 preceding years. The results of these surveys indicate that the Black-Backed Woodpecker population is stable across the forests included in the bioregion.

Salvage and Restoration: Objectors are concerned that extensive salvage and reforestation after wildfires will degrade or destroy complex early seral habitats important to many bird and mammal species which depend on snags and shrubs, and that the LTBMU should consider projects that create openings of varying sizes and shapes that retain reserve trees and clumps to produce spatial and structural heterogeneity in forest stands. The Objectors were also concerned that commercial logging had not been properly analyzed, and thus was a violation of NEPA because it imperils rare and/or at-risk wildlife species, such as the California Spotted Owl and Black-Backed Woodpecker.

The forest recognizes the importance of adding a DC strategy and objective to retain complex early seral in a relatively undisturbed condition. To accomplish this, objectives 6, 9 and 11 will be clarified to address disturbances that can be used to help achieve these conditions. Habitat created as a result of a disturbance, including and not limited to cutting trees, would contain dense patches of pre-disturbance habitat elements including snags and habitat elements characteristic of a natural seral progression.

In SG59, the LTBMU identified the importance of post fire habitat and will revise the SG to ensure post fire restoration projects would include ecological restoration objectives based on the needs of local wildlife species associated with snags and other components of this habitat and would be in the context of SG28. Where management intervention is necessary, restoration project objectives for wildlife will prioritize the retention of existing dense and connected patches of snags that contain a range of snag sizes and special arrangements and the retention of region raiding vegetation such as the scrub layer and herbaceous understory.

The purpose of SG28 is to promptly address potential post wildfire adverse effects. Wildlife habitat is implicitly included in the term “wildlife.” It is possible that those adverse effects could include hazardous fuels or that other restoration activities could create a hazardous fuel condition specifically related to public safety. The purpose of including this in the guideline is to clarify that offsetting restoration costs through the sale of wood products is allowed.

In summary, review of the planning record indicates the LTBMU has fully evaluated the needs of species such as Black-Backed Woodpecker and provides sufficient rationale as to how the

habitat needs for that species will be met and in what priority. The MIS report provides great detail regarding the life history and habitat needs of black-backed woodpecker specific to the Sierra Nevada. The science referenced within the MIS document is more current and site specific than that cited by the objector and better meets the expectation of “best available science” with regard to this species. (FEIS, pp 3-330-331)

In addition to incorporating new and emerging science into their analyses, the LTBMU incorporated this information into the vision of desired conditions (Revised LMP, pp 19-33) as well as SGs developed to further guide those expectations. As the LTBMU points out, “we have used the best available science when preparing the Revised LMP and our analysis of effects, but also taking into account that we are a multiple use agency and are mandated to manage the landscape to meet these varied needs.” (FEIS, p N-111-112)

For additional information see the responses to comments in the FEIS (Appendix N). The forest received extensive comments on their approach for managing the woodpecker’s habitat. They responded to comments related to snags and salvage logging in PC# 73, #214, #243, #287 and #300. For response to comments regarding the assessment of the black-backed woodpecker population status (PC#s 300 and 243), the reader is referred to comments #283 and #275.

Monitoring: The Forest monitoring and evaluation plan (Appendix A) contains requirements to track accomplishments and progress on objectives.

Restoration of Burned Areas: Objectors are concerned about the management of post fire and contend that the protection of wildlife habitat should be second only to public safety and the protection of buildings and would prefer stronger standards regarding snag retention, canopy closures, and increased protection of habitat corridors. The response to comments acknowledged that “the revised LMP includes direction for restoration of burned areas and does not promote salvage logging of woody material (FEIS, p N-60). After safety considerations are met, wildlife habitat would be the next driver for retention of post-fire mortality.” The FEIS further responded “that the needs of local wildlife associated with components of this habitat (e.g., snags) would be a key driver in developing restoration projects in burned areas. It is important to consider during project development the location of fire events with respect to public safety concerns, the quality of the burned habitat for species normally associated with burned forests, species present in the project area, and other driving resource needs (e.g., water quality and accelerated restoration of burned areas to pre-habitat conditions for species at risk, e.g. California Spotted Owl).”

The Objectors suggest the LTBMU add a standard that, within any 5-year period, at least 4,000 acres of suitable Black- Backed Woodpecker habitat would be maintained on the LTBMU and would require retention of at least 90% of any moderate/high-severity burn areas (except for public safety reasons). Maintenance of 4,000 acres of snag habitat would present both implementation and monitoring/tracking difficulties, and would likely conflict with other desired conditions and land uses. Retention of 90% of moderate/ high-severity burned areas would likely conflict with other resource values, especially for large fires. Accordingly, retention is best determined on a project level basis. The proposed LOP would preclude mechanized tree removal during most of the operating season (generally May- mid-October).

The objectives section of the LTBMU revised LMP for forest vegetation and fuels management objectives (page 54) indicates a plan to treat a total of 3,800 acres per year in the WUI with thinning, fuel reduction, and prescribed fire. At least 1,800 of these acres are to be prescribed burning of surface fuels. This objective is based on past experience and estimates of future productivity.

The purpose of SG58 is to prioritize public safety and developed infrastructure. Parenthetically, the standard lists several examples of potential threats to public safety and developed infrastructure. The standard functions as written. If post-fire hazardous fuels do not present a threat to public safety and developed infrastructure, as is often the case, no hazardous fuel treatment would be taken.

SG38 needs to be considered in conjunction with the various DCs related to vegetation and fire management. Several of those DCs describe the nature of closed canopy stands within different ecosystems and species habitat needs. Review of the record indicates that the LTBMU revised LMP provides a balance of different management opinions in response to the relative threat presented by wildfire in different zones of the WUI. The LTBMU considered the comments on the FEIS and addressed the science that it was asked to consider.

FINAL INSTRUCTIONS

1. Revise Objectives for creation of early seral habitat (Obj. 6, 9, 11) to clarify that areas disturbed by wildfire, insects, or disease would be utilized to meet these objectives when available.
2. Add a DC and a strategy that addresses complex early seral habitat.

3. Revise SG59 to require retention of snag habitat, when appropriate.
4. Enhance documentation to reflect literature review and synthesis of post fire logging effects for California Spotted Owl.

FOREST MANAGEMENT: OLD GROWTH AND WILDLIFE HABITAT

PRIMARY OBJECTORS

Harold Singer

Center for Biological Diversity and the John Muir Project, Earth Island Institute, Justin Augustine

Sierra Forest Legacy, Craig Thomas and Michael Graf

Heavenly Resort, Andrew Strain

OBJECTION ISSUE SUMMARY: REMOVAL OF LARGE TREES

Objectors claim that the FEIS fails to adequately analyze impacts of the proposed LMP on old-growth forests. They state that the risks/harms of commercial logging are either not considered or are improperly minimized, in violation of NEPA's hard look standard because numerous scientific studies document significant harm to rare, imperiled, and/or at-risk wildlife species.

There is also a concern that the FEIS did not model and analyze in any other manner the removal of trees greater than 30 inches diameter at breast height (dbh), and that this failure is contrary to NEPA's requirement to take a hard look at potential environmental impacts. They believe the planning IDT could have easily sampled past treatment units to get a reasonable sample of sites with variable conditions that would have given the public a quantified sampling of the levels of 30 inch dbh tree removal in the planning area. They contend that failing to provide this information (that could be collected) violates NEPA's requirement to consider accurate scientific information (40 CFR § 1500.1 (b)).

Objectors expressed concerns that SG33 allowed nearly unlimited discretion to cut trees greater than 30 inches dbh which are important for wildlife habitat. Specific concerns about degradation of spotted owl habitat were expressed. Objectors propose only allowing removal of trees greater than 30 inches dbh for safety or equipment operability purposes, and utilizing project-specific forest plan amendments when removal for other purposes is needed.

The Objectors contend that the revised LMP over-emphasizes that aspen and meadow restoration, suggesting they are more important than maintaining large trees. Further, objectors are concerned that by allowing unlimited discretion to harvest large trees, there may be adverse impacts to late seral, closed canopy dependent wildlife. Large trees (trees greater than 30 inches dbh) contribute to forest structure and function and removing large trees could lead to a reduction of large trees clumps within stands which in turn could lead to forest simplification. Objectors feel that an IDT should analyze the impact of removal, felling, or girdling when large trees need to be removed.

The Objectors submit that the “potential for abuse of the undefined restoration objective is real, particularly given the admitted lack of certainty about historic conditions in Tahoe. For example, we note the density of large trees averaging 39 and 43 stems/ha > 30 inch dbh in mixed conifer and red fir, respectively at the Teakettle research site suggests big trees are underrepresented by current stand conditions in the Sierra Nevada (North et al. 2002). The problem can be illustrated by white fir in Tahoe. It is common knowledge that larger, aging white fir often has multiple disease characteristics is shade tolerant and can be found in dense clumps with other trees. While exceptions SG33 b, c, and d call out the potential negative possibilities (disease or insects, competitive densities, shade tolerance and competition with other species), the LMP is silent about the very high ecological values associated with large, decadent white fir. Dwarf mistletoe, fir canker, and a variety of decay fungi are common disease processes in white fir. PSW-GTR-237, co-authored with the Forest Service, PSW, University of California, Sierra Forest Legacy and others, contains an appendix (Walsh and North 2012) supporting retention of the vary conditions such as disease-created structures and shade tolerant trees targeted in the LTBMU Plan Standard and Guide 33.”

