United States Department of Agriculture

Forest Service

Pacific Northwest Region - Pacific Southwest Region

April 2011

FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

Mt. Ashland Ski Area Expansion

Rogue River-Siskiyou National Forest
Siskiyou Mountains Ranger District

Klamath National Forest
Happy Camp/Oak Knoll Ranger District

Lead Agency:	USDA Forest Service Rogue River-Siskiyou National Forest
Responsible Official:	**Scott D. Conroy** **Forest Supervisor** Rogue River-Siskiyou National Forest
For Further Information Contact:	**Donna Mickley; District Ranger** Siskiyou Mountains Ranger District, or **Steve Johnson;** Project Leader Ashland Ranger Station 645 Washington Street Ashland, OR 97520; Phone: (541) 552-2900

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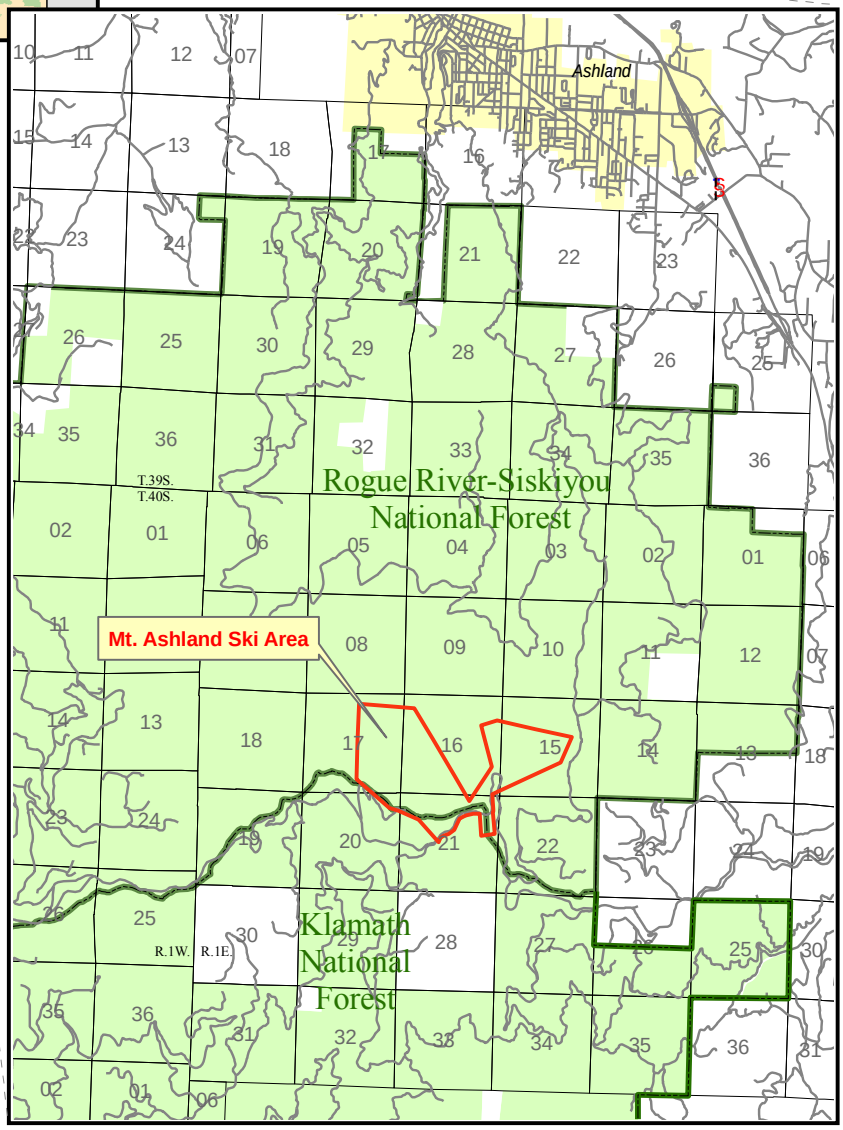

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Mt. Ashland Ski Area Expansion

Siskiyou Mountains Ranger District
Rogue River-Siskiyou National Forest

Scott River Ranger District
Klamath National Forest

Jackson County, Oregon

April 2011

Lead Agency:	USDA Forest Service Rogue River-Siskiyou National Forest
Responsible Official:	**Scott D. Conroy** **Forest Supervisor** Rogue River-Siskiyou National Forest
For Further Information Contact:	**Donna Mickley; District Ranger** Siskiyou Mountains Ranger District, or **Steve Johnson**; Project Leader Ashland Ranger Station 645 Washington Street Ashland, OR 97520; Phone: (541) 592-2900

Abstract:

The Mt. Ashland Ski Area (MASA) is an existing winter sports recreation area located within the Siskiyou Mountains in Southern Oregon on National Forest System Lands, and is operated under special use authorization issued and administered by the Rogue River-Siskiyou National Forest, Siskiyou Mountains Ranger District. A small portion of the ski area is located on the Klamath National Forest. MASA is located about 7 air miles south of the City of Ashland, primarily within the Ashland Creek Watershed. The Mt. Ashland Association currently leases the ski area from the City of Ashland, holder of the Forest Service Special Use Permit for the MASA. According to its bylaws, Mt. Ashland Association operates the ski area for the City of Ashland as "a non-profit corporation organized under the laws of the State of Oregon exclusively to provide educational and recreational opportunities in Jackson County, Oregon, to members of the general public".

In September 2004, the Forest Service issued a Record of Decision (ROD) for the Mt. Ashland Ski Area (MASA) expansion, selecting Alternative 2 with some modifications adopted from Alternative 6. The Forest Service received twenty-eight notices of appeal to the ROD. In December 2004, the Forest Service denied all administrative appeals to the ROD. In January 2005, Oregon Natural Resources Council (ONRC) filed suit against the Forest Service and Regional Forester Linda Goodman seeking declaratory and injunctive relief on the grounds that the MASA expansion project violated both the NEPA and the NFMA. On February 9, 2007, after considering cross-motions for summary judgment, a United States District Court entered summary judgment against ONRC. ONRC filed a timely notice of appeal to the Ninth Circuit Court of Appeals. Upon review, the Ninth Circuit remanded the case to the district court and instructed it to promptly enjoin the MASA expansion project contemplated in the 2004 ROD until the Forest Service corrected the NFMA and NEPA violations found in *Oregon Natural Resources Council Fund (ONRC) v. Goodman*, 505 F.3d 884 (9th Cir. 2007).

The Forest Service has prepared this Final Supplemental Environmental Impact Statement (FSEIS) in response to the September 24, 2007 Opinion of the Ninth Circuit Court of Appeals concerning the Mt. Ashland Ski Area Expansion, in addition to public and agency comments received on the March 2010 Draft Supplemental Environmental Impact Statement (DSEIS).

The Court of Appeals found that the Forest Service did not violate the Rogue River LRMP and the NFMA by authorizing development facilities in currently undeveloped riparian habitat; nor the NEPA requirement that the 2004 FEIS discuss or analyze all federal, state and local laws, including Oregon state wetland laws and regulations. In addition, the Court of Appeals found that the FEIS adequately disclosed the shortcomings in the Water Erosion Prediction Project (WEPP) models used to estimate sediment impacts on the municipal watershed and, therefore, complied with NEPA; and that the Forest Service did not violate the NEPA by using the Equivalent Roaded Area model to analyze the cumulative watershed impact of the MASA expansion.

The Court of Appeals found that the Forest Service failed to properly evaluate the impact of the proposed MASA expansion on the Pacific fisher; in violation of both the NEPA and the NFMA and that it violated the NFMA by failing to appropriately designate Riparian Reserves and Restricted Watershed terrain.

The purpose and need for this supplement is to analyze and correct specific violations identified by the Ninth Circuit Court of Appeals which will allow a determination on whether and to what extent analysis of supplemental information might alter the decision to allow ski area expansion. This action is needed to address the previous decision and to be responsive to the Court of Appeals Opinion and district court injunction.

This Supplemental EIS document is designed to supplement the existing 2004 FEIS document by adding information and analysis to Chapter III (Affected Environment) and Chapter IV (Environmental Consequence) to address matters identified by the Ninth Circuit Court of Appeals. In some cases (as noted), it will replace certain sections of these FEIS chapters. This supplemental process allows the latest and most complete information and analysis to include the 2004 FEIS with the 2010 supplemental information and analysis.

A 45-day public comment period for the DSEIS for Mt. Ashland Ski Area Expansion formally began on March 27, 2010 with publication of a Notice of Availability in the Federal Register Vol. 75 No. 58 (FR page 14594). The 45-day comment period closed on May 10, 2010.

500 paper copies and 25 compact discs of the full DSEIS were produced. Copies of the full DSEIS were distributed to federal and state agencies, local governments, elected officials, seven federally recognized tribes, media representatives, libraries, organizations, and businesses (See DSEIS, Chapter V, for a listing). The full DSEIS was provided to others upon request. The document was also made available on the Rogue River-Siskiyou National Forest website at http://www.fs.fed.us/r6/rogue-siskiyou/projects/planning/index.shtml.

A total of 845 comments to the DSEIS were received at the close of the Comment Period. Approximately 60 additional comments were received after May 10, 2010. All comments received through September 30, 2010 were reviewed for substantive content and read and coded based on content and intent.

The Forest Service accepted written, electronic and oral comments as provided in §215.6. Pursuant to 36 CFR 215.6 (b), (1), an appendix documents the Responsible Official's consideration of all comments submitted in compliance with paragraph (a) of this section. This Response to Comments document is attached to the FSEIS as Appendix B (incorporated by reference).

Substantive comments received generally focused on the transparency of analysis, and the detail and basis of assumptions of analysis. There were some comments that were determined to be: (1) outside the scope of the DSEIS; (2) identified additional changed circumstances that warranted a changed condition assessment (FSH 1909.15 Sec 18); or (3) that were related to implementation of ski area expansion and not analysis under NEPA. The majority of comments received were not considered substantive, as they primarily offered opinions or rationale for their viewpoint. These viewpoints tended to focus on support for or opposition to ski area expansion.

FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT
MT. ASHLAND SKI AREA EXPANSION

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CHAPTER I - INTRODUCTION

The Forest Service has prepared this Final Supplemental Environmental Impact Statement (FSEIS) in response to the September 24, 2007 Opinion of the Ninth Circuit Court of Appeals concerning the Mt. Ashland Ski Area Expansion, in addition to public and agency comments received on the March 2010 Draft Supplemental Environmental Impact Statement (DSEIS).

This FSEIS documents analysis and supplemental information designed to correct specific violations identified by the Court of Appeals for a ski area expansion decision made on September 13, 2004. The Forest Service issued a Final Environmental Impact Statement (FEIS) in August 2004. This FSEIS supplements, and is tiered to, the 2004 *Final Environmental Impact Statement* (FEIS) and it incorporates by reference the Administrative Record and Supplemental Administrative Record for the 2004 FEIS and its Record of Decision (ROD) *for Mt. Ashland Ski Area Expansion.* This FSEIS is prepared in accordance with the National Environmental Policy Act (NEPA) and the regulations for implementing the procedural provisions of NEPA (40 CFR parts 1500-1508; 36 CFR 220).

A. CHANGES BETWEEN DRAFT AND FINAL

Minor edits were completed throughout this Chapter to provide clarification of information previously presented.

A section was added to this Chapter that discusses public involvement and the 45-day public Comment Period for the DSEIS. Reference is made to the addition of a Response to Comments document, attached to this FSEIS as Appendix B (incorporated by reference).

Reference is also made to an additional New Information Review dated December 1, 2010, attached to the FSEIS as Appendix A (incorporated by reference). This document provides an assessment of topics based on comments received on the DSEIS that were considered to be within the scope of the DSEIS that claimed they could or should be assessed for sufficiency, relevancy and significance as new information or changed circumstances since the 2004 FEIS and ROD.

B. BACKGROUND

The Mt. Ashland Ski Area (MASA) is an existing winter sports recreation area located within the Siskiyou Mountains in Southern Oregon on National Forest System Lands, and is operated under special use authorization issued and administered by the Rogue River-Siskiyou National Forest, Siskiyou Mountains (formerly Ashland) Ranger District. A small portion of the ski area is located on the Klamath National Forest. MASA is located about 7 air miles south of the City of Ashland, primarily within the Ashland Creek Watershed. The Mt. Ashland Association currently leases the ski area from the City of Ashland, holder of the Forest Service Special Use Permit for the MASA. According to its bylaws, Mt. Ashland Association operates the ski area for the City of Ashland as "a non-profit corporation organized under the laws of the State of Oregon exclusively to provide educational and recreational opportunities in Jackson County, Oregon, to members of the general public."

Construction of the present ski area commenced in 1963; the area opened in 1964. During its first three decades, the ski area was operated by a succession of private, for-profit companies, for whom it proved a financial disappointment.

In 1992, the private operator decided to close the ski area. Plans were drawn up to dismantle the chair lifts and other improvements (Mt. Ashland Ski Area Restoration EA--AR[1] 4784-4837). The City of Ashland then interceded, acquiring the Special Use Permit and facilities (AR 4921-43). The City leased the ski area, for a nominal sum, to the Mt. Ashland Association (MAA), a non-profit entity established for the purpose of operating the ski area (AR 4862-4920).

All analysis documented in the 2004 FEIS and ROD assumes and includes the area within the 1991 expanded Special Use Permit Area at the corrected figure of 960 acres (FEIS pages I-7 and II-3). This includes 888 acres on the Rogue River-Siskiyou National Forest and 72 acres on the Klamath National Forest (ROD page 43).

The current operational ski area occupies about 287 acres. The existing ski area development consists of a day lodge, a ski rental shop building, ancillary structures, four chairlifts, and approximately 125 acres of ski runs. A parking lot for approximately 550-600 vehicles is located south of the lodge along Forest Road 20. The legal location description for all actions associated with the 2004 FEIS and ROD is T. 40 S., R. 1 E., within portions of sections 15, 16, 17, 20, 21, and 22, W.M., Jackson County, Oregon.

1. Expansion History under the NEPA

Expanding the Mt. Ashland ski area is not a new idea. Various plans have been proposed over the past 40 years. In 1991, the Forest Service conceptually approved expansion of the ski area in the Mount Ashland Ski Area Master Plan Record of Decision ("1991 Master Plan", AR 4404-23; see also AR 4131-4403 - Final Environmental Impact Statement for 1991 Master Plan). Additional environmental analysis was planned to consider the details, such as the precise location of each component and the construction design (AR 4411).

The City's lessee, MAA, submitted a new expansion proposal in 1998. A draft environmental impact statement (EIS) was circulated in January 2000 (AR 12569-13208). It generated considerable public comment, in part because the only two action alternatives evaluated were perceived as too similar (AR 19354- 62, 22130-32). A new draft EIS was circulated in 2003 (AR 22140-23222).

The Forest Service has studied the proposal and its impact for years via the Environmental Impact Statement process and considered thousands of pages of public comment. The Forest Service issued a Final Environmental Impact Statement (FEIS) in 2004. In the FEIS, the Forest Service studied six alternatives (SAR 191-311). It discussed the affected environment and environmental consequences in depth. The Forest Service analyzed, for example, issues of climate, avalanche and natural hazards, minerals and seismic conditions, soil processes including erosion and sedimentation, watershed resources, water quality, aquatic conservation, air quality, landscape ecology, current vegetation conditions, outstanding or unusual plant communities, and wildlife species (SAR 108-16, 315-521, 528-703).

The Forest Service issued a Record of Decision and approved a "Modified Alternative 2" in September 2004 (SAR 1-97). Alternative 2 and Alternative 6 are the only two expansion alternatives relevant to this FSEIS and were the only alternatives considered by the Court of Appeals[2]. Alternative 2 contemplates the MAA constructing two new chair-lifts and two new surface lifts, clearing seventy-one acres for new ski runs, and clearing four additional acres for lift corridors and staging areas, primarily within the western half of the Special Use Permit area. The proposed ski run development would require the removal of approximately sixty-eight acres of trees, which could potentially generate 1,822 thousand board feet (or 1.8 million) of commercial grade timber.

[1] Administrative Record

[2] Court of Appeals Opinion at 13057 stated "Alternative 2 and Alternative 6 are the only two expansion alternatives relevant to this appeal."

Additionally under Alternative 2, watershed restoration projects would be implemented, including structural storm water control and non-structural controls, such as the controlled placement of woody material. Alternative 6, which is a variant of Alternative 2, envisioned limiting the environmental consequences of expansion in the Middle Fork area by requiring MAA to use a lightweight, low ground pressure machine to clear ski runs and lift runs. Alternative 6 also eliminated a ski run through an alder glade wetland and reconfigured another run near a different wetland. These components of Alternative 6 were incorporated into the Record of Decision.

The Forest Service received twenty-eight notices of appeal to the ROD (AR 28574). In December 2004, the Regional Forester denied all administrative appeals (36 CFR 215) to the ROD.

2. Litigation History

In January 2005, Oregon Natural Resources Council, the Sierra Club and Headwaters (collectively ONRC) filed suit in federal district court against the Forest Service and Regional Forester Linda Goodman seeking declaratory and injunctive relief on the grounds that the MASA expansion project violated both the NEPA and the National Forest Management Act (NFMA). Specifically, ONRC contended that the Forest Service failed: (1) to ensure the viability of the Pacific fisher, a sensitive species; (2) to adequately consider and disclose the direct and cumulative impacts on the Pacific fisher; (3) to analyze whether the expansion will comply with wetlands laws; (4) to adhere to Rogue River Land and Resource Management Plan (LRMP) and Northwest Forest Plan (NWFP) standards and guidelines for protecting watersheds and riparian areas; (5) to disclose a potentially high rate of error in the model that it used to estimate sediment impacts on the municipal watershed; and (6) to adequately disclose cumulative water quality impact by utilizing a computer model without disclosing its flaws, rather than cataloging and analyzing specific projects.

On February 9, 2007, after considering cross-motions for summary judgment, the district court entered summary judgment against ONRC. The court found that the Forest Service's disclosure of potential erosion and water quality impacts in the FEIS complied with the NEPA, and that the Forest Service did not violate the NEPA[3] or the NFMA[4] by failing to discuss compliance with applicable laws governing wetlands in the FEIS. It also found the Forest Service's failure to classify Land Hazard Zone 2 terrain as Riparian Reserve was harmless and concluded that the proposed expansion satisfied the principal Rogue River LRMP and NWFP requirements for land designated Restricted Watershed and Riparian Reserve. Lastly, the district court held that ONRC's allegations regarding the Pacific fisher "mostly rely on extra-record materials that I have stricken, and events that post-date final approval of the ROD."

[3] The National Environmental Policy Act (NEPA) mandates that covered governmental entities take a "hard look" at the environmental consequences of certain proposed actions. The NEPA requires federal agencies to prepare an EIS for "major Federal actions significantly affecting" the environment. 42 U.S.C. § 4332(2)(C). An EIS is a thorough analysis of the potential environmental impacts that "provide[s] full and fair discussion of significant environmental impacts and . . . inform[s] decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1

[4] The National Forest Management Act (NFMA) imposes constraints on the Forest Service's management of national forests. Procedurally, it requires the Forest Service to develop a land and resource management plan, also referred to as a "forest plan," for each forest it manages. 16 U.S.C. § 1604(a). The NFMA also requires that a forest plan "provide for diversity of plant and animal communities," *id.* § 1604(g)(3)(B), and that "[f]ish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area," 36 C.F.R. § 219.19 (2000). Any action taken by the Forest Service in a managed forest must comply with the NFMA and must also be consistent with the governing forest plan.

ONRC filed a timely notice of appeal to the Ninth Circuit Court of Appeals to the district court's judgment. The Court of Appeals granted a stay of the district court's judgment for the duration of the appeal. On September 24, 2007 the Court of Appeals issued its ruling *Oregon Natural Resources Council Fund (ONRC) v. Goodman*, 505 F.3d 884 (9th Cir. 2007), upholding the Forest Service on several counts. The Court of Appeals found that Forest Service did not violate the Rogue River LRMP and the NFMA by authorizing development facilities in currently undeveloped riparian habitat; nor the NEPA requirement that the 2004 FEIS discuss or analyze all federal, state and local laws, including Oregon state wetland laws and regulations. In addition, the Court of Appeals found that the FEIS adequately disclosed the shortcomings in the Water Erosion Prediction Project (WEPP) models used to estimate sediment impacts on the municipal watershed and, therefore, complied with NEPA; and that the Forest Service did not violate the NEPA by using the Equivalent Roaded Area model to analyze the cumulative watershed impact of the MASA expansion. However, the Court of Appeals found the agency "failed to properly evaluate the impact of the proposed MASA expansion on the Pacific Fisher" and failed "to appropriately designate Riparian Reserves and Restricted Watershed terrain, as required by the Rogue River National Forest Land and Resource Management Plan." (Opinion at 13055-13056). See Sections C and D for more details. This Opinion is attached to this FSEIS referred Appendix C (incorporated by reference).

3. Evaluation of New Information and/or Changed Circumstances

Forest Service policy for implementing regulations under the NEPA outlines a procedure for review of actions that are awaiting implementation when new information or changes occur and should be considered for correction, supplementation, or revision; Forest Service Handbook (FSH) 1909.15, section 18. If new information or changed circumstances relating to the environmental impacts of a proposed action or decision come to the attention of the responsible or deciding official after a decision has been made and prior to implementation, the official must review the information carefully to determine its importance.

If, after an interdisciplinary review and consideration of new information within the context of the overall project or decision, the Responsible Official determines that a correction, supplement, or revision to an environmental document is not necessary, implementation should continue and the results of the interdisciplinary review is to be documented in the project file (FSH 1909.15, section 18.1).

Evaluation of New Information was performed in 2007, 2009, and 2010. On July 2, 2007, the Forest Service documented an evaluation of new information and changed circumstances for potential relevance to the September 2004 decision. A number of items evaluated had been raised by Oregon Natural Resources Council (ONRC). Some of those same issues were raised again on September 5, 2008 by Tom Dimitre, Chair of the Rogue Group of the Sierra Club. On September 22, 2009, the Forest Service documented an additional evaluation of claims of new information and changed circumstances for potential relevance to the September 2004 decision. These evaluations (New Information Reviews) are contained in Appendix A to the FSEIS and are incorporated by reference.

The relevant information evaluated by the agency or claims submitted as noted above in these evaluations did not present a substantially different picture of the environmental consequences of Mt. Ashland Ski Area Expansion from what was already presented and considered in the 2004 FEIS. On February 2, 2010, the Forest Supervisor filed a letter to the record documenting that these evaluations did not identify any claims of new information or changed circumstances that would warrant preparation of a correction, supplement, or revision to the Final Environmental Impact Statement for the Mt. Ashland Ski Area Expansion, as documented in August 2004 (FSH 1909.15, section 18.1). This letter also confirmed that the Forest Supervisor decided to prepare a Supplemental Environmental Impact Statement to address matters identified by the Ninth Circuit Court of Appeals.

On December 1, 2010, an additional New Information Review was prepared. This latest review provides an assessment of topics based on comments received on the March 2010 DSEIS that were considered to be within the scope of the DSEIS and claimed that they could or should be assessed for sufficiency, relevancy and significance as new information or changed circumstances since the 2004 FEIS and ROD.

These topics include those that were not included or specifically analyzed in The "New Information Review" of July 2, 2007 as well as the "New Information Review" of September 22, 2009 (DSEIS Appendix A). It also includes topics addressed in DSEIS Appendix A where new information or circumstances may exist since the latest assessment in September of 2009.

The sufficient and new information evaluated in the December 2010 New Information Review did not present a substantially different picture of the environmental consequences regarding Mt. Ashland Ski Area Expansion from what was already presented and considered in the 2004 FEIS and other relevant documents (see above). None of the information was found to be significant or would result in a change to the purpose and need for this project; therefore no further environmental analysis or documentation (correction, supplement, or revision to an environmental document) for these topics will be conducted.

C. WHAT THE COURT OF APPEALS FOUND DEFICIENT

The Court of Appeals found that the Forest Service failed to properly evaluate the impact of the proposed MASA expansion on Pacific fisher, in violation of both the NEPA and the NFMA, and that it violated the NFMA by failing to appropriately designate Riparian Reserves and Restricted Watershed terrain.

1. Pacific Fisher - NFMA Claims

No Compliant Biological Evaluation
The Court of Appeals found that the Forest Service's evaluation of the Pacific fisher in the MASA expansion area does not comply with the requirements of the Rogue River LRMP, does not include a compliant Biological Evaluation[5] for the Pacific fisher and, therefore, violates the NFMA.

Inappropriate Use of Habitat as a Proxy for Population Viability
The Court of Appeals found that species viability may be met by estimating and preserving habitat "*only* where *both* the Forest Service's knowledge of what quality and quantity of habitat is necessary to support the species *and* the Forest Service's *method for measuring the existing amount of that habitat are reasonably reliable and accurate*." Therefore the Forest Service's use of habitat as a proxy for population viability violated the NFMA.

Biological Evaluation Process for Habitat Analysis Insufficient
The Court of Appeals found that the Forest Service had insufficient data and knowledge regarding (1) the population of the Pacific fisher, and (2) the quantity and quality of habitat preferred by the Pacific fisher to justify using habitat as a proxy for population. Therefore the Forest Service's habitat analysis was insufficient to satisfy the demands of the Rogue River LRMP Biological Evaluation process, and is in violation of the NFMA.

2. Pacific Fisher - NEPA Claims

Impacts to Corridor Not Disclosed
The Court of Appeals found that the Forest Service violated the NEPA when it failed to disclose the potential impact of displacing the fisher and damaging habitat in the corridor linking the Klamath-Siskiyou region and the Southern Cascades.

Cumulative Effects from Other Projects Not Considered
The Court of Appeals found that the Forest Service violated the NEPA when it failed to discuss the cumulative effects on the Pacific fisher from future projects in the vicinity of the MASA expansion area, including Ashland Forest Resiliency, Ashland Watershed Protection Project, and Mt. Ashland Late-successional Reserve Habitat Restoration and Fuels Reduction Project (on the south side of Mt. Ashland on the Klamath National Forest).

[5] The Ninth Circuit Court of Appeals found that the Forest Service did not update or amend its 1999 Biological Evaluation for terrestrial species (Opinion at 13062).

3. Restricted Riparian and Restricted Watershed Terrain - NFMA Claims

Failure to Designate Restricted Riparian (MS 26) and Restricted Watershed (MS 22)
The Court of Appeals found that Forest Service violated the NFMA by failing to appropriately designate "Riparian Reserves" and "Restricted Watershed" terrain as required by the Rogue River LRMP and the Northwest Forest Plan (NWFP).

The rules governing the Forest Service's designation and management of Riparian Reserves and watersheds are complex and overlapping. The principal source of these rules is the NWFP and derivatively, the Aquatic Conservation Strategy (ACS) adopted pursuant to the NWFP. Accordingly, the Forest Service must also comply with the Rogue River LRMP's more restrictive standards and guidelines for lands designated Restricted Riparian, Management Strategy 26 (MS 26) and for lands designated Restricted Watershed, Management Strategy 22 (MS 22). These standards and guidelines include the protection of all terrain within 100 feet horizontal distance of perennial streams, wetlands and associated riparian vegetation (Restricted Riparian MS 26), and all acres "designated as suitable for Municipal Supply Watershed" (Restricted Watershed[6] MS 22).