Objectors also believe the same issue would “apply to any other tree species in Tahoe (Jeffrey pine, red fir etc.), whose larger trees might somehow be eligible for logging under these provisions. In our view, this Standard SG33 needs significant revision and clear language that the wildlife biologist will make the determinations regarding tree removal and the

determination will include a detailed and rigorous examination of the ecological value of all trees > 30 inch. A diseased white fir in high stand density with a large cavity containing juvenile California Spotted Owl could be removed under SG33 b, c, d. Mistletoe “broom” in sugar pine, an active fisher rest site 2013.”

SUMMARY OF RECORD REVIEW FINDINGS

CONCLUSIONS

SG33: Objectors propose changing SG33 to only allow removal of trees greater than 30 inches dbh for safety or equipment operability purposes, and utilizing project-specific forest plan amendments when removal for other purposes is needed.

SG33 is not intended to provide for removal of many large trees. In the event of widespread tree disease or insect outbreaks, project-specific NEPA analysis would be needed under those circumstances. Forest plan amendments are not necessary for the types of removals described in the revised standard. Other standards and guidelines provide additional protection - the combination of SGs 36, 37, and 38 would effectively prevent conversion of late seral stands to mid seral.

During the objection meetings the Forest Service proposed a revised SG33 which reduces discretion and addresses habitat concerns as follows:

1. Retain trees 30 inches dbh or larger. Where trees greater than 30 inches dbh need to be removed, IDT members (e.g., vegetation management specialist, wildlife biologist, scenic specialist, recreation management specialist) will propose trees to be removed, girdled for snag creation, or felled for coarse woody debris during project development. Exceptions under which a tree 30 inches dbh or larger can be removed include the following:
 - a) The tree(s) larger than 30 inches dbh presents a safety hazard, prevents equipment operability, or removal is required in conjunction with a special use permit (e.g utility line).

- b) The tree(s) larger than 30 inches dbh has been successfully infected by disease and/or infested by insects with potential to spread to adjacent trees and is in a developed recreation site or facility site (e.g. a communication site).
- c) The average dbh of overstory trees (dominant and co-dominant trees) within the stand is greater than 30 inches dbh and the stand density index (SDI) indicates that mortality is imminent (e.g. SDI max); the selection for removal or snag creation would allow competitive release for growth of the largest trees, and selection of trees for removal would give preference to shade tolerant trees.
- d) When necessary to support aspen, meadow or stream restoration.
- e) When managing for blister rust resistant pines that require removal of competing trees within a sufficient radius to improve health of the pine.
- f) Removal, snag creation, or felling for coarse woody debris of trees equal to or larger than 30 inches dbh is only allowed in PACs when necessary for PAC restoration (to move PAC habitat closer to desired conditions) in PACs that meet conditions in SG90.
- g) In TECPS-occupied or known nesting, denning, roosting trees and adjacent high-habitat-value trees (e.g., trees that provide thermal or protective cover) removal, snag creation or felling for coarse woody debris of a tree equal to or larger than 30 inches dbh is prohibited.

This proposed standard was accepted by the Objectors with the exception of clauses c and f. Additional changes to clauses c and f are given in the Final Instructions section below.

Removal of Greater Than 30 inches dbh: The LTBMU FEIS adequately addresses the issue of California Spotted Owl population decline in the FEIS (Chapter 3, beginning on pg. 492). A review of literature explaining the declining population of the California Spotted Owl is also disclosed in this section. The Forest Service has listed the California Spotted Owl as a sensitive species meaning it is a species whose “populations are of some concern because of overall declines or risks from land management activities on the Forest.” As a sensitive species, additional consideration is given to management of the species habitat (LTBMU LMP, Chapter 2 SG86 to 93).

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The LTBMU has taken adequate steps in their Revised LMP to minimize negative impacts on the California Spotted Owl and its habitat (LTBMU LMP Chapter 2, FEIS. Chapter 3.4.23: Terrestrial Wildlife Habitat and Species).

The Spectrum model was the primary model used by analysts to predict future outcomes of planned treatments identified to achieve forest restoration goals. “Although the Revised LMP would allow trees greater than 30 inches in diameter to be removed (this is the case for Alternatives B, C, and E), no trees greater than 30 inches were removed by the model.” That the model did not remove any trees greater than 30 inches dbh was also stated on page 3-258. Page 3-264 of the FEIS states, “Thus, the following graphs that depict an increase in the number of large and very large trees are somewhat misleading as these numbers increase without any disturbance.” The planning record is unclear as to why trees greater than 30 inches were not modeled for removal in Spectrum and how their removals would affect future projections.

The Forest Inventory and Analysis (FIA) program is a scientifically rigorous program to assess the quantity and quality of the nation’s forests including the LTBMU. Table 3-42 details acres by forest type and seral stage but it does not include estimates of trees greater than 30 inches in diameter. Table 3-41 includes the desired range of stocking (density), basal area of live trees, the number of snags and tons per acre of coarse woody debris on the forest floor, but not the current assessment of stocking by size classes. Review of the documentation demonstrates the statement by the objector that the data is not in the revised LMP documents is correct.

“...as stated in the Revised LMP Consistency section of the Revised Plan Introduction, projects and activities are required to comply with Guidelines as well as Standards. The guideline related to the removal of trees 30 inch dbh or larger has been revised to clarify the limited exceptions under which these trees may (but not must) be removed, girdled for snag creation, or felled as coarse woody debris. The use of this guideline would be for circumstances that represent exceptions rather than common practice, and would be based on project-level purpose and need as well as on site-specific conditions. Therefore, there is no meaningful way to disclose impacts associated with this guideline except at the project-level, not at the level of the Forest Plan. However, we acknowledge the potential for the loss of some large trees and the FEIS effects analysis has been updated to reflect this potential.”(Appendix N, page N-124)

Further, Appendix N page N-144 states, “We realize that the potential for the killing of trees larger than 30 inches in diameter, reducing canopy cover, and restoration of PACs seem counter to the protection of the habitat components very strongly associated with spotted owl habitat.

Our intention is to protect these habitat features into the future for sustained habitat quality, and improved habitat quality for spotted owls and other sensitive terrestrial wildlife species. We have revised the Plan (Alternative E) and the FEIS to clarify that wildlife needs would be key drivers in the development of these projects and that all projects would be developed through the work of an interdisciplinary team and be subject to NEPA.”

FINAL INSTRUCTIONS

1. Adopt the revised SG33 as written above with the following exception:
 - a. Clarify SG33 clauses c and f: Create a new standard if necessary to clarify when 30 inch dbh or larger may be removed.
 - b. Revise and clarify SG33(c) to be consistent with desired conditions for the forest type (DCs 27-35), including retention of clumps of large trees.

OBJECTION ISSUE SUMMARY: RESTORATION AND WILDLIFE HABITAT EFFECTS ANALYSIS

Objectors believe, “that neither the plan nor FEIS provides a clear and precise definition of what constitutes restoration as a forest-wide Plan objective. At a fundamental level, the Forest Service has not defined the relationship between forest ‘restoration’ and these elements of forest decay that also happen to be a primary characteristic of high quality wildlife habitat for many species.”

The Objectors contend that the FEIS fails to provide a map of current old-growth forest habitat and fails to provide any data, or maps, on the estimated effect (degree of increase or decrease over time) of each alternative on this key resource. Accordingly they feel the FEIS fails to adequately analyze impacts of the revised LMP on old-growth forest. They state that the risks/harms of commercial logging are either not considered, or are improperly minimized and that this violates NEPA’s hard look standard because numerous scientific studies document significant harm to rare, imperiled, and/or at-risk wildlife species.

Objectors also believe that a failure to analyze the impacts of allowing unlimited discretion to remove trees greater than 30 inches dbh would result in impacts to wildlife dependent upon this structure, including species needing late seral, closed canopy forests. They also object to the potential result of this discretion to remove trees 30 inches dbh and greater which can lead to the lack of protection for clumps of large trees within stands and at the landscape level which will lead to forest simplification and loss of heterogeneity.

In the written objection, one objector requested that SG37 be deleted as SG38 provided the necessary guidance. During the May 20th meeting, the suggestion was made to combine the two, plus to clarify the intent behind the percentages of canopy closures.

The Objectors state that the FEIS violates NEPA because it fails to fully consider a reasonable range of alternatives. The EIS includes two intensive logging alternatives, Alternatives B and C, which are essentially identical, except that Alternative C envisions somewhat more intensive logging “to the lower range of desired tree stocking levels” (DEIS, p. 2-9). Objectors contend it is particularly important ecologically to fully and completely consider such a non-commercial active ecological management alternative, given that “diversity” and “heterogeneity” in forest structure from logging activities, which remove structural elements, are often fundamentally different from natural disturbance—or snag/log creation that mimics natural disturbance—in terms of their effects on native biodiversity, especially on some of the rarest species of concern.

Further, Objectors state, “as discussed in our comments, the areas proposed for commercial logging could easily see 50- 90% tree mortality, or more, directly from chainsaws. However, the science shows that, even at high stand densities, only about 5-10% mortality occurs in these forest types. Further, this is corroborated by North (2012 [p. 17, Fig. 2-1]), which shows that, even at high Stand Density Index levels of 300 to 500, mortality is only 4-12%; and basal area mortality is only about 8-12% even at stand basal area levels of 250 to over 300. North (2012 [p. 18]) summarizes the scientific literature on natural mortality levels in unburned forest and concludes that average levels of about 9-14% are quite normal and natural for these forest types in unburned forests.”