Failure to Evaluate Soils Standards and Guidelines for MS 26 and MS 22
The Court of Appeals found that the Forest Service violated the NFMA by failing to ensure that the expansion will comply with the Rogue River LRMP standards and guidelines. The Rogue River LRMP includes specific soil disturbance standards and guidelines and requires compliance for management activities for areas designated as Restricted Riparian (MS 26), and Restricted Watershed (MS 22) terrain.

4. Riparian Reserves - NFMA Claim

Failure to Designate Landslide Hazard Zone 2 as Riparian Reserve
The Court of Appeals found that the Forest Service failed to designate the Landslide Hazard Zone 2 (LHZ) land as Riparian Reserve and this failure results in violations of the Rogue River LRMP, the NWFP (and ACS), and the NFMA, because a proper designation as Riparian Reserve would compel specific management practices to ensure that the terrain is appropriately protected.

5. Restricted Watershed Terrain - NFMA Claim

No Forest Plan Amendment to Exclude Restricted Watershed (MS 22) from SUP Area
The Court of Appeals found no explanation in the record that would resolve the conflict between the 2004 FEIS statement that the 1994 NWFP "amended" existing Rogue River LRMP designations to "Administratively Withdrawn (Special Management)" and that "this allocation is complimentary to the Developed Recreation Rogue River LRMP allocation." Because there was no amendment to the Rogue River LRMP in the record permitting the contemplated change to the Watershed, the Court of Appeals found that the Forest Service violated the NFMA by failing to ensure that the expansion will comply with the Rogue River LRMP standards and guidelines.

[6] The Court of Appeals Opinion at 13068 stated "Restricted Riparian MS 22"; in this SEIS, this reference is taken to mean Restricted Watershed, the accurate title of land allocation MS 22.

D. WHAT THE COURT OF APPEALS FOUND SUFFICIENT

New Developed Recreation Site
The Court of Appeals found that the Forest Service did not violate the Rogue River LRMP and the NFMA by authorizing development facilities in currently undeveloped riparian habitat in the Middle Fork drainage. ONRC had argued that the Rogue River LRMP explicitly prohibits "new developed recreation sites" on Restricted Riparian.[7] The Court of Appeals agreed that since ski area construction began in 1963, the project is not a "new" recreation site but the expansion of an existing site, and that the restriction does not apply.

In addition to being fully supported by the Restricted Riparian language of the Rogue River LRMP, this conclusion is also fully consistent with treatment of this issue in the Restricted Watershed terrain portion of the Rogue River LRMP. In the standards and guidelines for Restricted Watershed MS 22, the Rogue River LRMP provides that "[n]ew developed recreation sites will not be constructed. Expansion of existing recreation sites will be analyzed in project environmental analysis." The Court of Appeals found that while the second sentence does not appear in the standard and guidelines for Riparian Reserve MS 26, the two treatments are consistent and there is no reason to treat them differently.

The Court of Appeals therefore holds that the term "new" is intended to have a uniform meaning throughout the Rogue River LRMP and that the prohibition therein of new developed recreation sites in Restricted Riparian and Restricted Watershed does not apply to the MASA expansion.

Compliance with State of Oregon Wetland Laws and Regulations
The Court of Appeals found that the Forest Service did not violate NEPA requirement and that the 2004 FEIS discusses or analyzes all federal, state and local laws, which include Oregon state wetland laws and regulations. The Court of Appeals found that the Forest Service included in the FEIS a discussion of whether the proposed expansion would violate federal and state laws, and explicitly noted that state and local agencies would have regulatory responsibilities for many activities and actions in the expansion project. Although the FEIS does not specifically address Oregon's unique regulatory program for wetlands, the FEIS is clear that state approval is a condition of the project.

Disclosure of Limitations of Water Erosion Prediction Project Model
The Court of Appeals found that the Forest Service's FEIS adequately disclosed the shortcomings in the Water Erosion Prediction Project (WEPP) models used to estimate sediment impacts on the municipal watershed and, therefore, complied with NEPA. The NEPA does not require the reviewing court to "decide whether an [EIS] is based on the best scientific methodology available; rather the question is whether the FEIS adequately disclosed the model's potential weakness. In Appendix H to the FEIS, the Forest Service outlined several limitations of the WEPP model: its failure to account for the higher erosion rates that typically occur during the first two years after disturbance; the fact that its components are reasonably effective on the agricultural rangelands for which the WEPP model was designed, but that it has limitations when applied to forest lands; and the fact that no watershed template is currently available.

[7] The Court of Appeals Opinion at 13072 stated "Riparian Reserves"; in this SEIS, this reference is taken to mean "Restricted Riparian (MS 26) where at standard and guideline 8, page 4-299, it explicitly states "Prohibit new developed recreation sites." The standard and guidelines associated with NWFP Riparian Reserve contains no such stipulation.

Use of Equivalent Roadless Area Model for Cumulative Watershed Impacts
The Court of Appeals found that the Forest Service did not violate the NEPA by using the Equivalent Roadless Area (ERA)[8] model to analyze the cumulative watershed impact of the MASA expansion. The Court of Appeals noted that the Forest Service relied upon the ERA model, to address cumulative watershed effects. The ERA model simulates the current condition of the terrain in the watershed which reflects the impact of past projects, and the FEIS describes the ERA methodology and the results of the analysis in detail. The Court of Appeals did not question the methodology, but "deferred instead to the agency's expertise in developing the model," an analysis that "consider[s] cumulative watershed effects and provide[s] a significant amount of quantified and detailed information" satisfies the NEPA.

E. PURPOSE AND NEED FOR THIS SUPPLEMENT

The purpose and need for this supplement is to analyze and correct specific violations identified by the Ninth Circuit Court of Appeals which will allow a determination on whether and to what extent analysis of supplemental information might alter the decision to allow ski area expansion. This supplement is needed to address the appropriateness of the previous decision and to be responsive to the Court of Appeals Opinion and district court injunction.

1. What This Supplement Does

This FSEIS document is designed to supplement the existing 2004 FEIS document by adding information and analysis to Chapter III (Affected Environment) and Chapter IV (Environmental Consequence) to address matters identified by the Ninth Circuit Court of Appeals. In some cases (as noted), it will replace certain sections of these FEIS chapters. Because the decision made in September 2004 approved a "Modified Alternative 2", Alternative 2 and Alternative 6 are the only two expansion alternatives relevant to this FSEIS and were the only alternatives considered by the Court of Appeals. For the FSEIS, relevant changes in effects for all Alternatives Considered in Detail will be presented for new information and/or changed acreages identified in supplemental information and analysis, as appropriate.

This supplemental process will then allow the latest and most complete information and analysis to include the 2004 FEIS concurrent and integrated with this 2009 supplemental information and analysis for the 2004 decision. As previously noted, this FSEIS tiers to the existing 2004 FEIS. This NEPA strategy is designed primarily to analyze and correct specific violations identified by the Ninth Circuit Court of Appeals.

2. What This Supplement Does Not Include

For this process, it is equally important to understand what this supplemental document does NOT include. For this process, **there is no "Proposed Action".** The action being processed under the requirements of NEPA is to follow appropriate procedures, including public notification, about the intent to prepare a Supplemental EIS. There is no proposal to change the proposed action that triggered the Draft and Final EIS for Ski Area Expansion. This supplement provides disclosures required by the Court of Appeals and will allow review of the previous decision.

For this process, **there is no "Scoping"**. Under 40 CFR 1502.9(c)(4), there is no formal scoping period for this action. Appropriate procedures under NEPA require a Notice of Intent (NOI) to prepare a Supplemental EIS; this notice was published in the Federal Register on March 9, 2010. The Supplemental EIS process is being guided by the Opinion of the Ninth Circuit Court of Appeals.

[8] Court of Appeals Opinion at 13074 stated "Equivalent Roadless Area" in referencing the ERA model. In this SEIS, this reference is taken to mean Equivalent *Roaded* Area (see FEIS IV-94).

For this process, **there are no "Issues**". Concurrently, there are no alternatives being proposed or analyzed. All analysis and documentation will focus on the deficiencies identified by the Court of Appeals and on the 2004 FEIS and ROD.

F. DECISION FRAMEWORK

The Forest Service Responsible Official will use the results of this supplemental analysis to determine if and how the violations identified by the Ninth Circuit affect the 2004 decision. The Forest Service will decide whether to withdraw the 2004 decision, or issue a new or supplemental decision. If a new or Supplemental Record of Decision is issued in conjunction with the FEIS, that decision will be subject to appeal in accordance with 36 CFR 215.

G. PUBLIC INVOLVEMENT

A 45-day public comment period for the Draft Supplemental Environmental Impact Statement (DSEIS) for Mt. Ashland Ski Area Expansion formally began on March 27, 2010 with publication of a Notice of Availability in the Federal Register Vol. 75 No. 58 (FR page 14594). The 45-day comment period closed on May 10, 2010. 500 paper copies and 25 compact discs of the full DSEIS were produced. Copies of the full DSEIS were distributed to federal and state agencies, local governments, elected officials, seven federally recognized tribes, media representatives, libraries, organizations, and businesses (See DSEIS, Chapter V, for a listing). The full DSEIS was provided to others upon request. The document was also made available on the Rogue River-Siskiyou National Forest website at http://www.fs.fed.us/r6/rogue-siskiyou/projects/planning/index.shtml.

A total of 845 comments to the DSEIS were received at the close of the Comment Period. Approximately 60 additional comments were received after May 10, 2010. All comments received through September 30, 2010 were reviewed for substantive content and read and coded based on content and intent.

Substantive comments received generally focused on the transparency of analysis, and the detail and basis of assumptions of analysis. There were some comments that (1) were determined to be outside the scope of the DSEIS; (2) identified additional changed circumstances that warranted a changed condition assessment (FSH 1909.15 Sec 18); or (3) were related to implementation of ski area expansion and not analysis under NEPA. The majority of comments received were not considered substantive, as they primarily offered opinions or rationale for their viewpoint. These viewpoints tended to focus on support for or opposition to ski area expansion.

The Forest Service accepted written, electronic and oral comments as provided in §215.6. Pursuant to 36 CFR 215.6 (b), (1), an appendix documents the Responsible Official's consideration of all comments submitted in compliance with paragraph (a) of this section. This Response to Comments document is attached to this FSEIS as Appendix B (incorporated by reference).

H. OVERVIEW OF WHAT THIS SUPPLEMENT INCLUDES

This section of the FSEIS highlights what this supplement includes and what and how it is addressed in FSEIS Chapter II.

Pacific Fisher - NFMA Claims
This FSEIS will explain how the 1999 Biological Evaluation was updated and incorporated into the 2004 FEIS. It will supplement the current conditions for the fisher population in and around Mt. Ashland and will identify current amount and types of habitat. It will present a summary of the latest research on the Pacific fisher species biology, habitat requirements, and local field surveys and inventories. This will allow use of habitat as a proxy for population viability. The effects on fisher species and habitat from ski area expansion will be disclosed. The supplemental sections will include all steps of the Biological Evaluation process required by the LRMP for the Pacific fisher.

Pacific Fisher - NEPA Claims
This FSEIS will supplement the disclosure of impacts to the corridor linking the Klamath-Siskiyou region and the Southern Cascades, from ski area expansion. It will supplement the analysis for cumulative effects on the Pacific fisher from foreseeable projects in the vicinity of the MASA expansion area including Ashland Forest Resiliency, Ashland Watershed Protection Project, and Mt. Ashland Late Successional Reserve (LSR) Habitat Restoration and Fuels Reduction Project.

Restricted Riparian and Restricted Watershed Terrain - NFMA Claims
This FSEIS will identify appropriate areas and analyze the effects of expansion against the standards and guidelines for Restricted Riparian (MS 26) and Restricted Watershed (MS 22) management allocations. The supplement will present effects in regard to specific soils standards and guidelines for these allocations.

Riparian Reserves - NFMA Claim
This FSEIS will include Landslide Hazard Zone 2 as part of the Riparian Reserve, and analyze and disclose the land cover (vegetation) effects of expansion against revised Riparian Reserves.

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CHAPTER II - SUPPLEMENTAL INFORMATION

A. INTRODUCTION

The Forest Service has prepared this Final Supplemental Environmental Impact Statement (FSEIS) in response to a September 24, 2007 Opinion of the Ninth Circuit Court of Appeals concerning Mt. Ashland Ski Area Expansion. This FSEIS documents analysis and supplemental information designed to correct specific violations identified by the Court of Appeals for a ski area expansion decision made on September 13, 2004. The Forest Service issued a Final Environmental Impact Statement (FEIS) in August 2004 and a Draft Supplemental EIS in March 2010.

This FSEIS document is designed to supplement the existing 2004 FEIS document by adding information and analysis to Chapter III (Affected Environment) and Chapter IV (Environmental Consequence) to address matters identified by the Court of Appeals. In some cases (as noted), it will replace certain sections of these 2004 FEIS chapters. Because the decision made in September 2004 approved a "Modified Alternative 2", Alternative 2 and Alternative 6 are the focus of this FSEIS.

B. CHANGES BETWEEN DRAFT AND FINAL

Minor edits were completed throughout this Chapter to provide clarification of information previously presented. Some of this clarification resulted from comments received on the Draft SEIS.

For the Final SEIS, relevant changes in effects for Alternatives Considered in Detail is presented for new information and/or changed acreages identified in supplemental information and analysis, as appropriate.

Additional information and text was added to **Biological Evaluation Step (b): Field reconnaissance of the affected area**, for background and results of recent (2010) Pacific fisher field surveys and trapping efforts.

Clarification is provided for fisher analysis where habitat considered suitable for fisher (denning/resting and dispersal/foraging) is modeled with satellite imagery to determine project removal effects to fisher which includes all forested stands with canopy closures of 60 percent and above.

Clarification is provided that fisher dispersal corridors include riparian habitats as these habitats are the most complex and potentially most conducive to fisher movement. Based on recent fisher survey information, the discussion regarding home ranges and movement across the Interstate-5 barrier is updated.

Clarification is provided that ski area expansion activities do not include roads, other than service roads that would be constructed in non-habitat areas within the existing ski area. Clarification is provided regarding fisher disturbance effects in the summer months.

Clarification is provided that MS 26 includes perennial streams and wetlands, are based on the actual on-the-ground inventory conducted by SE Group in 2002, and documented in the Wetland and Stream Survey contained in the 2004 FEIS as Appendix E.

An improved map showing the intersection of proposed new ski runs with MS 26 and additional discussion on effects of the Lower Wetlands Bridge Construction in this area of MS 26 is provided.

Clarification is provided for soil impacts in regard to soils standards and guidelines for MS 22 and 26 (detrimental soil conditions and bare mineral soil exposure). Clarification is provided regarding the amount of clearing and grading within Riparian Reserves and the amount of change (increase) based on supplemental analysis.

The FSEIS includes discussion of Riparian Reserve standards and guidelines as well as attainment of the Aquatic Conservation Strategy.

C. SUPPLEMENTAL INFORMATION - PACIFIC FISHER

1. Pacific Fisher - NFMA Claims

This section of the FSEIS will explain how the 1999 Biological Evaluation was updated and incorporated into the 2004 FEIS. It will supplement the current conditions for the fisher population in and around Mt. Ashland and will identify current amount and types of habitat. It will present a summary of the latest research on the Pacific fisher species biology and habitat requirements. This will allow use of habitat as a proxy for population viability. The effects on fisher species and habitat from ski area expansion will be disclosed. The supplemental sections will include all steps of the Biological Evaluation process required by the LRMP, for the Pacific fisher.

a. No Compliant Biological Evaluation

The Court of Appeals found that the Forest Service's evaluation of the Pacific fisher in the MASA expansion area does not comply with the requirements of the Rogue River LRMP, does not include a compliant Biological Evaluation for the Pacific fisher and, therefore, violates the NFMA.

Supplemental Information
The 2003 Draft EIS was designed as a complete replacement for the 2000 Draft EIS. In the 2000 Draft EIS, a Biological Evaluation document (dated August 1999) for terrestrial wildlife was contained as Appendix E. In the 2003 Draft EIS, the Biological Evaluation process and documentation was designed to be included within the body of the EIS, and not contained as "stand alone" documents. The 2004 Final EIS strategy for all biological resources was designed to continue that process; for example, see FEIS page III-105 for Sensitive Plants which states: "A Biological Evaluation process was conducted for Threatened, Endangered, and Sensitive (TES) Plant species; all information and findings are included within this Final EIS."

Also see FEIS page IV-124; "A Biological Evaluation (BE) process was conducted for this project and is described herein." For Aquatic Resources, page IV-172 states; "A Biological Evaluation process was conducted for species and habitat listed under the Endangered Species Act and Magnuson Stevens Act; all information and findings are included within this Final EIS."

This Supplemental EIS will clarify the 2004 Final EIS strategy for terrestrial wildlife. The following shaded text ***replaces*** the first two paragraphs on page IV-145 for Section D, subsection 10, and 10a, 2004 FEIS Chapter IV:

> **10. Effects on Terrestrial Wildlife Species**
>
> Activities associated with proposed ski area expansion may affect several species of terrestrial wildlife listed as Proposed, Endangered, Threatened, or Sensitive (PETS) under the Endangered Species Act or Forest Service Regional directives. Effects to other terrestrial species are also discussed in this Section.

a. Summary of Effects to Proposed, Endangered, Threatened, or Sensitive Species (PETS)

In compliance with Section 7 of the Endangered Species Act (ESA)(1973 *et seq*.) and Forest Service Policy (FSM 2672.2) a Biological Evaluation (BE) process was conducted for this project and is described herein for PETS wildlife species. All information and findings are included within this Final EIS. Lists for the RRNF, Pacific Northwest Region (R6), and the KNF, Pacific Southwest Region (R5) were reviewed in regard to potential effects on any of these species by actions within the Special Use Permit Area and larger Analysis Area associated with ski area expansion on Mt. Ashland. Pre-field and reconnaissance results are discussed and summarized in Chapter III (see Table III-28).

b. Insufficient Biological Evaluation Process and Habitat Analysis

Background

The Court of Appeals found that the Forest Service had insufficient data and knowledge regarding (1) the population of the Pacific fisher, and (2) the quantity and quality of habitat preferred by the Pacific fisher to justify using habitat as a proxy for population. Therefore the Forest Service's habitat analysis was insufficient to satisfy the demands of the Rogue River LRMP Biological Evaluation process, and is in violation of the NFMA.

The Court of Appeals found that species viability may be met by estimating and preserving habitat "*only* where *both* the Forest Service's knowledge of what quality and quantity of habitat is necessary to support the species *and* the Forest Service's *method for measuring the existing amount of that habitat are reasonably reliable and accurate*." Therefore the Forest Service's analysis process for use of habitat as a proxy for population viability was improper and violated the NFMA.

Biological Evaluation Direction from LRMP

As stated in the RRNF Land and Resource Management Plan:

LRMP MS 4: page 4-55
LRMP MS 22: page 4-266
LRMP MS 26: page 4-300

> Biological evaluations (FSM 2672.2) shall be prepared for each project authorized, funded or conducted on the Forest. The biological evaluation shall be used to determine the possible effects the proposed activity will have on listed and PETS species. The biological evaluation consists of five steps:
>
> (a) Pre-field review of existing information;
> (b) Field reconnaissance of the project area;
> (c) Determination of whether local populations of listed and PETS species will be affected by a project;
> (d) Analysis of the significance of project effects on local and total populations of listed and PETS species;
> (e) When step four *(d)* cannot be completed due to lack of information, a biological or botanical investigation is conducted to gather the information needed to complete step four *(d)*.

Supplemental Information

The following supplemental sections to the 2004 FEIS will include all steps of the Biological Evaluation process required by the LRMP, for the Pacific fisher.

SUPPLEMENTAL BIOLOGICAL EVALUATION – PACIFIC FISHER

Biological Evaluation Step (a): Pre-field review of existing information

The following shaded supplemental text ***replaces*** FEIS pages III-131 and III-132 for the Pacific fisher. Supplemental information is based on additional Pacific fisher analysis conducted for the recent Ashland Forest Resiliency and subsequently the Mt. Ashland Ski Area Expansion (USDA-FS 2008*b*). The 2008 AFR analysis is incorporated by reference.

Pacific Fisher Biology


Sierra Forest Legacy 2010

Description

Pacific fisher: *Martes pennanti*

The rarely encountered Pacific fisher is in the family Mustelidae, the largest member of the genus *Martes*. The only other North American member of the genus *Martes* is the American marten (*M. americana*).

Fishers are medium-sized carnivores with a general weasel shape but lacking the extreme elongation of the weasels. The fisher has a long body with short legs and a long bushy tail. Their tail constitutes about one third total body length. Their faces are triangular with muzzles less pointed than those of foxes. The fisher's ears are wide and rounded. Fishers are digitigrades with five toes on each large, well-furred paw. Claws are sharp, curved, and semi-retractable but not sheathed (Sierra Forest Legacy 2010).

The fisher is light brown to dark blackish brown with the face, neck, and shoulders sometimes being slightly gray. The chest and underside often has irregular white patches. At 6.6 to 13.2 pounds, male fishers weigh about twice as much as females (3.3 to 5.5 lbs). Males range in length from 35 to 47 inches while females range from 29 to 37 inches long. Fishers are estimated to live up to 10 years (Powell 1993).

Range and Distribution

According to literature reviews, the fisher occurs from southern Yukon and southwestern Northwest Territories southeast through British Columbia and possibly extreme southeastern Alaska, Alberta, Saskatchewan, Manitoba, Ontario, southern Quebec, and New Brunswick to Nova Scotia. Its distribution extends south through several forested areas of the northeastern United States including Maine, New Hampshire, Vermont, northern New York, Pennsylvania, western Massachusetts, the upper peninsula of Michigan, and northern Wisconsin and Minnesota. There is also a population in West Virginia. In the western United States, fisher populations are known to occur in western Montana, the Idaho panhandle, the southern Sierra Nevada of California, the Klamath and Siskiyou Mountains of northwestern California and extreme southwestern Oregon, and the southern Cascade Range of southwestern Oregon. The fisher may be extirpated from Washington (Meyer 2007). However, there has been a recent fisher reintroduction effort in the Olympic Peninsula in 2007 and 2008 (Happe et al. 2008)

The geographic distribution of fishers in the Pacific Coast states has been greatly reduced in extent from pre-settlement conditions. Prior to extensive European settlement, the fisher occupied most coniferous forest habitats in Washington, Oregon, and California (Aubry and Lewis 2003). Persistence of fishers in Washington is questionable. Lewis and Stinson (1998) reported that the fisher is very rare in Washington. Extensive surveys by the Washington Dept. of Fish and Wildlife and the US Forest Service have failed to locate a fisher population, or confirm the presence of a fisher in areas where recent reports are concentrated (Lewis and Stinson 1998).

One telemetry study and several surveys conducted by various agencies and individuals have documented fishers in the southern Oregon Cascades and Siskiyou Mountains (Aubry et al. 1997, Slauson and Zielinski 2001, Aubry and Raley 2006, E. Weir 2003, Aubry et al. 2005, Farber and Criss 2006). The presence of fishers in California is well-documented (Zielinski et al. 1995, Farber and Franklin 2005, Farber and Criss 2006).

Reproduction

Fishers exhibit intrasexual territoriality, where individuals defend a home range against members of the same sex, but there is considerable overlap between sexes. These territories are maintained year-round except at times during the breeding season when males may trespass on each other's territories while they search for receptive females (Powell 1993).

In Oregon, the breeding season begins in early February when adult males became more active and start to make longer distance movements. Males sometimes moved well beyond their non-breeding season home ranges, presumably to find reproductive females (Aubry et al. 2004). Mating occurs shortly after parturition, although the fertilized eggs do not implant for approximately 10 months. Active pregnancy typically begins in February and lasts until March or early April, when fishers give birth to an average of 2 to 3 kits (Meyer 2007). In southwestern Oregon, adult females gave birth to kits from about 17 March to 5 April, and the natal denning period lasted until late-May or the beginning of June (Aubry and Raley 2006).

Home Range, Movement, and Dispersal

The size of fisher home ranges varies both regionally and by habitat condition, although male home ranges are generally larger than those of females. Home range size for fishers is likely related to the availability of resources, including abundance and diversity of prey and suitable habitats for den and rest sites. Male home range sizes may also be influenced by the availability of females.

Mean home range sizes of males in the southern Cascades of Oregon was 147 km^2 during the breeding season and 62 km^2 during the non-breeding season compared to female home ranges of 25 km^2 (Aubry and Raley 2006). Male home ranges near the north coast of California averaged 58 km^2 compared to 15 km^2 for females (Zielinski et al. 2004).

Seasonal movements are generally related to the breeding period for males. In southwest Oregon, male home ranges were twice as large during the breeding season compared to the non-breeding season (Aubry and Raley 2006). One adult male who resided on the east slope of the Cascade Range during the non-breeding season traveled approximately 30 km across the Cascade crest to the west slope during 3 successive breeding seasons (Aubry et al. 2004). Aubry and Raley (2006) used fixed-wing aircraft to monitor two adult males during the breeding season and reported that a 3 year old male occupied a 226 km^2 area, and a 6 year old male occupied a 100 km^2 area. The younger male made excursions far to the south of his non-breeding season home range, and the older male moved primarily within his non-breeding home range with some excursions beyond his usual activity area.

During the denning season, females on the Hoopa Reservation used an average of 3.1 dens per season and moved kits a cumulative average distance of 871 m with a range of 85-2,228 m. Dens were located an average of 414 m apart. Despite the distance between den structures, dens used each year were located within a small, concentrated area of each female home range (Mathews 2006).

In southwestern Oregon, when females moved their kits from the natal den, subsequent use of maternal dens was variable. Females that only had 1 kit were relatively mobile and few maternal dens were found. In contrast, when females had ≥2 kits, maternal dens were found regularly and at least some of the dens were used for >2 weeks (Aubry and Raley 2006). At 2-3 months of age, juveniles begin foraging for themselves, though they remain on their mother's home range until they disperse at 6-12 months of age (Powell 1993). Riparian corridors (Heinemeyer and Jones 1994) and forested saddles between major drainages (Buck 1983) may provide important dispersal habitat or landscape linkages for fishers.

Reported dispersal distances for fishers vary. In a study in Maine, dispersal distances ranged from 4 to 19 km, and there was no significant difference in dispersal distances between males and females (Arthur et al. 1993). The authors believed that these dispersal distances were short compared to the size of an adult home range, and probably resulted from the study population being trapped, creating many unoccupied home ranges. However, these dispersal distances are not greatly different from those reported in Oregon and California. In the southern Oregon Cascades, Aubry and Raley (2006) documented 7 juvenile dispersals (4 females, 3 males). By approximately the end of May, most 1-year-old fishers had settled into the area where they eventually established a home range. Males dispersed an average of 29 km, mean dispersal distance of females was 6 km. Two of the 4 females did not disperse from their natal areas; these females appeared to establish home ranges adjacent to and slightly overlapping their mother's home range (Aubry and Raley 2006).

On the Hoopa Reservation in northern California, 1 female dispersed 1-2 km from her natal den and set up a home range. Another female moved up to 10 km from her natal den and was apparently moving toward her mother's home range when she died. One male dispersed 3-4 km from his natal den and set up a home range. There has been high turnover in female fishers in recent years on the Hoopa Reservation, suggesting that there are a high percentage of vacant home ranges that could be occupied by dispersing individuals (M. Higley 2007, pers. comm.).