Objectors are also concerned that, “the FEIS fails to provide a rational connection between the stated goal of reducing tree mortality, the science, and the reality of the Plan. Moreover, the FEIS does not adequately divulge and analyze what the expected/predicted levels of tree mortality would be from logging pursuant to the Plan as adopted, compared to expected natural mortality levels, or to mortality levels from Alt. D. Furthermore, the risks/harms of

commercial logging are either not considered, or are improperly minimized. This violates NEPA's hard look standard because numerous scientific studies document significant harm to rare, imperiled, and/or at-risk wildlife species, such as the spotted owl (Seamans and Gutierrez 2007, Dugger et al. 2011) and Black-backed Woodpecker (Hanson and North 2008, Hutto 2008), from commercial logging activities—both commercial thinning and salvage logging.”

Objectors ask that an additional alternative be included through a supplemental EIS to the revised LMP and FEIS. They claim, the “FEIS does not include an action alternative (for full and complete consideration and analysis) that would institute an active management approach that would result in more active management than Alts. B and C (and A), but would do so in a non-commercial, ecological approach that would focus on actively managing forests, including mature trees, to accomplish ecological goals, but by actively creating habitat structures without commercial logging—i.e., without removing wood commodities (sawtimber or biomass) from the LTBMU (personal use firewood permits, etc.)”

Objectors allege a further NEPA violation that, “the Plan wrongly emphasizes forestry objectives over ecology by promoting the reduction of fire, beetles, and disease. However, all of these forest attributes are absolutely essential to the ecological well-being of the forest because wildlife depends upon the structures/ habitat created by fire, beetles, and disease. Because the FEIS does not evaluate the ecological benefits associated with fire, disease, and beetles, and fails to provide meaningful data to demonstrate that there is somehow “too much” disease or insects on the landscape, it fails to examine how the reduction or loss of these forest attributes will harm the forest. Indeed, the EIS is thus far assuming without justification that these forest attributes are only negative. Thus, until the EIS meaningfully addresses the role of fire, beetles, and disease, it will not meet NEPA's ‘hard look’ mandate”.

Objectors suggest that Alternative B should incorporate the concept of reducing the number of entries by thinning to the lower range of desired tree stocking where it is determined that multiple entries could cause significant ground disturbance, disruption of recreational opportunities, or effects on wildlife.

Objectors also contend that, “the desire to reduce tree mortality in the forest from native beetles is wrong. Indeed, according to the Forest Service's own data, it appears that the Forest Service's direction would allow far higher tree mortality, through logging, than would result from beetles, and the FEIS does not divulge this or explain how increasing tree mortality, and reducing future snag recruitment, advances ecological integrity. Given the extensiveness of

overly dense forest conditions, and the objectives for scenic quality in the Basin, beetle outbreaks and the tremendous tree mortality associated with them are not acceptable. Therefore, thinning the forest stands below maximum stand density index for each of the major forest types on a periodic basis will lower the risk of outbreaks and improve resiliency of the stands to withstand natural levels of beetle attack, asserting, there is nothing un-scenic about mortality from beetles and many people can enjoy such areas, especially once they understand the importance, ecologically, of such areas. And, to claim that the mortality associated with beetles is not acceptable reflects a bias towards silvicultural objectives when the Forest Service is also tasked with maintaining the ecological integrity of the area.” Objectors do not believe a meaningful argument has been presented to show that beetle mortality is unacceptable and to the contrary, such mortality creates important wildlife habitat.

SUMMARY OF RECORD REVIEW

CONCLUSIONS

The desired conditions, strategies, objectives, and standards and guidelines described in the revised LMP are intended to maintain and enhance the suitability of habitat for all threatened, endangered, candidate, and proposed (TECP) species (and MIS habitat), including marten and the California Spotted Owl. The approach in the revised LMP does not assign quantitative limits on canopy cover and/or basal area retention because one-size-fits-all approach would not allow the LTBMU to achieve the desired conditions for forest vegetation, and protect and improve the habitat for sensitive species.

The revised LMP objective for forest vegetation is to move toward a desired condition such that “when amount of forest area and vegetation type more closely approximates historical forest structures, forests in the Lake Tahoe Basin will be more resilient to fire, bark beetle-caused tree mortality, drought, and future changes in climate regimes.” As a result of this strategy, “a more resilient balance of forest stand densities, structure, and species composition will emerge across the landscape.”

The LTBMU responded to concerns for the California Spotted Owl extensively in the FEIS, Response to Comment PC# 521, “the goal for forest vegetation in this plan is to restore forest structure and composition to conditions that are more resilient to future changes in climate

and disturbance regimes” and that “late seral, dense forests in the Sierra Nevada are at risk to stand-replacing fire because of heavy fuel loading.” Additionally the response documents the damage to California Spotted Owl PACs as a result of fires.

The LTBMU chose to balance the potential short-term effects of vegetation treatments against the long-term benefit to reduce losses of PACs through wildfire. They cite both the 2001 and 2004 framework which “allowed for potential short-term modifications to habitat and impacts to reduce fuels and the risk of stand-replacing, catastrophic fires and the USFWS indicated that short-term effects of treatments could be incurred for the long-term benefit of reducing the risk of catastrophic fire in owl habitat.” They also discuss the status of the California Spotted Owl and threats to the owl in explaining their management approach. Within the Response to Comment found in the FEIS, the LTBMU wrote that that they agreed that the Forest Service would benefit from additional language that clarifies the intent to protect late-seral, closed-canopy habitat (e.g., dense canopy cover and large trees) for associated wildlife species without incorporating one-size-fits-all quantitative parameters at the plan level. The LTBMU then incorporated new strategies and revised standard and guideline portions of the following sections: Forest Vegetation, Fuels, and Fire Management Program Strategy and Biological Resources. They also increased the canopy cover desired condition for goshawk and spotted owl PACs to 70 percent cover.

Although the guidelines for PACs allow reduction of canopy cover below this desired condition, these circumstances would occur only to improve habitat over the long term by restoring structure and/or reducing risk from beetle outbreak and catastrophic fire, and would be evaluated on a project-specific basis. The LTBMU also incorporated a standard that treatments shall not reduce the canopy of the dominant and co-dominant trees by more than 10 percent across a late seral closed canopy stand. The LTBMU further stated, “it is true that the spotted owl and marten are not simply associated with dense late-seral closed-canopy habitat but with certain features of these habitats such as snags and coarse woody debris (understory complexity)—both of which are the subject of revised and new standards and guidelines that protect and promote creation of these features on the landscape. “

SG23 refers to the design of hazardous fuel treatments, that when implemented, should reduce the likelihood of crown fires. In areas where crown fire may be a desired condition, or an accepted condition, hazardous fuel treatments would not be planned or implemented.

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Restoration: Objectors believe that neither the revised LMP nor FEIS provides a clear and precise definition of what constitutes "restoration" as a forest-wide Plan objective. Review of the record showed that the term "restoration" is defined in the glossary. However, the definition was confusing between the DC and general definition as Objectors indicate.

Combining SG37 and SG38: Review of the planning record indicated, that as written the intent of SG37 and SG38 is unclear, with regard to late seral habitat and percent of canopy closure. However, clarifying the intent of SGs 37 and 38 would be more beneficial than combining the two standards or deleting SG37 while keeping SG38, as an objectors suggests.

Forest Inventory: The LTBMU FEIS analyzed the Forest Inventory and Analysis (FIA) data in Table 3-42, Current Forest Conditions by California Wildlife Habitat Relationship Class and Seral Stage were based on Forest Inventory. By using the 2004 Framework direction, mapping old-growth is not needed at the basin level.

FINAL INSTRUCTION

1. Reword SG37 and SG38 to clarify intent: retention of late seral closed canopy and percentages of closure.
2. Ensure restoration is clearly defined and clearly linked between the DCs and general definition in the glossary.
3. Clarify in the documentation why the graphs are relevant in spite of not reflecting disturbances and why large tree removals were not modeled in Spectrum.
4. Use the same FIA data that was used to construct Table 3-42 to produce another table with stems per acres by size class and forest type with a format consistent with other tables in the FEIS.
5. Clarify the intent of SG62 to focus on snag distribution and not focus on specific numbers for specific species. SG62 includes distribution. SG59 covers distribution for post fire conditions. Add more specifics in SG62 from SG59. Evaluate SG88 to ensure there is an emphasis on removal of smaller trees contributing to canopy closure objectives.

6. Clarify tables 1 and 2 in the plan. Relate to DC23 which provides guidelines for developing project-level prescriptions that include measurable forest restoration standards to guide vegetation management and wildfire risk reduction efforts.

VIABILITY, MIS, AND MONITORING

PRIMARY OBJECTORS

Center for Biological Diversity and the John Muir Project, Earth Island Institute, Justin Augustine

Sierra Forest Legacy, Craig Thomas and Michael Graf

OBJECTION ISSUE SUMMARY: VIABILITY

The Objectors believe the Forest Service cannot rely on regional monitoring to ensure the viability of wildlife species in the LTBMU. They contend that the approach of accomplishing the monitoring through the Sierra-wide bio-regional monitoring adopted in the 2007 MIS amendment conflicts with the 1982 Planning Rule, which requires the LTBMU to conduct monitoring to ensure that species viability and diversity is being maintained in the planning area, (36 CFR § 219.19). They assert that the FEIS provides no response to this point, focusing instead on a discussion of the Black-backed woodpecker. See Response to Comments, pp. 109-115 in the FEIS.

The Objectors believe that the revised LMP and FEIS do not identify MIS based on criteria specific to the LTBMU Planning Area and thus misses the potential impacts of management activities on existing MIS and their specific habitats. The Objectors contend that eliminating MIS will not ensure wildlife viability and diversity in the Tahoe Basin planning area.

Objectors contend that the LTBMU is in violation of 1982 Planning Rule Requirements by failing to maintain viable populations of MIS (spotted owl, marten, flying squirrel). They contend that,

“...the plan is violating the 1982 Rule Requirements to Ensure Diversity of Wildlife in Tahoe”. They remind the Forest Service that land management plans must “provide for diversity of plant and animal communities.” (16 U.S.C. § 1604(g)(3)(B). To implement the statutory directive, the 1982 NFMA regulations require the Forest Service to “maintain viable populations of existing native and desired non-native vertebrate species in the planning area.” Id. § 219.19. A “viable population” is defined as “one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area.”

The Objectors also include another reminder, “to ensure that the Forest Service meets the diversity and viability requirement, the 1982 Regulations require monitoring “[a]t intervals established in the plan” to evaluate “how well objectives have been met and how closely management standards and guidelines have been applied,” at which point “the interdisciplinary team shall recommend to the Forest Supervisor such changes in management direction, revisions, or amendments to the forest plan as are deemed necessary.” See 36 CFR 219.12(k)

The Objectors contend that the LTBMU FEIS Response to Comments is not acceptable, “viability is one of, if not the, most important issues at stake and can therefore not be lumped into a generic claim that “[i]t is unnecessary and would be impractical to include every regulatory concept in the 1982 rules. That is simply a non-answer and is irrelevant. Likewise, simply because viability is not ‘new’ is not a good reason not to include it in explicit and clear fashion.”

In addition, the Objectors contend the LMP and FEIS do not comport with NFMA and NEPA as to wildlife viability, environmental consequences of the action, and the mandate to take a “hard look” at the Plan’s impacts. The Objectors ask that the Forest Service present a plan for how viability and diversity will be assured before and after the transition to the 2012 Planning Rule.

Further, Objectors ask that the Forest Service add a forest-wide standard (not a guideline) requiring the Forest Service to maintain at least viable populations of all MIS on the LTBMU planning area, including plan level presence/absence monitoring for MIS in the LTBMU. They would like to see included in this standard a requirement that if populations are decreasing for MIS regionally or locally, include monitoring for MIS in the LTBMU that assess changes to MIS occupancy. They also request that the bald eagle, peregrine falcon, mule deer, mallard, willow flycatcher and black bear be retained or added as MIS on the LTBMU and that the Forest Service engage partners in monitoring designs and tracking to lower costs.

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Objectors ask that the LTBMU adopt a monitoring and adaptive management program that has clear thresholds and triggers to monitor the effects of treatments on marten occupancy and reproduction and provides an annual review of status. Also Objectors request the Forest Service complete a scientifically accurate accounting of impacts from the revised LMP on marten habitat, comparing it to the habitat corridor system discussed above.

There are three distinct elements of this broad issue of Viability, Monitoring and MIS requirements including, the 1982 requirement to provide habitat for viable populations within the planning area, the monitoring requirements for MIS, and the analysis requirement for MIS. During discussion at the May 20th meeting, objectors clarified that in addition to meeting the requirements of the 1982 Planning Rule, the viability of the California Spotted Owl and Pacific marten is an issue. Objectors re-iterated that they believe the revised LMP components will not facilitate California Spotted Owl conservation because key concepts of suitable habitat and highly suitable habitat were not properly defined.

SUMMARY OF RECORD REVIEW

WHAT IS REQUIRED

The 1982 Planning Rule requirements (standards of review):

- Viability: “[H]abitat shall be managed to maintain viable populations of existing native and desired nonnative vertebrates in the planning area. . . . [H]abitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area.” (36 CFR 219.19).
- MIS: MIS are selected “because their population changes are believed to indicate the effects of management activities. . . . Population trends of the [MIS] will be monitored and relationships to habitat changes determined. . . .” 36 CFR 219.19 (a)(1) and (6).
- MIS: “Planning alternatives shall be stated and evaluated in terms of both amount and quality of habitat and of animal population trends of the [MIS].” (36 CFR 219.19 (a)(2)).

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Viability is not a direct requirement for MIS populations as the viability requirement is for managing habitat for native and non-native vertebrate species and MIS could include invertebrate species. In addition, the 1982 rule does not require any particular quantity or quality of MIS monitoring, and does not specify where MIS monitoring must occur. The 2012 planning rule does not require further changes with the exception of monitoring, “no prior obligations remain from any prior planning regulation except those that are specifically included in a unit’s existing plan. Existing plans will remain in effect until revised. This part does not compel a change to any existing plan, except as required in § 219.12(c)(1). . . . (36 CFR 219.17 (c)).”

2012 Planning Rule Monitoring Program transition for 1982 existing plans and/or revisions.

Where a plan’s monitoring program has been developed under the provisions of a prior planning regulation and the unit has not initiated plan revision under this part, the responsible official shall modify the plan monitoring program within 4 years of the effective date of this part, or as soon as practicable, to meet the requirements of this section. (36 CFR 219.12 (c)(1)).

The requirement in 219.12 (c) that monitoring programs in existing plans are to be modified to meet the Rule’s monitoring requirements should not be read to require changes to other parts of the existing plan. If a requirement for the new monitoring program would necessitate amendment or revision of an existing plan, then the responsible official may consider it not practicable to do so by May 9, 2016.

Because a plan monitoring program is not a plan component, it may be modified by an administrative change (see 36 CFR 219.7(f) and 219.13(c)). An administrative change to modify a plan monitoring program may be made only after notice to the public of the proposed modification, and an opportunity for public comment:

A substantive change to the monitoring program made outside of the process for plan revision or amendment may be made only after notice to the public of the intended change and consideration of public comment (§ 219.7(f)). (36 CFR 219.13 (c) (1))

CONCLUSIONS

Viability

The LTBMU takes a reasonable approach to meet the intent of the 1982 Rule. Individual members of species found within the planning area belong to populations that extend well beyond the boundary of the planning area. Therefore, the LTBMU can emphasize restoration of habitat, provide habitat for members of the populations, and contribute to the stability of those populations, but cannot provide for enough adequate habitat to maintain species viability. The regulation cannot be read to require the impossible (i.e., provide more habitat than it has.) The LTBMU is an extremely small area and, as explained in Appendix E of the revised LMP, “it does not (cannot) provide for viability within the planning unit area for many of the wide ranging native vertebrate species. “However. . .[it] does provide for conservation of species . . . by providing habitat to support species reproductive individuals and provide for connectivity to surrounding habitat” (App. E-5).

The LTBMU adequately addresses the environmental consequences of maintaining the viability of species in the LTBMU FEIS Chapter 3 (3.4.14.2 Affected Environment & 3.4.14.3 Environmental Consequences, pg 311-355). The LTBMU provides sufficient standards and guidelines (Revised LMP Chapter 2, see SG 31 thru 72) to maintain habitat for viable populations of species. (see Appendix E- Species Diversity of the FEIS: E.2. Species Viability and Species List)

A question was raised during the July 1st meeting, during the viability discussions, which centered on how viability would be met under the 1982 regulations (which this revised LMP would be approved under) and how is that going to be addressed as management shifts to focal species. The 1982 regulations require the Forest Service to develop a plan to provide for management that would maintain habitat for viability. However, this is the only obligation the rule imposes. After the revised LMP is approved, projects must be consistent with the LMP. If the LMP says “every project must be designed to ensure sufficient habitat remains to maintain viable populations, then, projects, to be consistent, must not reduce habitat to a point that species will not be viable. However, the rule does not require the LMP to be worded so precisely.

MIS Selection and Monitoring

The MIS monitoring approach was designed based on a set of similar management activities across the Sierra Nevada Forests. The LTBMU, as part of the Sierra Nevada Forests, believes its management activities will continue to be similar to the other Sierra Nevada Forests.

Section 36 CFR 219.19 (a)(1) of the 1982 Rule requires the identification and selection of MIS “[i]n order to estimate the effects of each alternative on fish and wildlife populations” during the planning process.” The rule further states that MIS “shall be selected because their population changes are believed to indicate the effects of management activities.” These provisions are not monitoring requirements for MIS. The only rule requirement specifically for monitoring MIS is found at section 219.19 (a)(6), “population trends of the management indicator species will be monitored and relationships to habitat changes determined.” The Forest Service has never interpreted this provision as requiring the LMP to provide for any specific amount of monitoring, or to monitor every action that may affect MIS. Whether the LMP sufficiently provides for monitoring of MIS is therefore not a regulatory matter. The FEIS contains a discussion of MIS monitoring results (pgs. 306-355) for the LTBMU and contains a monitoring plan (Appendix A). The monitoring plan refers to the Sierra Nevada MIS approach to interpret changes in MIS at large scales with no monitoring proposed for the unit beyond that done for the Sierra Nevada range.