Fisher Diets

Powell (1993) reported that the primary prey of fishers throughout most of their range is snowshoe hares (*Lepus americanus*) and porcupines (*Erethizon dorsatum*). Although the fisher is reported to be a specialist in late-seral, mixed conifer-hardwood forests, recent analysis of the diet of fishers in the southern Sierra Nevada portray an opportunistic predator with a diverse diet. Zielinski et al. (1999) characterized fisher diet by analyzing 201 fisher scats and found that mammals were the most frequent food item. Reptiles and insects were also major components in the diet (Zielinski et al. 1999).

In southwest Oregon Aubry and Raley (2006) analyzed 303 scats from 11 female and 84 scats from 8 male fishers. Food items from 5 major taxa groups were identified; Mammalia (female 85 percent, male 76 percent), Aves (female 28 percent, male 27 percent), Reptilia (females 7 percent, males 5 percent), Insecta (females 25 percent, males 27 percent), and Planta (females 14 percent, males 13 percent). Their results suggested that female fishers were capturing smaller-bodied prey more frequently than larger-bodied prey, and males were capturing larger-bodied prey more frequently. Aubry and Raley (2006) also found evidence that males, but not females were preying upon porcupines. These findings suggest that fishers, at least in the western states, are a generalist predator.

Pacific Fisher Habitat Needs

The fisher is one of the most habitat-specialized mammals in western North America (Buskirk and Powell 1994). Specialization appears to be tied primarily to denning and resting habitats. The varied diet of fishers suggests they may forage in a variety of habitats.

Fishers use landscapes at different spatial scales for different behaviors and activities (Powell 1994, R. Weir and Harestad 2003). For example, fishers may establish their home ranges at the landscape scale, forage at the patch scale, and select habitat for resting or denning at the patch scale as well as at a finer scale of habitat characteristics of elements within a patch (Powell 1994, Powell and Zielinski 1994, R. Weir and Harestad 2003).

Rest Structures

Several studies have shown that fishers appear to be highly selective of resting structures. In California, Zielinski et al. (2004) found that resting structures were in the largest diameter trees available. Average diameter breast height (dbh) for live conifers was 117 cm for live conifers, 120 cm dbh for conifer snags, and 69 cm dbh for hardwoods.

On the Hoopa Valley, and Shasta-Trinity study areas, Yeager (2005) determined that rest trees used by fisher had a substantially larger dbh than the average dbh of the four largest trees on the rest site plots. In the Hoopa Valley, the rest tree was one of the four largest trees on 91 percent of the rest site plots measured, and was the single, largest tree on 46 percent of the rest site plots. In southwest Oregon, Aubry and Raley (2006) reported that the average diameter of live trees used by females for resting was slightly greater than those used by males: 88 cm dbh versus 64 cm dbh.

In California, Zielinski et al. (2004) found that fishers select rest sites with substantially higher canopy closure immediately adjacent to the rest site (93.4 percent) when compared to random sites (88.8 percent). Yeager (2005) reported that on the Hoopa Valley study area, 86.8 percent of all rest sites had more than 50 percent canopy cover and 59.7 percent had greater than 75 percent canopy cover. At Shasta-Trinity, 97.6 percent of all rest sites had more than 50 percent canopy cover and 87.5 percent had greater than 75 percent canopy cover. In southwest Oregon, fishers selected rest sites with canopy closure greater than 80 percent (Aubry and Raley 2006). It is important to note that canopy closure associated with rest sites was measured at the patch-scale in nearly all studies reporting this habitat characteristic. The majority of studies conducted this analysis at a scale of 1 acre or less, and not at the stand or landscape level.

In the southern Oregon Cascades, Aubry and Raley (2006) located and typed 641 different resting structures. Fourteen percent of the rest structures were reused by the same animal on more than 1 occasion, and 3 percent were used by another radio-collared fisher at some time during the study. Both male and female fishers primarily used live trees for resting. Use of logs and cull piles by females and males was similar. Females used a greater proportion of snags for resting than males. Both male and female fishers used mistletoe brooms in live trees more than any other micro-site (females 31 percent, males 21 percent). Mistletoe brooms in live trees were suspected rest sites for an additional 44 percent of live trees used by females, and 33 percent of live trees used by males. Rodent nests were used in 24 percent of the trees used by male fishers.

Cavities in both conifers and hardwoods are used by fishers for resting. However, to create suitable rest cavities, trees must be old enough to have suffered the type of stresses that create infection courts for heartrot fungi, and large enough to form cavities large enough to be used by fishers (Zielinski et al. 2004). Large trees also provide platform-type resting structures such as mistletoe brooms, clumped branches that support rodent nests, or rust brooms that can support the weight of fishers. Once these large trees die and fall, they become the type of log that fishers have been known to use as rest sites. Removal of understory and mid-story canopies around large structures may also reduce the effectiveness of the structure as a secure rest site because they contribute to the microclimate of the site. Under- and mid-story canopies probably also provide some protection for female and juvenile fishers from predation or harassment by large raptors and mobbing by corvids (crow family) because sight distance is reduced in dense, multi-storied stands.

Den Structures

As with resting structures, both conifers and hardwoods provide habitat for fisher dens. Yeager (2005) categorized 18 fisher dens in the Hoopa and Shasta-Trinity study sites. Sixteen were located in hardwoods, and 2 in conifers. Of these 18 dens, all but 3 were located in live trees. On both study areas, black oaks were used in 50 percent of all dens categorized. Other species used were tanoak, white oak, canyon live oak, chinquapin, Douglas-fir, and ponderosa pine.

In southwestern Oregon, Aubry and Raley (2006) located 13 natal and 18 maternal dens. For natal dens, fishers used both live trees and snags with openings that accessed hollows created by heartwood decay. The most commonly used tree species were incense cedar, true fir, and western white pine. Douglas-fir, incense cedar and true firs were used as maternal dens. Structures used for maternal dens were more variable than those used for natal dens, and included cavities in the bole or butt of large live trees and snags, and large hollow logs (Aubry and Raley 2006).

Natal den trees need to be large enough to accommodate a cavity capable of containing an adult female fisher and multiple kits (Aubry and Raley 2006). In the southern Cascades of Oregon, the average dbh and height of live trees used for natal dens was 92 cm and 40 m respectively. The average dbh and height of snags used for natal dens was 89 cm and 26 m respectively (Aubry and Raley 2006).

Foraging Habitat

Based on their diverse diet, fishers appear to be a generalist predator that is opportunistic in its foraging strategies (Aubry and Raley 2006, Zielinski and Duncan 2004, Aubry et al. 2002, Zielinski et al. 1999, Powell 1993). There is some indication of seasonal variation in the fisher's diet (Zielinski et al. 1999) which is likely linked to seasonal abundance of prey and forage species. While fishers require structures provided by older aged or residual stands for denning and resting, they appear to use a broad array of stand conditions for foraging.

R. Weir and Harestad (2003) found that fishers exhibited selectivity for stands and patches with high volumes of coarse woody material (CWM) and specific closures of high and low shrub layers. However, they hypothesize that an overly complex forest floor may affect the hunting success of fishers by reducing the likelihood of capturing prey. Fishers avoided stands with >80 percent closure of the low shrub layer. Jones and Garton (1994) found that fishers did not use non-forested sites while resting or hunting, but did use pole-sapling forests for hunting substantially more than for resting. The inclusion of berries in the fisher's diet suggests that they do forage, at least occasionally or seasonally, in forest gaps or along edges of forested stands where many fruit-bearing shrubs and forbs are found.

Pacific Fisher Listing Status

The Pacific fisher was petitioned for listing by the Center for Biological Diversity and several other environmental organizations in November 2000. After a 12-month review, the US Fish and Wildlife Service found Pacific fisher to be a distinct population segment (DPS) and gave a "warranted but precluded" decision to the petition, designating the West Coast DPS a federal Candidate species (USDI Fish and Wildlife Service 2004). Other rankings include: USDA Forest Service, Region 6 – Sensitive, Region 5 - Sensitive; USDI Bureau of Land Management, Oregon – Sensitive, California - Sensitive; Oregon State Sensitive – Critical species, California State – Species of Special Concern. The Natural Heritage Program ranks this species as Globally demonstrably widespread (G5), Oregon State (S2) imperiled because of rarity or other factors, and ORNHIC List 2. In December 2010, a range-wide conservation assessment for western fisher populations was released by the interagency fisher biology team (Lofroth et al., 2010).

Biological Evaluation Step (b): Field reconnaissance of the affected area

The following shaded supplemental text ***replaces*** FEIS pages III-132 for the Pacific fisher. Supplemental information is based on the latest information and history of surveys, and local knowledge.

During the winter of 2001/2002, a biology student associated with Southern Oregon University (Eugene Weir[9]) located and photographed an adult Pacific fisher using carnivore bait stations which were placed in the MASA Special Use Permit Area. Fisher were repeatedly photographed between February – late April 2002, at a site in proposed Run 12. Mr. Weir's findings at that time were an elevation record for the species in the Siskiyou Mountains. In 2003, Mr. Weir found evidence of fisher in the Special Use Permit Area during snow track surveys and he also documented fisher in the adjacent Neil Creek drainage.

[9] Eugene Weir worked as a fisheries technician conducting field inventory work for the Forest Service, Ashland Ranger District under volunteer and small service agreements during the summer of 2000 and 2001, while attending Southern Oregon University.

Snow conditions in the Siskiyou Mountains are typically denser than other areas due to lower elevations, and closeness of coastal influences which affects precipitation patterns and temperature variations. This may account for why fisher are able use habitats at higher elevations than in other parts of their range where deep, powdery found at snow higher elevations limits their use(Lofroth et al. 2010).

In addition, during the winter of 2001/2002 (late December to late April), a second Southern Oregon University student (Brian Schroeder) also conducted a photo point study of fisher activity, on the western side of the Applegate River drainage (adjacent to the Ashland Watershed). He had six fixed camera sets out at one time, and used the cameras at 10 different sites. In December 2001, he recorded one visit by a fisher to a site near the southern tip of Applegate Lake at an elevation of 2,200 feet. At a site near Browntown, he recorded 31 visits by a fisher in January 2002, at an elevation of 3,400 feet.

Fishers have been documented in the Ashland Watershed (E. Weir 2003), and adjacent areas (Was 1995, Schroeder 2001, Stevens, unpublished data, Aubry et al. 2005, Farber and Criss 2006). These documented observations suggest Pacific fisher are in the Siskiyou Mountains, and specifically the MASA Special Use Permit Area.

Two recent surveys that have incorporated hair snaring and subsequent DNA analysis as a component have identified fishers just south of the Ashland Watershed as members of the indigenous population (Aubry et al. 2005, Farber and Criss 2005). There have also been documented records of fisher in the Applegate river watershed just west of the Ashland watershed within the Kinney Creek drainage and recently (June 2009) for the Brush Creek area on FS Road 1010 as well as in the Beaver and Little Applegate Creek drainages (D. Clayton pers. comm.). Another report of fisher was a few miles north of Grayback Mountain on BLM lands (S. Niemela, ODFW June 2009).

In summary, all of these detections in the Applegate and Ashland watershed demonstrate that fisher is well distributed in the Siskiyou Mountains of southwest Oregon.

In February 2010, a fisher trapping effort was initiated in the Ashland Watershed to determine the response of fisher to proposed fuels reduction activities in Ashland Forest Resiliency (AFR). This effort is being coordinated with the Forest Service, Pacific Southwest Region and Pacific Southwest Research Station, the US Fish and Wildlife Service, and the Oregon Department of Fish and Wildlife. The Rogue River-Siskiyou NF joined in this trapping and monitoring effort in 2010 and assisted with monitoring within the Ashland Watershed.

This Ashland trapping effort is part of a larger project the Pacific Southwest Research Station is conducting to investigate the short-term impacts of fuel reduction projects on fishers. Used in this study were GPS collars that collect location data and is then available for download to researchers for 4-7 months. The goal is to deploy the collars 4-6 months before a treatment is enacted to collect baseline home range and habitat use data. Animals will then be re-trapped and collared for equivalent data showing habitat use during treatments as well as post-treatment home range and habitat use.

To date, during three trapping efforts over 61 days in 2010 in the lower portion of the Watershed (below 4,200 feet in elevation), ten fisher have been trapped and collared, two more were released without collaring; this is a total of twelve individuals that have been identified in a small portion of the Watershed.

In addition, 52 individual fisher have been identified over four years using track plates, hair snare devices, and genetic analysis in the Beaver Creek watershed just south of Mt Ashland; 40 individuals have been identified in the southern portion of the Mt. Ashland Late-Successional Reserve (LSR) (S. Yeager USFWS, 2010; pers. comm.)

Biological Investigation
Because there is a lack of information on local and total populations of Pacific fisher and the effects of ski area expansion, **a biological investigation analysis was conducted to gather and predict the significance of effects (LRMP biological evaluation step 4 [d]).** This investigation includes a prediction of the local and total populations, and an investigation of effects based on habitat analysis using satellite imagery (habitat as proxy for population data and knowledge); see next steps.

Biological Evaluation Step (c): Determination of whether local populations of Pacific fisher will be affected by MASA Expansion

The 2004 FEIS (page IV-152), concluded that "All Action Alternatives would likely have some effect on fisher use of the areas where new ski runs would be built." This was based on the fact that fisher were located within the Special Use Permit Area and within runs that would be cleared for ski area expansion. This supplemental biological investigation includes a prediction of the local and total populations, and a prediction of effects based on habitat analysis using satellite imagery (use of habitat as proxy for population data and knowledge).