The LTBMU revised LMP does contain sampling locations for the Sierra Nevada monitoring plan and these results appear in the FEIS MIS discussion. The revised LMP emphasizes the restoration of ecosystems as their desired condition. Given that emphasis and movement toward the natural range of variability, rather than away from it, MIS response to management actions should be favorable and habitat should improve.

To improve management efficiency across ecologically similar landscapes, Forest Service units within the Sierra Nevada range selected the same set of MIS. This approach made it possible to develop a landscape scale monitoring strategy. The LTBMU is part of the Sierra Nevada monitoring strategy and has MIS sampling sites within the boundary of the LTBMU planning area. This large-scale sampling approach will detect effects of similar management activity across the Sierra Nevada. Regarding plan level presence or purported absence of monitoring for MIS in the LTBMU, the Forest Service already accomplishes MIS monitoring under the bioregional monitoring program (i.e., “the planning unit does contain sampling locations for the Sierra Nevada monitoring program...”).

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As to retaining the bald eagle, peregrine falcon, mule deer, mallard, willow flycatcher, and black bear as MIS on the LTBMU, this list is currently not identified as MIS for the LTBMU (Marten, Spotted Owl and Flying Squirrel). These species may be considered at the bioregional level throughout the Sierra Nevada and depending on their status some could eventually be identified as focal species, as per the 2012 Planning Rule requirements for collaborative development of the monitoring program.

When the monitoring transition occurs to meet the requirements of the 2012 Planning Rule, the entire monitoring and evaluation plan in the existing LMP will be reviewed as well as any relevant existing broad scale monitoring programs to determine what modifications are needed to meet the monitoring requirements of the planning rule (CFR 219.12(a)(5)). The responsible official may modify the existing LMP monitoring and evaluation plan to a monitoring program with an administrative change. The responsible official may defer making changes not required by the 2012 transition language until the next LMP revision.

Adopting a monitoring and adaptive management approach that has clear thresholds and triggers to monitor effects of treatments on marten occupancy and reproduction, as proposed by the Objector(s), would not be appropriate or required to meet the 2012 Planning Rule requirements. There is no guarantee that marten would be identified as a Focal Species (and therefore, have monitoring requirements). There is also no guarantee that marten would be identified as a Species of Conservation Concern (SCC). Even if it is identified as an SCC, monitoring of SCC is related to ecological conditions, not occupancy and reproduction.

The 1982 Planning Rule requires that "Planning alternatives shall be stated and evaluated in terms of both amount and quality of habitat and of animal population trends of the [MIS]." (36 CFR 219.19 (a)(2)). The FEIS is not very clear about how the quality of habitat and trends of MIS varies by alternative.

Objectors asked for the LTBMU to include recommendations from General Technician Reports (GTR) 220 and 337. Review of the planning record shows that those papers were used extensively in developing plan components.

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FINAL INSTRUCTIONS

1. To move towards adhering to CFR 219.12, coordinate with the Region 5 Forests currently under the LMP revision process using the 2012 Planning Rule to collaboratively identify focal species and develop a monitoring strategy for the identified species.
2. Clarify in the documentation how the quality of habitat and trends of MIS varies by alternative.
3. Reinstate the 2004 Sierra Framework management direction related to CASPO habitat until such time as the California Spotted Owl Conservation Strategy is completed. At that time revise plan components for CASPO.
4. Add Desired Conditions for Marten (missing in FEIS/Plan, use existing direction from 2004 Sierra Nevada Forest Plan Amendment -SNFPA.)

ISSUES WITHOUT INSTRUCTION

The following objection issues were analyzed and checked against the revised LMP, project record, FEIS, and the draft ROD. No instruction from the Reviewing Officer is given, as it has been determined that the proposed actions taken by the LTBMU comply with law, regulation or Forest Service policy and are within the Responsible Official's decision authorities.

CLIMATE CHANGE, PLANNING, NEPA AND PROCEDURES

PRIMARY OBJECTORS

Harold Singer

Marjorie Sills

Heavenly Resorts, Andrew Strain

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Tahoe Area Sierra Club, Wilderness Committee, Fred Roberts

Sierra Forest Legacy, Sierra Club, Friends of the River, California Wilderness Coalition, Snowlands Network, Sierra Nevada Alliance, Earthjustice, et. al., Michael Graf and Craig Thomas, Robert Rowen, Justin Augustine – lead Objectors

OBJECTION ISSUE SUMMARY: STANDARDS AND GUIDELINES

One objector contends that SG2 and SG4's identification as "Guidelines" can be interpreted to mean that Forest management activities do not have to be designed to prevent violations of applicable air and water quality standards. As one objector states, "the FEIS does not adequately identify all potentially significant impacts associated with potential departures from "Guidelines" that are included in the Standards and Guidelines...without clear performance goals or objectives associated with each G&S that is labeled a "Guideline" there are no "Limits" subject to independent analysis of this discretion."

The objector suggests that "SGs2, 4, 7, 10-20, 28, 30, 33, 43-46, 51, 115, 118-120 in the revised LMP are not linked to a performance goal or objective meaning that it is "impossible for a USFS decision maker or the public to perform any meaningful evaluation of any proposed deviation at either the program or project level to determine if the deviation meets the intent of the 'Guideline.'" The objectors request that the LTBMU, "convert the remaining S&Gs to "Standards" or add language to each that clearly identifies the performance goal or objective that the S&G will achieve if implemented. This performance goal or objective would be the benchmark that a decision maker or member of the public could evaluate any proposed deviation from the S&G."

SUMMARY OF RECORD REVIEW

WHAT IS REQUIRED?

The 1982 Rule requires the "Establishment of quantitative and qualitative standards and guidelines for land and resource planning and management; (219.1 (12))."

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The 1982 Planning Rule at 36 CFR § 219.11, “Forest plan content,” explains the use of objectives and goals in a forest plan:

“The forest plan shall contain the following:

- (a) A brief summary of the analysis of the management situation, including demand and supply conditions for resource commodities and services, production potentials, and use and development opportunities;
- (b) Forest multiple-use goals and objectives that include a description of the desired future condition of the forest or grassland and an identification of the quantities of goods and services that are expected to be produced or provided during the Resource Planning Act planning periods...”

CONCLUSIONS

There are no requirements that determine when a standard should be used instead of a guideline. The requirements at 219.12 only require the establishment of SGs. Therefore, the LTBMU plan meets the requirements set forth in 219.12. Standards and Guidelines are also defined on page 7 in the revised LMP.

The objector is concerned that there are not clear goals and objectives associated with each Guideline. The 1982 rule does not require that each objective or goal must be linked to a corresponding Standard or Guideline; it only requires that multiple-use goals and objectives are included within the plan.

Black’s law dictionary defines guideline as a practice that allows leeway in its interpretation. This level of discretion is necessary and does not violate any laws, regulations, or policy. As a general rule, Guidelines offer guidance rather than impose mandatory requirements. Guidelines rely on the judgment and professional competence of field personnel to carry out specialized tasks and to meet work standards. Wherever possible, guidelines provide employees latitude and flexibility in performing specialized tasks to respond to local situations and conditions.

Range of Alternatives: The LTBMU considered an adequate range of alternatives and completed the appropriate level of analysis per alternative. It was not determined that the concept of reducing the number of entries should be common to all alternatives. The LTBMU did an adequate job with alternative B and does not need to modify it further as it relates to the

number of entries and has addressed the rationale on why there is active intervention in forests in Appendix N (page N. 20, PC 170 rationale for not considering an ecological alternative in detail).

Range of Variability: The desired ranges of structural classes for each major forest type are a reflection of disturbances in a more naturally functioning ecosystem where such disturbance regimes can occur without human intervention. The current forest conditions primarily stem from Comstock-era logging and efforts over the past 100 years to suppress wildfires. Therefore, one of the primary natural drivers that would have shaped the landscape while the post-Comstock-era forest was regenerating (i.e. fire) did not occur. Likewise, other disturbance factors, for example drought, related mortality are quickly removed to lower the risk of nearby trees becoming infested by bark beetles. Natural and historic ranges of variability are discussed during project development to best prescribe surrogate treatments that more closely resemble what would be expected if a naturally occurring disturbance were to occur.

Insect and disease: The LTBMU responded to the concern, the “plan should clarify how it considers the ecological role of beetles, disease, and fire in forest ecology” in the FEIS Appendix N, “the plan seeks to reduce beetle risks and fire effects that are outside of the natural and/or historic ranges of variability. Objectives aim to reduce forest stand densities from conditions that do not represent natural conditions and would result in extraordinary outbreaks and catastrophic fire.”

Forest vegetation management options reflected in the revised LMP follow precepts of ecosystem-based management. Given that there are no lands suitable for timber production in the LTBMU, forestry practices are directed towards achieving objectives other than timber (wildlife, recreation, scenic or other resource objectives). After public safety has been addressed, snags and down wood created by natural processes are a desirable component in the forest. Additional considerations are contained in the revised LMP when retaining snags. This strategy is consistent with current Forest Service policy.

In the FEIS Response to Comment, PC# 451 states “The Forest Service needs to clarify the assumptions about tree mortality from beetles and the rationale for the need to reduce stand densities.” In response to PC# 451 the LTBMU states, “the assumptions are nothing new to forestry. These are well supported in the literature. The question is really about whether or not bark beetle outbreaks are acceptable or not. Given the extensiveness of overly dense forest conditions, and the objectives for scenic quality in the Basin, beetle outbreaks and the

tremendous tree mortality associated with them are not acceptable. Therefore, thinning the forest stands below maximum stand density index for each of the major forest types on a periodic basis will lower the risk of outbreaks and improve resiliency of the stands to withstand natural levels of beetle attack.”

Regarding the Objector’s point that beetle killed trees are not necessarily “un-scenic,” the LTBMU relied upon the Forest Service Scenery Management System to guide their decisions. The Scenery Management System (SMS) was developed by several hundred individuals, organizations and agencies for the inventory and analysis of the aesthetic values of National Forest lands. While there is little doubt that some people find beetle-killed areas attractive, the main point is that the extensiveness of overly dense forest conditions and the tremendous tree mortality as well as the negative impact of beetle-killed trees to most people are the driving forces for active management of the stands.

NEPA’s Hard look and Insect and Disease: The planning record does not demonstrate that the LTBMU violated NEPA’s hard look standard for rare or at risk species.

The plan’s objectives are well supported in the literature. Given the extensiveness of overly dense forest conditions, and the objectives for scenic quality in the LTBMU, beetle outbreaks and the tremendous tree mortality that can be associated with them are not acceptable. Therefore, thinning the forest stands below maximum stand density index for each of the major forest types on a periodic basis will lower the risk of outbreaks and improve resiliency of the stands to withstand natural levels of beetle attack.

In the FEIS, Alternatives B, C, and E are differentiated by the amount of thinning per acre (highest in Alternative C) and /or the number of acres treated over time. The revised LMP seeks to reduce beetle risk and fire effects that are outside of the natural and/or historic ranges of variability. Objectives aim to reduce forest stand densities from conditions that do not represent natural conditions and would result in extraordinary insect/disease outbreaks and catastrophic fire.

Forest vegetation management options reflected in the revised LMP follow precepts of ecosystem-based management. Given that there are no lands suitable for timber production in the LTBMU, forestry practices are directed towards achieving objectives other than timber (wildlife, recreation, scenic, or other resource objectives). After public safety has been addressed, snags and down wood that are created by natural processes are a desirable

component in the forest. Additional considerations are contained in the revised LMP for instances in which snags are retained.

Aspen Restoration -In response to PC# 267 in Appendix N, the LTBMU FEIS states, “The protective measures we have proposed (through desired conditions and strategies) are “intended to contribute towards the conservation of our species” (which would mean biodiversity at the Plan level).” These include maintaining diversity of aspen stands and meadows. The LTBMU specifically addresses why active intervention is required to maintain aspen stands and Table 3-38 identifies encroachment of conifer trees as a treatment to both aspen and meadows.

OBJECTION ISSUE SUMMARY: CLIMATE CHANGE AND FOREST HEALTH

The Objectors contend that the FEIS and preferred alternative fails to clearly address the problem of climate change. They claim that several factors will worsen conditions in the Tahoe Basin, including cutting of large diameter trees, carbon dioxide emissions from over-snow vehicles and OSV use in IRAs, lack of additional recommended wilderness, and increased mechanized traffic.

Objectors also contend that “the LTBMU Plan has been released at a time in history (November 2013) when the Basin’s natural communities are encountering growing and unprecedented shocks that climate change predictions for the Basin suggest drought will increase in frequency and severity (Saffold, 2010) threatening the health of forests, wetlands, and their wildlife in the Tahoe Basin....Erosion, nutrient release, and air pollution have caused Lake Tahoe's water clarity to decline from 100 feet in 1960 to about 70 feet today. Climate change also drives the problem as water temperature of Lake Tahoe has increased 1 degree Fahrenheit in the last 30 years threatening the lakes clarity (Margaret Moran, 2013). The biggest problem facing the LTBMU in the next twenty years is climate change. Although the Environmental Impact Statement includes a discussion of climate change, the preferred Alternative (Alternative E) does not address what should be done to help the Basin's environment cope with this problem. Objections to the Draft Record of Decision's inadequacies are the following:

1. Outside of the WUI zones, cutting of large trees will be allowed in Alternative E. Large trees are the best removers of CO₂ from the atmosphere which is the main cause of

climate change. The only large trees (over 20 inches in diameter) that should be cut outside of the WUI zone are identified hazard trees.

2. Over snow vehicles will remain in 55 percent of basin lands in all alternatives. OSVs, like any internal combustion engines, emit CO₂ which affects air quality and contributes to climate change. They also will have a deleterious effect on the land as the temperature in the basin increases. Even though it is not feasible at the present time to eliminate them entirely from the basin, they should at least be excluded from inventoried roadless areas.
3. No new wilderness is proposed in the preferred alternative. High altitude wilderness is the best place for species that have difficulty surviving as their present environment gets warmer to find a suitable environment. Both the Dardanelles and Freel IRA's would provide high altitude wilderness for these species and need to be part of the long-range management plan. If boundaries are carefully drawn, designation of these as wilderness would not interfere with well-used mountain bike trails.
4. Although it is impossible to eliminate automobiles from the Basin, no changes in recreation or parking should be made that encourage more mechanized traffic that makes the greatest contribution to CO₂ that causes atmospheric pollution and climate change."

The following suggestions are made by objectors to ameliorate the effects of climate change:

- No cutting of trees more than 20 inches in diameter outside of the WUI unless they are identified hazard trees.
- OSVs should be excluded from IRAs.
- Recommend new wilderness, particularly the Dardanelles and Freel IRAs.
- No changes in recreation or parking that encourage more mechanized traffic.

CONCLUSIONS

Although the 1982 Planning Rule does not require climate change analysis, the project record reflects climate change considerations throughout. The LTBMU Climate Change Strategy outlines a six point plan for incorporating climate change into the management of the LTBMU:

- Collaborate on local and regional vulnerability assessments. Participate in a Regional vulnerability assessment for the Sierra Nevada.
- Incorporate vulnerability assessments related to climate change into management on the LTBMU as information is synthesized. Consider and prioritize adaptation activities recommended for vulnerable resources based on funding.
- Consider restoration of species and/or habitat identified as vulnerable to climate change during project planning.
- Consider restoration of individual species during habitat restoration, especially for vulnerable resources.
- Minimize management impacts to species that are vulnerable to climate change. Reduce stress (e.g. human activities, invasive species) related to management in order to reduce the additive effects of non-climate stress.
- Incorporate adaptation actions into management to increase resiliency and adaptive capacity of vulnerable resources. LTBMU LMP, p. 50

The discussion of 20 inch diameter limits is found in Section 2.5.7 of the FEIS – 2001 SNFPA Alternative. Lower diameter limits *were* considered in Alternative D and the conditions that allow removal of trees larger than 30 inches dbh are found in SG33, which include forest and stand health, safety, and operational constraints (FEIS, Chapter 2, page 25).

The Air Quality section of Chapter 3 compares emissions from OSVs with emissions from vegetation management activities (FEIS, Chapter 3, pages 55-75). Though the wilderness designation in Alternative D would remove a large area open to OSVs, it might decrease use--or displace users. Otherwise, areas open to OSV use do not vary by alternative and thus emissions from OSV use will not differ among alternatives (FEIS, Chapter 2, page 63).

Appendix N - Response to Comments addresses comments received about climate change (FEIS, Appendix N, pages 39-46). Please see the response to PC# 48 and # 108, which discusses the interplay between climate change and adaptive management. *Id.* at 40. The nearby discussion of mitigation and vulnerability assessments is also instructive. *Id.* at 42.

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Regarding parking and recreation changes; as previous data shows, greater numbers of users are anticipated over the life of the LMP. Even absent any changes to the LMP, there will likely be an uptick in mechanized traffic in the area.

The LTBMU also considered climate change in the Climate Change Trend Assessment, which was compiled to synthesize the best available scientific information on climate change. It summarizes available information observed over the last 98 years and the amount of change projected in the coming decades (FEIS Appendix D). The Assessment was subject to a Science Consistency Review in July, 2013. On climate change, the group largely determined that relevant scientific information was considered, that the information was reasonably interpreted and accurately presented, and that the uncertainties associated with the relevant scientific information acknowledged and documented (Science Consistency Review Report, pages. 32-3, 38-40, 56).

Appendix D and Section 3.4.7 of the FEIS respond to multiple concerns raised by the Objectors during scoping and the public comment period. The LTBMU does not respond point by point to each of the items raised by the Objectors but, taken together, these sections explain how climate change data informed the planning process.

The objection issues directly related to climate change regarding the effects of climate change such as, erosion, air pollution, and water pollution. (For example, "if temperature continues to increase it will slow recovery of water clarity"). The LTBMU is taking a proactive approach, as evidenced by both the planning record and the existence of a joint multi-county/agency program in place to address climate change issues.

OBJECTION ISSUE SUMMARY: PROCEDURAL ISSUES

One Objector contends that "the draft Plan and EIS were incorrectly noticed as being in the States of Arizona and California. There was no reference to the State of Nevada where a portion of the project is located. The Code of Federal Regulations requires agencies to correctly identify the State(s) where the proposed action is located."