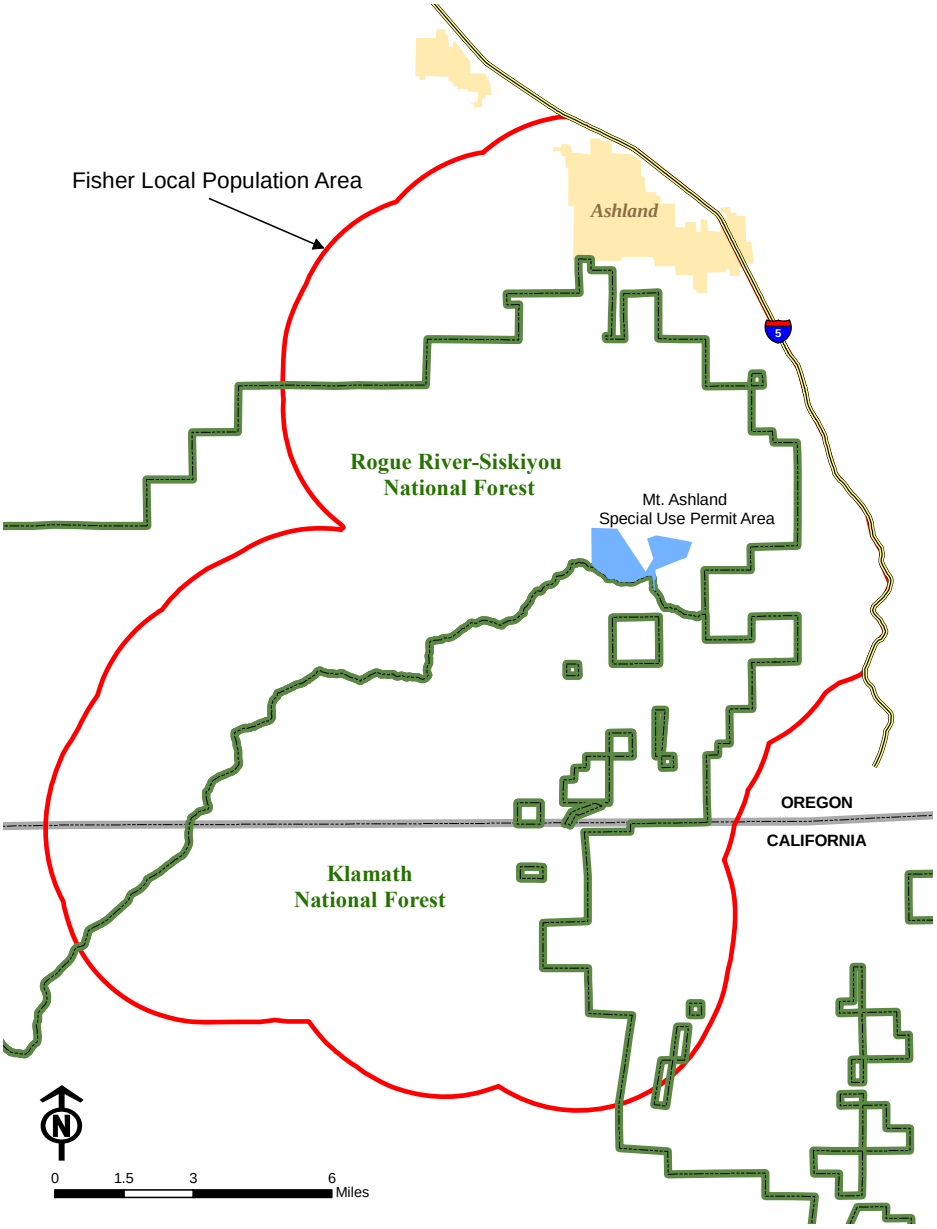
The following shaded supplemental text ***replaces*** FEIS pages IV-152, IV-153 for the Pacific fisher. Supplemental information is based on the supplemental biological investigation.

Populations
The US Fish and Wildlife Service has determined that fishers in the Cascade Range and all areas west, to the coast in Oregon and Washington; and in California, the North Coast from Mendocino County north to Oregon, east across the Klamath Mountains, across the southern Cascade Range and south through the Sierra Nevada as the West Coast Distinct Population Segment (USDI Fish and Wildlife Service 2004).

Currently, there are two documented populations in southern Oregon which appear to be genetically isolated from each other (Aubry et al. 2004). This is considered to be due to the presence of potentially strong ecological and anthropogenic barriers including the white oak savanna habitat of the Rogue Valley and Interstate 5. Based on DNA analyses, individuals in the southern Oregon Cascades appear to be descendents of animals re-introduced from British Columbia and Minnesota during the late 1970s and early 1980s by the Oregon Department of Fish and Wildlife (Drew et al. 2003). Animals in the eastern Siskiyou Mountains of Oregon are genetically related to individuals in the northwestern California population, which is indigenous (Wisely et al. 2004, Farber and Franklin 2005).

This fisher biological investigation defines the **local population area** as those individuals residing within the entire Mt. Ashland Late-Successional Reserve (LSR), and on federal lands within 5 km of the LSR boundary, except on the eastern edge, where Interstate 5 defines the edge of the fisher local population area (see Figure FSEIS II-1) due to its potential to act as a barrier to movement and dispersal (see also cumulative effects). This buffer is derived from reported dispersal distances for female fishers in California and Oregon in the scientific literature and personal communications with researchers which have conducted fisher studies in southern Oregon and northern California.

Figure FSEIS II-1. Local Population Area



This fisher biological investigation defines **the total population** as all individuals residing in the Klamath-Siskiyou and California Coast Regions. Fishers in these 2 areas have been shown to be closely related through genetic analyses (Wisely et al. 2004). Fishers in the southern Oregon Cascade Range are introduced and not considered to be part of the total population. Estimates of fisher population size are based on 1) the cumulative mean home range size of female fishers (10 km^2) reported in 7 studies in northern California, and 2) generally, fisher home range sizes increase in size from south to north (S. Yeager, unpublished data). In addition, recent (since March 2010) field investigation radio telemetry and GPS locations of two female fishers in the Ashland Watershed bears out the estimate of an approximate 10-12 km^2 home range. Telemetry study of ten fisher (six females and four males) is ongoing within the Ashland Watershed (D. Clayton, personal observation).

Female dispersal distances are analyzed because dispersal distances for juvenile male fishers are widely variable, are likely influenced by intra-specific competition with resident males, and males in some populations have been shown to have non-breeding season home ranges separate from the general population (Aubry and Raley 2006).

Because the local population being analyzed is at the northern extreme of the California population, female fisher home ranges are expected to vary from 10-20 km^2 in size, and male home ranges to vary from 25-45 km^2 in size. The local population area defined is 653 km^2. This equates to approximately 33-65 female home ranges and 15-26 male home ranges within the local population area.

Assuming the habitat is fully occupied by both male and female fishers, there is little overlap of territories within sexes, and there is complete overlap between sexes, **the local population estimate is 48-91 resident fishers**. This could be a liberal estimate of population size because generally, not all suitable habitat within an extant population's range is likely to be occupied. Carlos Carroll estimated **the entire northern California-Southwestern Oregon (total) fisher population as 1,000-2,000 individuals** (Center for Biological Diversity 2000); consequently it is believed that this estimate is consistent with the literature.

Biological Evaluation Step (d): Analysis of the significance of project effects on local and total populations of Pacific fisher

This supplemental biological investigation includes a prediction of effects on the local and total populations based on habitat analysis using satellite imagery (use of habitat as proxy for population data and knowledge). The following shaded supplemental text ***replaces*** FEIS pages IV-152, IV-153 for the Pacific fisher. This supplemental information describes the direct and indirect effects on Pacific fisher based on the supplemental biological investigation.

Baseline Habitat Conditions

Habitat data for fisher analyses was derived from Geographic Information System (GIS) coverages. This analysis is based on satellite imagery. The use of satellite imagery allows large areas to be assessed on a consistent basis and is considered the "best available" data that maps and provides consistent vegetation characteristics throughout the analysis areas regardless of ownership. Other vegetation maps either stopped at the National Forest boundary or consisted of interpreted data (assumptions of conditions made from aerial photos).

Satellite imagery utilized for this fisher biological investigation was developed by Geographic Resource Solutions in 1994 in conjunction with the Applegate Adaptive Management Area, designated under the Northwest Forest Plan. The area covered by this imagery includes the area within the local population area. An accuracy assessment for this imagery was performed in the Applegate Watershed (immediately west of the Ashland Watershed) and determined the imagery to be 86+ percent accurate (Hill 1996). When used at the landscape scales, local Forest Service experience has shown the reliability of the imagery to be relatively high (Boucher pers. obs. 2005).

Accuracy for satellite imagery utilized for this biological investigation is assumed to be 80+ percent. It is important to note some limitations in terms of the satellite imagery used for this analysis. The imagery was classified over a large area and as such, individual pixels of data may not exactly match on the ground. However, when viewed at the landscape scale, the imagery presents a consistent "snapshot" which is useful for planning and analysis.

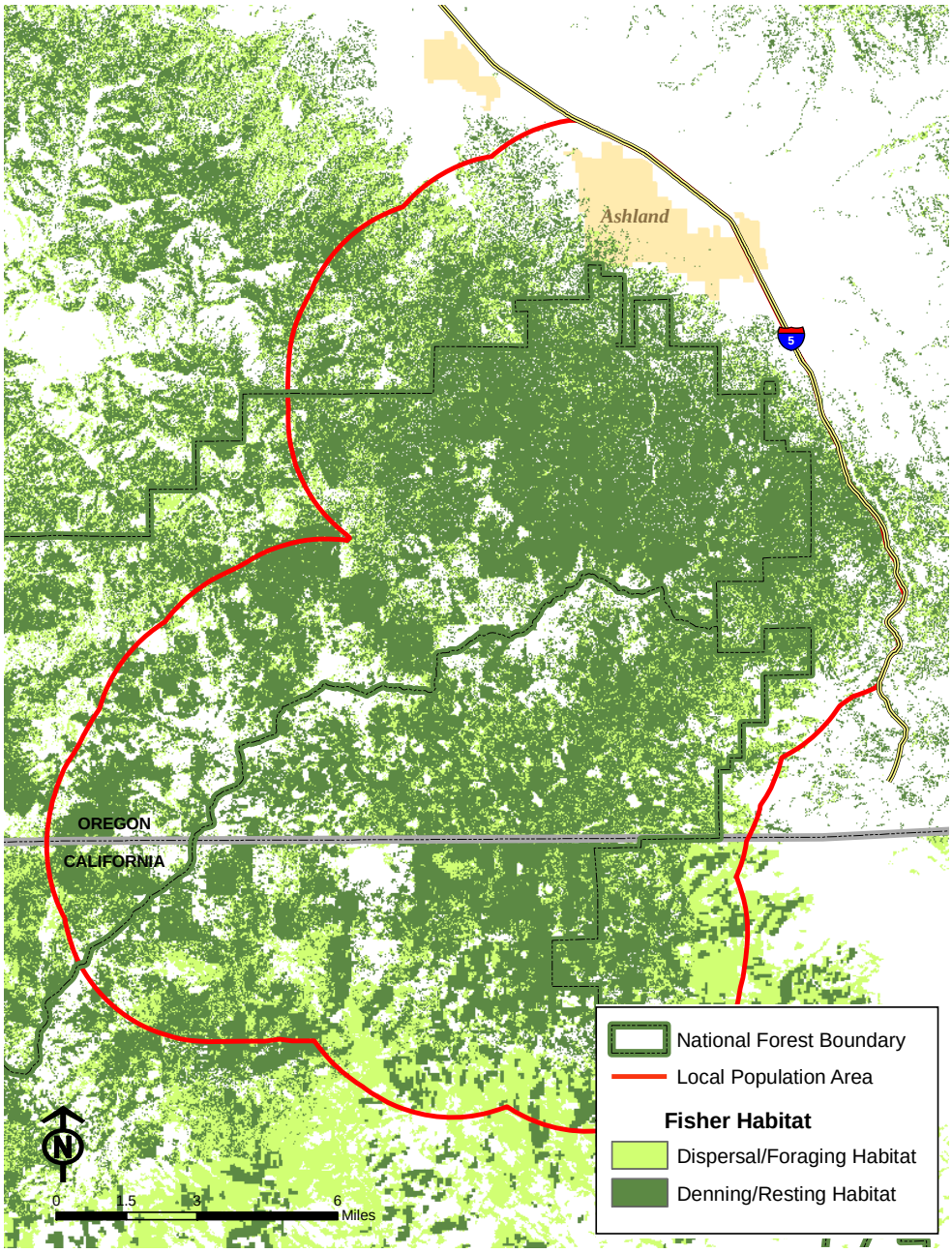
For the purpose of this biological investigation, fisher denning/resting habitat is defined as coniferous forest with ≥80 percent overstory canopy closure and a quadratic mean diameter[10] of ≥24"dbh. Fisher dispersal/foraging habitat is defined as coniferous forest (sapling/pole or larger) with ≥60 percent canopy closure.

[10] Quadratic mean diameter is a conventional measure of the average tree diameter in a stand of trees and requires estimates of the number of trees per acre.

Based on these assumptions, as derived from satellite imagery, within the local population area there are 161,349 acres of habitat considered suitable for fisher (**denning/resting/ dispersal/foraging habitat with ≥60 percent canopy closure**). National Forest System lands comprise 105,402 acres within the local population area of this type of habitat (Figure FSEIS II-2). The 80 percent canopy closure requirement relates to resting/denning habitat only, the literature shows that fisher may occupy stands with less than that for foraging habitat. Therefore the 60 percent analysis was used to determine removal effects to fisher and its habitat which includes all forested stands with canopy closures of 60 percent and above.

There are 50,386 acres within the local population area that do not have overstory canopy (trees) with ≥60 percent canopy closure. However, some of these areas do have shrub or sapling pole habitats that provide approximately 60 percent canopy closure and fishers may use them for traveling and foraging.

Figure FSEIS II-2. Current Condition of Fisher Habitat within the Local Population Area



As previously stated, for the purpose of analyzing effects on fisher populations resulting from the MASA expansion, this fisher biological investigation defines the local population area as those individuals residing within the entire Mt. Ashland Late-Successional Reserve (LSR), and on federal lands within 5 km of the LSR boundary, except on the eastern edge, where Interstate 5 defines the edge of the fisher local population area (see Figure FSEIS II-2) due to its potential to act as a barrier to movement and dispersal. This buffer is derived from reported dispersal distances for female fishers in California and Oregon in the scientific literature and personal communications with researchers which have conducted fisher studies in southern Oregon and northern California.

Effects from Ski Area Expansion

Effects Related to Direct Habitat Removal

The decision for the Mt. Ashland Ski Area Expansion project would remove 44 acres of denning/resting habitat (coniferous forest with ≥60 percent overstory canopy closure and a quadratic mean of ≥24" dbh) and an additional 17 acres of dispersal/foraging habitat for fishers (coniferous forest - sapling/pole or larger) with ≥60 percent canopy closure: see FSEIS Figure II-3). Specifically, removal of habitat describes management activities which would reduce canopy closure to below a level which fishers would be expected to continue to use the affected habitat at the patch scale. Additionally, removal of these habitats would reduce or eliminate coarse wood, snags, microsite conditions, and structural complexity. Where denning/resting or dispersal/foraging habitat is removed, it is unlikely that fisher would continue to use the site. At the site scale for example, the area where a fisher was photographed in proposed Run 12, fisher would be unlikely to use that site if the project is implemented; canopy cover would be reduced to below minimum guidelines, coarse wood, snags, micro site conditions, and structural complexity would be lost.

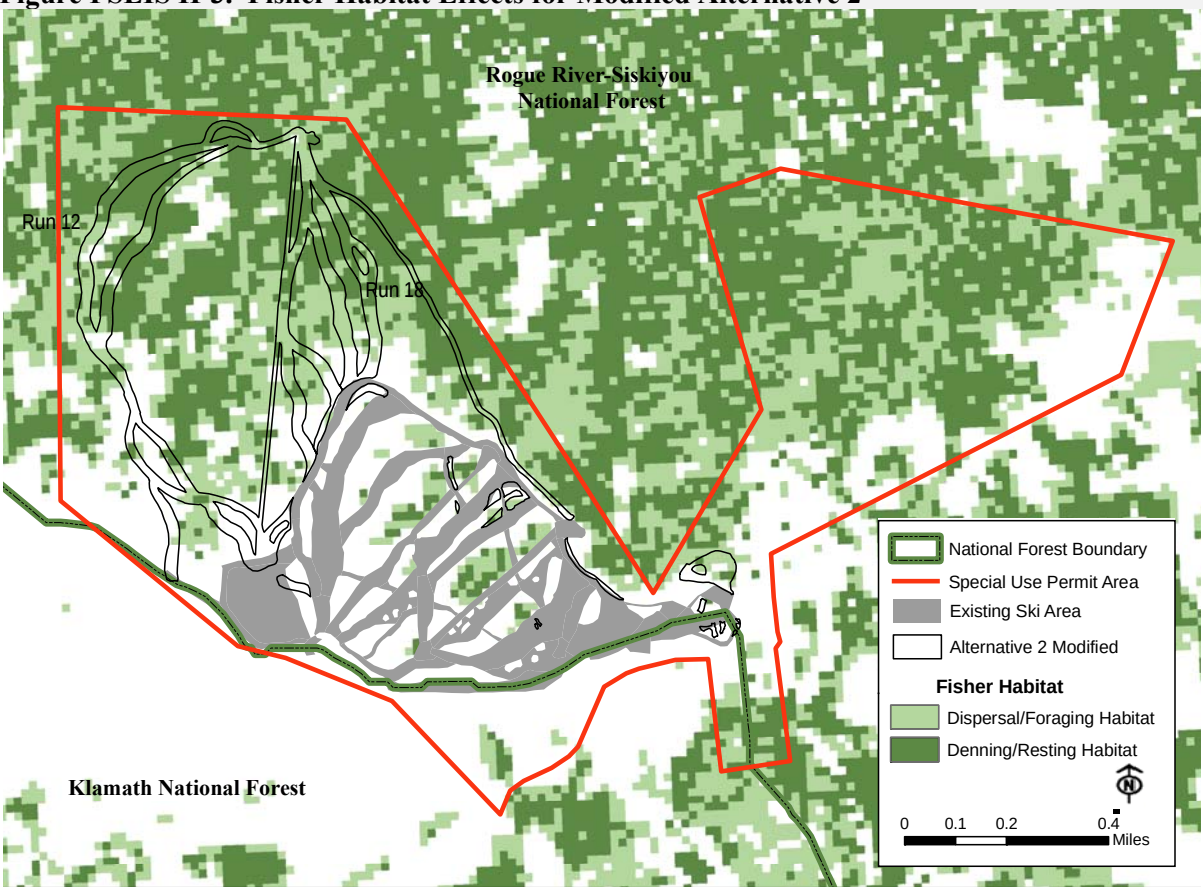
For fisher at the proposed project scale, the total area impacted by the decision for the Mt. Ashland Ski Area Expansion project is considered to be 220 acres because Runs 12, 15, 18 and Surface Lift 15 fragment this area from the remaining habitats within the local population area due to removal of trees. Implementation of this project would create openings that average 125 ft. wide on the proposed ski runs, which are likely to create barriers to fisher movement. Therefore, the entire 220 acre expansion area is unlikely to function as fisher habitat or be included in an individual's home range.

Within this 220-acre expansion area, approximately 66 acres are currently non-habitat (non-forest or <40 percent canopy closure), 66 acres are dispersal/foraging habitat (coniferous forest (sapling/pole or larger) with ≥60 percent canopy closure), and 88 acres are resting/denning habitat (coniferous forest with ≥60 percent overstory canopy closure and ≥24"dbh).

The decision for the Mt. Ashland Ski Area Expansion project therefore is likely to remove up to 154 acres suitable denning/resting and dispersal/forage habitat from within the home range of up to 1 female fisher and 1 male fisher causing these animals to avoid those areas where that habitat has been removed as well as much of the rest of the area due to fragmentation of the remaining habitat. The number of fisher impacted is based on the analysis of the number of animals within the local population and the assumption that there is total overlap between sexes and no overlap within sexes (see the local population discussion above beginning at page II-10). This means that up to one theoretical female fisher home range and one theoretical male home range could overlap that specific habitat.

In regard to the other Alternatives Considered in Detail, Alternative 1 (No-Action) would not change the current conditions; Alternative 3 would impact slightly less fisher habitat than Alternative 2 and 6; Alternative 4 would impact a similar amount of habitat; and Alternative 5 would impact the least amount of fisher habitat, primarily in the area of the current ski area. Alternatives 2, 3, 4 and 6 would similarly affect up to 1 female fisher and 1 male fisher causing these animals to avoid their relative expansion impact area.

Figure FSEIS II-3. Fisher Habitat Effects for Modified Alternative 2



Effects Related to Dispersal Opportunities

Currently, emigration, immigration, and movement by fishers north to south likely occurs within forested areas both east and west of the Special Use Permit Area (see Figure FSEIS II-2), and these habitats would remain unaffected in the foreseeable future. Implementation of the [decision for] the Mt. Ashland Ski Area Expansion project is not expected to prevent movement and dispersal of fishers within the local or total population area because the summit of Mt. Ashland is already a natural opening and is not likely providing connectivity for fishers traveling north and south due to their avoidance of non-forested habitats.

For the other Alternatives Considered in Detail, Alternative 1 (No-Action) would not change the current conditions and the other Action Alternatives (Alternatives 3, 4, and 5) would likewise not affect fisher dispersal.

After implementation of ski area expansion, remaining habitats would continue to allow fishers to emigrate and immigrate from north to south to interact with and exchange genetic material with animals in northern California (Figure FSEIS II-4).

Figure FSEIS II-4. Potential Fisher Dispersal - Current Condition

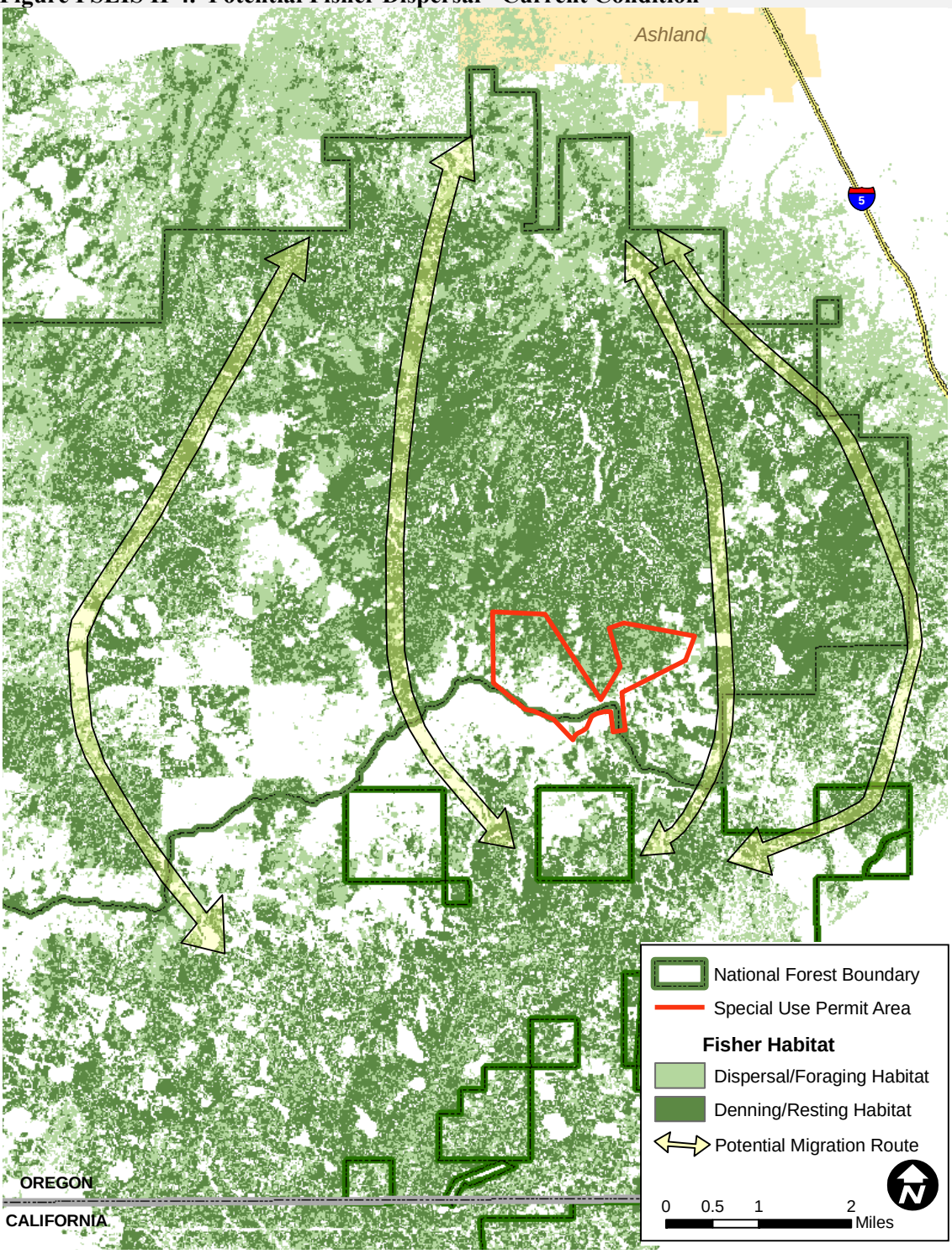


Figure FSEIS II-4 shows dispersal corridors that generally follow the Neil Creek and Upper Little Applegate drainages and the East and West Forks of Ashland Creek. These areas are where the habitats are most complex and potentially most conducive to fisher movement and include riparian habitats.

Effects Related to Disturbance

Impacts to fisher from human activities are not well documented. However, it can be expected that fishers, as with most wild animals, would exhibit aversive reactions to direct human contact or unnaturally loud noises. It can also be expected that avoidance reactions to human-caused disturbance would be elevated for females in dens or accompanied by young kits. Aubry and Raley (2006) identified the seasonal activity patterns for fishers in the southern Oregon Cascades. Females give birth in late March and generally move kits from the natal den to maternal dens at about 8-10 weeks. Near the end of July when kits are approximately 4 months old, they are more mobile and begin to travel with their mothers.

Activities associated with ski area expansion implementation such as felling, skidding, hauling, piling of fuels, and burning are likely to have the greatest adverse effects on reproductive females during the denning and early kit rearing periods. There could also be indirect effects from disturbance over the long-term because, if implemented, the ski runs and lifts and associated human activities would likely cause fisher to avoid the area entirely, thereby removing the ability for fisher to use the expansion impact area for the foreseeable future. The 2004 FEIS at pages IV-204 and 252 stated that "recreation use might increase slightly" and that "hiker use in the Middle Fork area might increase from very low (estimated at less than 40 visits per year) to low (200-300 per year). Mountain biking is currently prohibited within the current ski area boundary except for the Bull Gap Trail located near the main lodge. There are no plans to allow mountain biking within the expansion area. However, due to the potential for increased and continued disturbance from human activities, it is likely that fisher would not use the entire 220 acre expansion area. This could affect up to one male and one female fisher.

Effects to Large Snags

Reduction of large snags can also reduce the availability of fisher den sites. Aubry and Raley (2006) found that large snags were used for both natal and maternal den sites in southern Oregon. Snag retention within the expansion impact area and within the proposed runs themselves is unlikely due to implementation and human safety concerns; there would likely be minimal snag retention within the expansion impact area. This would potentially remove habitat for denning or resting for fisher within the cleared run and lift areas but not the entire Special Use Permit Area itself.