The Objector requested that "...the USFS should have either re-noticed the original draft EIS and Plan or made changes in the draft EIS and Plan and noticed them correctly. In either case, the

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USFS should have provided an appropriate comment period on the drafts rather than ignoring this mistake and going directly to final versions of the Plan and EIS."

Another Objector asserts that, "the USFS has intentionally failed to recognize the regulations of the Tahoe Regional Planning Agency (TRPA) in the list of applicable laws and regulations beginning on page 1-19 of the EIS. While the list includes the Lake Tahoe Basin 2008 Plan - TRPA, it fails to include the TRPA Regional Plan or Code of Ordinances as these are the implementation regulations for the 2008 Plan."

CONCLUSIONS

The Objector is correct that the original Notice of Availability issued by the Environmental Protection Agency in the Federal Register on June 1, 2012, did incorrectly identify the counties of Douglas and Washoe as being in the state of Arizona. These counties are indeed in the state of Nevada. The record shows that an amendment was released by the Environmental Protection Agency on June 8, 2012, that corrects the state to Nevada and also corrects the contact phone number. Therefore, the LTBMU did meet the requirements for notifying the public.

As per 36 CFR 219.7, the FEIS and Revised LMP show that the Forest did recognize the regulations of the Tahoe Regional Planning Agency.

The Tahoe Regional Planning Agency (TRPA) Regional Plan and Code of Ordinances are addressed in the Revised Plan beginning on page 10, under the "Relationship to Plans of Other Agencies" section. There is a link included to the TRPA website to view their planning documents. The Lake Tahoe Basin 2008 Plan – TRPA, is listed on page 1-19 of the EIS under the "Laws, Regulations, and Policy" section.

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OBJECTION ISSUE SUMMARY: PLANNING AND OBJECTION REQUIREMENTS

The Conservation Coalition is requesting an Objection Resolution Meeting during the 90-day review period to help resolve the Objection issues. The Coalition includes Sierra Forest Legacy, Sierra Club, Friends of the River, California Wilderness Coalition, Snowlands Network, Sierra Nevada Alliance, Earthjustice, and others.

SUMMARY OF RECORD REVIEW

WHAT IS REQUIRED?

§ 219.57 Resolution of objections.

- (a) Meetings. Prior to the issuance of the reviewing officer's written response, either the reviewing officer or the objector may request to meet to discuss issues raised in the objection and potential resolution. The reviewing officer must allow other interested persons to participate in such meetings. An interested person must file a request to participate in an objection within 10 days after publication of the notice of objection by the responsible official (§ 219.56(f)). The responsible official shall be a participant in all meetings involving the reviewing officer, Objectors, and interested persons. During meetings with Objectors and interested persons, the reviewing officer may choose to use alternative dispute resolution methods to resolve objections. All meetings are open to observation by the public.

CONCLUSIONS

Per the regulations found at 36 CFR 219.57, the objector may request a meeting with the Reviewing Officer. The regulations do not specify that the Reviewing Officer must meet with the objector.

Meetings were held, and all Objectors, interested persons and the public invited, on May 20, 2014, and July 1, 2014.

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OBJECTION ISSUE SUMMARY: SUSTAINABILITY REQUIREMENTS FOR RECREATION

Objectors state, "human presence and the importance of the recreational economy (FEIS Vol. I, p. 2-28) is the third reason the LTBMU uses to dismiss the SFL Conservation Strategy. We get the sense that the LTBMU does not understand the national direction of its own agency. In the Conservation Strategy, Introduction pg. I-2, we highlight Figure I-1: Weak versus Strong Sustainability in USDA, Forest Service (2010) Report on Sustainable Forests. It is clear that the Forest Service, at the national level, supports this vision of 'strong sustainability' by incorporating the newer vision of ecological sustainability and by acknowledging, that the human economy depends on people and social interaction.

Society, in turn, cannot exist outside the environment which provides the basic necessities for people to exist: air, food, water, energy, and raw materials. (USDA Forest Service 2010)....The natural environment in the LTBMU must not be managed any differently than on other national forests in the Sierra Nevada or elsewhere. Ecological integrity and 'Strong Sustainability' are also at the forefront of the Region 5 Ecological Restoration Initiative. Suggesting that the LTBMU is governed by difference rules of management due to high use levels is unacceptable and contrary to law and policy."

SUMMARY OF RECORD REVIEW

CONCLUSIONS

Review of the planning record showed that these objections issues were responded to in the Response to Comment sections in both the Draft and FEIS. Specifically it was requested that the LTBMU consider the document "National Forest in the Sierra Nevada: A Conservation Strategy" as an Alternative. In FEIS Chapter 2, Section 2.5.8, there is rationale for why this alternative was not considered in detail. The "National Forest in the Sierra Nevada: A Conservation Strategy" document is region wide in nature and not as site-specific as the proposed LTBMU revised LMP. In addition, the Conservation Strategy is focused on habitat and species management and does not adequately take into account the other multiple use mandates that are the foundation of Forest Service management.

Sustainable Recreation:

The aim of sustainable recreation management is to integrate recreation program activities with landscape processes, social values, and economic consideration to provide high quality recreation opportunities can be perpetuated through the long term.

The DC stated on page 39 in the revised LMP expresses the LTBMU's commitment to providing high quality recreational experiences through the long term. Additionally, on page 64 it states that the LTBMU recreation program strategy provides for a range of recreation opportunities while emphasizing shared use and sustainability objectives. The recreation program considers changing trends and user needs while maintaining the natural setting. All developed recreation sites will continue to be well maintained, sustainable, and compatible with management goals.

The Plan further states as recreation trends and user preferences change, recreation facilities and opportunities will be adapted to provide intended user experiences while being compatible with management goals.

- Use planning inventory and monitoring tools to identify changing desired recreation activities, settings, and opportunities.

Review of the record substantiates the LTBMU's commitment to providing high quality recreational experiences through the long term and monitoring to ensure the quality of the experience and its contribution to the area's economic health while providing environmental protection.

OBJECTION ISSUE SUMMARY: NEPA REQUIREMENTS AND OVER SNOW VEHICLES

Objectors contend that "the FEIS excuses the LTBMU's failure to consider expanded OSV restrictions on the ground and that the LTBMU received few specific suggestions for changes, and none that 'we thought would be acceptable to all parties'....the first part of this statement is wrong: Snowlands has provided the LTBMU specific proposals for OSV restrictions, both in its comments on the plan and in a half-dozen meetings and other correspondence."

They believe, "the second part of the statement is irrelevant and demonstrates the LTBMU's unwillingness to assume the role of responsible land manager. If all changes were easy and unopposed, we would have little need for decision-makers in the Forest Service. Taken as a

whole, the statement is disingenuous: the Objectors specifically asked the LTBMU to review OSV restrictions throughout the basin and the LTBMU consistently refused to consider specific management changes as part of its plan revision process.”

Objectors suggest the following;

1. Revise the Plan to acknowledge the need to review and revisit OSV restrictions in the basin, with particular attention to:
 - Assessing the demand for dispersed winter recreation and methods to accommodate growth in demand sustainably...
 - Assessing the impacts of OSV emissions and noise on other users...
 - Taking a hard look at whether OSV emission may be adversely impacting aquatic systems or the clarity of Lake Tahoe, and how to minimize such impact
2. Revise the Plan to include a commitment to implement any basin-wide resolution of OSV restrictions agreed to by the existing winter collaboration group (or its reconstituted successor), and, if such resolution has not been so agreed to by all parties by July 1, 2015 – or is not acceptable to the LTBMU – then proposing its own subpart C travel management plan by December 31, 2015, and completing the management process by July 1, 2017.
3. Through Forest Order, immediately revise the OSV use map to close the Chickadee Ridge area as indicated on Exhibit 1.
4. Through Forest Order, immediately revise the OSV use map to close the meadows and riparian areas in Blackwood Canyon as indicated on Exhibit 2.”

SUMMARY OF RECORD REVIEW

WHAT IS REQUIRED?

The NEPA regulations require an agency preparing a FEIS to assess and consider comments and to respond in one of several ways, including by modifying its analysis or by explaining why the comments do not warrant further agency response (40 CFR 1503.4).

CONCLUSIONS

The planning record shows that the LTBMU was aware of the proposals to expand OSV restrictions, and responded to them during the comment period. The failure to make suggested management changes is distinct from a, “refus[al] to consider specific management changes as part of [the] plan revision process..” There is no duty in the regulations to reevaluate OSV use upon revision of a LMP.

The comment analysis and response process is explained in FEIS Appendix N, pp. 2-3. Comments that were made by different commenters on the same subject were grouped and summarized into PC statements that captured the essence of like comments. For example, PC# 321 states that the Forest Service should work to resolve the conflicts associated with winter recreation. Similarly, PC# 387 states that the Forest Service should work to minimize conflicts between commercial OSV operations and human-powered recreationists. Several similar statements were received—and the responses integrated—during the public comment period. See FEIS, Appendix N, pp. 94-104 for an expanded discussion.

As noted in the FEIS, the current trend of growth in dispersed winter recreation is associated with increased competition for parking, crowding, and conflict between non-motorized and motorized recreationists (FEIS, Chapter 3, p. 387). Similar impacts are expected to occur in dispersed recreation areas as more users share the same general forest or trail system, which could result in a rise in user conflicts between motorized and non-motorized users. The agency will face increasingly difficult decisions about recreation management and resource protection conflicts. The LTBMU LMP is a programmatic document guiding future conditions. On page 39 of the revised LMP, the LTBMU states;

Recreation Opportunities Strategies

As recreation trends and user preferences change, recreation facilities and opportunities are adapted to provide intended user experiences while being compatible with management goals.

- Use planning inventory and monitoring tools to identify changing desired recreation activities, settings, and opportunities.

The LTBMU includes on page 71 of the revised LMP;

- Access and Travel Management Program Strategy
- Reduce roadside parking in areas of high density use and provide for managed parking. Prioritize transit or alternatives to the private automobile where parking capacity is reduced.
- Increase dispersed winter parking opportunities.

And additionally on page 74; Built Environment Objectives

- Obj 1: Implement BMP retrofits at all USFS facilities (including visitor centers, campgrounds, and parking lots.) by 2029 or as demand for recreation opportunities grows. (FEIS, Chapter 3, p. 380).

Review of documentation in the record and plan elements indicated the LTBMU is committed to providing high recreational experiences through the long term and monitoring to maintain that experience. See responses to Winter Recreation for further conclusions.

OBJECTION ISSUE SUMMARY: "BEST SCIENCE"

The Objectors contend that the, "FEIS fails to meaningfully respond to comments and to address science contrary to the Forest Service's assumptions. The Standards and Guidelines in the Plan fail to ensure that resources, such as vegetation, Recreation, Minerals, Water, Soils, Cultural and Historic, and Fish and Wildlife are protected." Further, Objectors contend, "Failure to provide an adequate, science-based monitoring and adaptive management plan responsive to the critical issues on the LTBMU. We have raised these concerns in our Forest Plan Revision Scoping Comment Letter (April 29, 2010) and in our comments on the Draft Plan and DEIS (August 29, 2012). Volume III, Appendix A-The LTBMU Forest Plan Monitoring and Evaluation Plan ("Monitoring Plan") fails to include components that effectively inform the LTBMU regarding impacts of the new Forest Plan."

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SUMMARY OF RECORD REVIEW

WHAT IS REQUIRED?

NEPA, 42 USC 4332(2)(A), 40 CFR 1503.4, NFMA (36 CFR 219.5), FSM 1921

Use of science is essential to all Forest planning involving natural resource management (FEIS, Appendix N, p. 16). The NEPA regulations require agencies to use a systematic, interdisciplinary approach to ensure integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man's environment (42 USC 4332(2)(A)). The 1982 Planning Rule also requires an interdisciplinary approach:

A team representing several disciplines shall be used for regional and forest planning to insure coordinated planning of the various resources. Through interactions among its members, the team shall integrate knowledge of the physical, biological, economic and social sciences, and the environmental design arts in the planning process. The team shall consider problems collectively, rather than separating them along disciplinary lines. 36 CFR 219.5(a)

CONCLUSIONS

A review of the record indicates that the LTBMU team used the appropriate level of analysis and scientific information to formulate the SGs.

To facilitate this process, the IDT engaged in a science consistency review. Pacific Southwest Research Station (PSW) scientists were asked to conduct a science review of the LTBMU Proposed LMP, the FEIS, and accompanying planning record:

Review Coordinator

Patricia L. Winter, Research Social Scientist and Team Leader, USDA Forest Service, Pacific Southwest Research Station, Riverside, CA¹²

Review Panel

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James D. Absher, Research Social Scientist, USDA Forest Service, Pacific Southwest Research Station, Riverside, CA

David N. Cole, Research Geographer Emeritus, USDA Forest Service, Aldo Leopold Wilderness Research Institute, Missoula, MT

Brandon M. Collins, Research Forester, USDA Forest Service, Pacific Southwest Research Station, Davis, CA

John J. Keane, Research Ecologist, USDA Forest Service, Pacific Southwest Research Station, Davis, CA

Nathan Sill, Wildlife Biologist, USDA Forest Service, Angeles NF, Arcadia, CA

Peter Weisberg, Associate Professor, Natural Resources and Environmental Science, University of Nevada, Reno, NV

Peter M. Wohlgemuth, Physical Scientist, USDA Forest Service, Pacific Southwest Research Station, Riverside, CA

David L. Wood, Professor Emeritus, Department of Environmental Science, Policy, and Management, University of California, Berkeley, CA

Barbara Zielinska, Research Professor, Division of Atmospheric Sciences, Desert Research Institute, Reno, NV

OBJECTION ISSUE SUMMARY: ADAPTIVE MANAGEMENT AND MONITORING

There were a number of objection issues referencing monitoring and adaptive management and suggesting what Objectors perceived as better approaches. "Adaptive Management and Monitoring --The monitoring and adaptive management section (III. B-1) of the SFL Conservation Strategy offers a far more detailed and integrated approach to meaningful forest

monitoring and adaptive management. The LTBMU monitoring section (Appendix A-1) lacks established thresholds and trigger points for important indicators that would inform managers regarding changes to resources that require management review and reconsideration. The LTBMU Monitoring Plan lacks any coherent adaptive management strategy to inform the need for change or to affirm achievement of desired conditions."

Objectors contend there is not an adaptive management program for any aspects of the Monitoring and Evaluation plan. They believe that while the FEIS claims that adaptive management will lead to changes in forest management over the life of the LMP, "the forest plans should identify the critical research questions guiding adaptive management, recommend management actions to facilitate their experimental approach to adaptation at a landscape scale, and include a detailed plan for accomplishing the necessary research. Adaptive management strategies should be clearly articulated in each forest plan, implementable within existing and foreseeable budgetary constraints, and transparently executed with full public involvement (Nie and Schultz 2011; see USFS 2012").

SUMMARY OF RECORD REVIEW

WHAT IS REQUIRED?

1982 NFMA 36 CFR 219.12(k)(4) Monitoring and evaluation. At intervals established in the plan, implementation shall be evaluated on a sample basis to determine how well objectives have been met and how closely management standards and guidelines have been applied. Based upon this evaluation, the interdisciplinary team shall recommend to the Forest Supervisor such changes in management direction, revisions, or amendments to the forest plan as are deemed necessary. Monitoring requirements identified in the forest plan shall provide for--

(4) A description of the following monitoring activities:

- (i) The actions, effects, or resources to be measured, and the frequency of measurements;
- (ii) Expected precision and reliability of the monitoring process; and
- (iii) The time when evaluation will be reported.

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2012 NFMA 36 CFR 219.12(c)(1) The responsible official shall develop the plan monitoring program as part of the planning process for a new plan development or plan revision. Where a plan's monitoring program has been developed under the provisions of a prior planning regulation and the unit has not initiated plan revision under this part, the responsible official shall modify the plan monitoring program within 4 years of the effective date of this part, or as soon as practicable, to meet the requirements of this section.

CONCLUSIONS

The objector has many contentions, all of which center around adaptive management of the LBTMU FEIS and Revised LMP. A review of the record on these issues show that the LBTMU Plan is adaptive in that new knowledge and information can be analyzed and the plan amended, if appropriate, at any time. It is Forest Service policy to implement adaptive management. The current LBTMU Plan has been amended numerous times and the Revised LMP will likely be amended in response to changing conditions and new science as needed. The Objector is concerned that the LMP will not be amendable; however, the Forest Supervisor will be able to amend the LMP as needed, with the exception of decisions such as Wilderness or WSR designation which require higher level approvals.

The LBTMU Revised Plan Monitoring and Evaluation Plan was developed under the 1982 NFMA Regulations. The LBTMU will comply with the 2012 NFMA Regulations by 2016, or as soon as practicable as allowed for by the 2012 Planning Rule. See instructions for Wildlife; MIS and Monitoring.

MOST COMMON ACRONYMS

CASPO: California Spotted Owl Conservation Strategy

CIRA: Citizen's Inventoried Roadless Area

CFR: Code of Federal Regulations

DBH (dbh): Diameter at Breast Height

DC: Desired Condition

DEIS: Draft Environmental Impact Statement

ERC: Energy Release Component

ESA: Endangered Species Act

FEIS: Final Environmental Impact Statement

FIA: Forest Inventory and Analysis

FSH: Forest Service Handbook

FSM: Forest Service Manual

IDT: Interdisciplinary Team

IRA: Inventoried Roadless Area

LMP: Land Management Plan

LOP: Limited Operating Period

LTBMU: Lake Tahoe Basin Management Unit

MIS: Management Indicator Species

MIST: Minimum Impact Suppression Tactics

MOU: Memorandum of Understanding

NEPA: National Environmental Policy Act

NFS: National Forest System

NVUM: National Visitor Use Monitoring

ORV: Outstandingly Remarkable River Value

OSV: Over-snow Vehicle

PAC: Protected Activity Centers

PC: Public Concern

RACR: 2001 Roadless Area Conservation Rule

ROD: Record of Decision

ROS: Recreation Opportunity Spectrum

SCC: Species of Conservation Concern

SG: Standard and Guide

SNFPA: Sierra Nevada Framework Plan Amendment

TRPA: Tahoe Regional Planning Authority

TM: Travel Management

TNF: Tahoe National Forest

USFWS: United States Fish and Wildlife Service

WSR: Wild and Scenic Rivers

WSRA: Wild and Scenic Rivers Act

WUI-Wildland Urban Interface