Effects to Coarse Woody Material

Down logs are important for fishers and their prey. Construction of the runs and lifts would remove most large wood from within those areas for the foreseeable future, thereby reducing denning/resting and forage opportunities for fisher.

Effects on Prey Species

Effects on prey species from ski area expansion are variable. Because fishers are known to prey upon a wide variety of small mammal species, it is difficult to quantify how expansion activities may affect their prey base. Small mammals occupy a wide variety of habitat types; some species are considered to be associated with late-successional or closed canopy habitats, while others are generally associated with early successional habitats. Other species are considered habitat generalists. The effects on small mammal populations are dependent on numerous factors which include amount of remaining canopy closure, coarse woody material, shrub and forb layers, and fungi. Regardless of species, it is likely that small mammal populations would be reduced within the expansion impact area given that the habitats described above would be reduced and/or altered.

2. Pacific Fisher - NEPA Claims

This section of the FSEIS will supplement the disclosure of impacts to the corridor linking the Klamath-Siskiyou region and the Southern Cascades, from ski area expansion. It will supplement the analysis for cumulative effects on the Pacific fisher from future projects in the vicinity of the MASA expansion area, including Ashland Forest Resiliency, the Ashland Watershed Protection Project, and the Mt. Ashland LSR Habitat Restoration and Fuels Reduction Project, as well as other projects with potential for cumulative effects.

a. Impacts to Corridors Not Disclosed

The Court of Appeals found that the Forest Service violated the NEPA when it failed to disclose the potential impact of displacing the fisher and damaging habitat in the corridor linking the Klamath-Siskiyou region and the Southern Cascades.

Supplemental Information
The 2004 FEIS discussed effects on terrestrial wildlife habitat (primarily late-successional forests) in an Other Issue titled "Effect on Terrestrial Wildlife Habitat" (FEIS page IV-141). Effects to connectivity (fragmentation) from ski area expansion were discussed in the 2004 FEIS at page IV-144, in a subsection of cumulative effects.

This discussion primarily focused on the north-south corridors along the Siskiyou Crest. Supplemental information derived from the biological investigation described above, found that currently, forested areas east and west of the Mt. Ashland proposed expansion area provide opportunities for movement and dispersal of fishers while it is likely that dispersal opportunities for forest associated species are limited near the summit of Mt. Ashland due to a lack of suitable dispersal habitat generally due to much of this area being high elevation and naturally in a non-forested condition (Lofroth et al. 2010).

The local population area has been defined and, for this supplemental analysis, is considered to occur at the landscape scale. After implementation of ski area expansion, remaining habitats would continue to allow fishers to emigrate and immigrate from north to south to interact with and exchange genetic material with animals in northern California (Figure FSEIS II-4).

The Court of Appeals found that the Forest Service violated the NEPA when it failed to disclose the potential impact of displacing the fisher and damaging habitat in the corridor linking the Klamath-Siskiyou region and the Southern Cascades. This corridor would represent an east-west link, which would include crossing the Interstate 5 corridor.

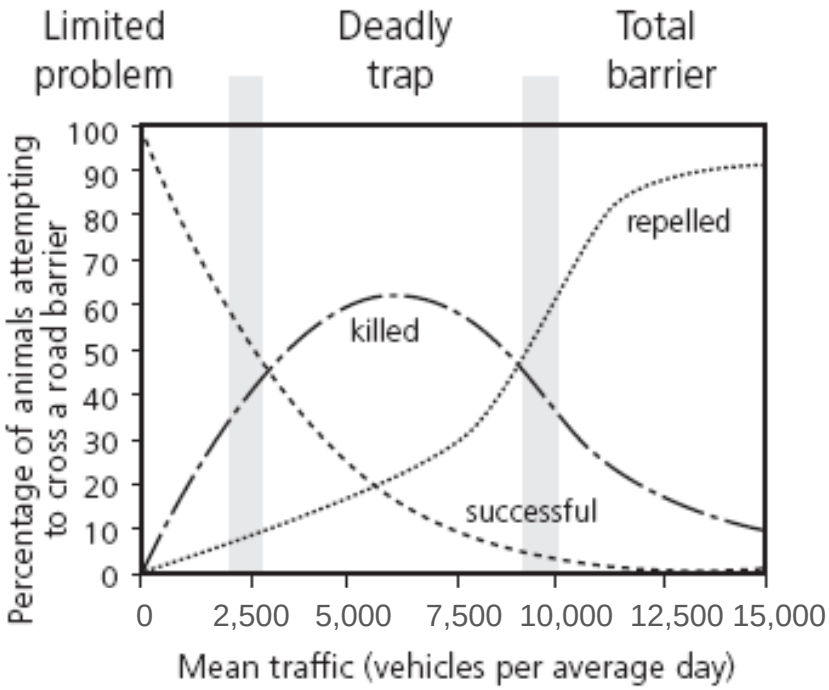
The following shaded supplemental text ***supplements*** FEIS pages IV-152, IV-153 for the Pacific fisher. This supplemental information describes the situation regarding the Klamath-Siskiyou region and the Southern Cascades (east-west) Interstate 5 corridor and the effects of traffic on Pacific fisher based on the supplemental biological investigation.

Interstate 5
Traffic has a considerable effect on population and community dynamics through the disruption and fragmentation of habitat and traffic mortality (van Langevelde and Jaarsma 2004). There are at least four adverse effects of traffic on animals; (1) destruction or alteration of habitat due to construction, (2) disturbance of habitat along the road or railway [noise, vibrations, car visibility, etc.], (3) barriers created by the road or railway (increased resistance for movements), and (4) barriers by traffic collision risk during crossing (van Langevelde and Jaarsma, 1997). Generally, as traffic volume increases, mortality increases roughly proportionally until the intimidation factor causes animals to cease attempting to cross, whereupon mortality decreases with an associated increase in the barrier effect (Jacobson 2007) (see Figure FSEIS II-5).

At low traffic intensity (<2,500 vehicles per average day) the small proportion of fauna casualties and animals repelled causes limited impact on the proportion of animals successfully crossing a road barrier. At medium traffic intensity (2,500-10,000) casualties are high, the numbers of animals repelled by the infrastructure increased and the proportion of successful crossings decreased, At high traffic intensity (>10,000) a large proportion of animals are repelled and despite a lower proportion of fauna causalities there is only a small proportion of successful crossings (Seiler and Helldin, 2006).

Aubry and Raley (2006) described seasonal activity patterns of fishers in the southern Oregon Cascade Range. Their observations showed that fisher activity increases during the months of February through April. During this period, males become more active and start to move beyond their non-breeding home ranges and juveniles begin to disperse. Average Daily Traffic on Interstate 5, 3 miles south of Ashland, OR, ranges from 13,000 – 16,000 vehicles/day between February and April (www.oregon.gov/ODOT). This presents a formidable challenge, if not a complete barrier, to movement across the Interstate for nearly all cursorial species including fishers. Fishers have been documented 2 miles west of Interstate 5 near the Siskiyou Summit (J. Stephens, pers. comm.), but it is unknown with any certainty which population this animal may have come from.

Figure FSEIS II-5. Traffic Effects



In addition, GPS collar locations downloaded from two fisher in the winter of 2010 show both a female and a male within one half mile west of the freeway but not crossing it (D. Clayton, pers. comm.). There is a potential for fishers to cross I-5 at three underpasses south of the town of Ashland. However, current radio telemetry data from fisher in the Ashland Watershed show no movement at all across the I-5 barrier. Current telemetry data does show one male fisher moving north and south across the Siskiyou crest between I-5 and the ski area within previously identified forested dispersal areas. Ski area expansion activities would not affect this dispersal habitat (D. Clayton, pers. comm.).

Micro-satellite DNA evidence indicates that fishers in the Siskiyou Mountains and those in the southern Cascades are distinct populations and are genetically isolated from each other (Aubry et al. 2004). Jeff Stephens of the BLM, Medford District obtained photographic evidence of fishers on the Dead Indian Memorial Plateau, east of Interstate 5 in 2006. The RRSNF conducted hair-snaring surveys in this area in early 2008 in an attempt to obtain DNA to identify which population the fisher(s) are from. Fishers were not detected during this effort.

As discussed in the biological investigation, the local population area was defined as those individuals residing within the entire Mt. Ashland Late-Successional Reserve, and on federal lands within 5 km of the LSR boundary, except on the eastern edge, where Interstate 5 defines the edge of the fisher local population area (see Figure FSEIS II-1) due to its potential to act as a barrier to movement and dispersal. Therefore, based on the biological investigation, the potential for displacing the fisher from damaging habitat in the corridor linking the Klamath-Siskiyou region and the Southern Cascades is not influenced by the [decision for] the Mt. Ashland Ski Area Expansion project (or any other Alternative Considered in Detail); it continues to be influenced by the existing barrier created by oak savannah habitat in the rogue Valley, human infrastructure and traffic utilizing Interstate Highway 5.

b. Cumulative Effects from Other Projects Not Considered

The Court of Appeals found that the Forest Service violated the NEPA when it failed to discuss the cumulative effects on the Pacific fisher from future projects in the vicinity of the MASA expansion area, including Ashland Forest Resiliency, Ashland Watershed Protection Project, and Mt. Ashland Late-successional Reserve Habitat Restoration and Fuels Reduction Project (on the south side of Mt. Ashland on the Klamath National Forest).

The Court of Appeals stated at 13066-13067; "We cannot excuse the Forest Service from the NEPA requirement to include an adequate cumulative impact analysis in the 2004 FEIS. Two future projects, the Ashland Forest Resiliency Project (a logging project[11]), and the Ashland Watershed Protection Project (a habitat restoration and fuel reduction project[12]), are scheduled to occur in the vicinity of the proposed MASA expansion. Though the Forest Service generally addressed the impact of these projects elsewhere in the FEIS, it failed to discuss in detail their impact upon the fisher as part of the cumulative impact analysis required by NEPA."

The Court of Appeals Opinion at 13065-13066 also found that the Forest Service's 2004 FEIS violates the NEPA because it fails to adequately discuss the impact on the Pacific fisher of two future projects: (1) the construction of nine miles of new logging roads within three miles of the project area, which will require the cutting of approximately 4,250 acres on the south side of Mount Ashland[13] and (2) a habitat restoration and fuel hazard reduction treatments, which include controlled fires.

Supplemental Information
The 2004 FEIS considered and discussed cumulative effects on terrestrial PETS species beginning at page IV-150. The potential effects of the Ashland Watershed Protection Project, and Ashland Forest Resiliency were discussed there. The Mt. Ashland Late-successional Reserve Habitat Restoration and Fuels Reduction Project (on the south side of Mt. Ashland on the Klamath National Forest) was not included in the 2004 cumulative effects analysis. This project was in the initial planning stages at the time of the FEIS and ROD and the extent of potential habitat modifications was unknown at that time because no proposed action had been identified[14].

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[11] Ashland Forest Resiliency is a project designed under the Healthy Forests Restoration Act (HFRA) of 2003. The stated purpose and need for action is "…urgent reduction of the potential for large-scale, high-severity wildland fire in the Upper Bear Analysis Area. The Purpose of the action is to protect Values At Risk, reduce hazardous fuels, reduce crown fire potential, and obtain conditions that are more resilient to wildland fires."

[12] The purpose and need for the Ashland Watershed Protection project was essentially the same as Ashland Forest Resiliency. It preceded the HFRA project, partially occurs with the same area but did not propose treatments on a landscape scale, as does Ashland Forest Resiliency.

[13] This reference is to the Mt. Ashland Late-successional Reserve Habitat Restoration and Fuels Reduction Project (on the south side of Mt. Ashland on the Klamath National Forest).

[14] Reasonably foreseeable future actions are those federal or non-federal activities not yet undertaken, for which there are existing decisions, funding, or identified proposal. Identification of Forest Service actions are described in §220.4(a)(1).

The following shaded text ***supplements*** FEIS pages IV-152 and IV-153 for the Pacific fisher. This supplemental information is based on the latest (2010) situation and is discussed in detail as part of the cumulative impact analysis for Pacific Fisher.

Ashland Watershed Protection Project

A Record of Decision was signed in May 2001 for the Ashland Watershed Protection Project (AWPP). The current situation for Ashland Forest Resiliency suggests that only the manual treatments under AWPP will be enacted, and that mechanical treatments will be incorporated into Ashland Forest Resiliency. This will result in less cumulative effects (because of the lack of cumulative treatments) than was assumed in the 2004 FEIS for ski area expansion. None of the manual treatments will remove or degrade late-successional habitat.

Ashland Forest Resiliency

The Rogue River-Siskiyou National Forest completed a Final EIS (September 2008) for Ashland Forest Resiliency (AFR). The Objection Process under 36 CFR 218 was conducted for this project and a Record of Decision selecting the Preferred Alternative was issued in October 2009. In the Final EIS for Ashland Forest Resiliency, the Forest Service developed and analyzed an additional Action Alternative, designed and identified as the Preferred Alternative. This alternative was developed from the results of analysis of the two Action Alternatives analyzed in detail in the Draft EIS, further collaboration with the City of Ashland and their representatives, and the extensive comments received on the Draft EIS during the Comment Period.

Regarding AWPP (see above), under collaborative discussions, the Forest Service and City agreed that the Forest Service should plan the entire landscape based on its current condition at the time of implementation of Ashland Forest Resiliency, and not defer treatments until after AWPP treatments are completed.

The Preferred Alternative was designed to include the most effective and efficient treatment methodologies, in the most strategic locations. The Preferred Alternative identifies approximately 7,600 acres of treatment, which is less than the Proposed Action (8,150 acres). Actions associated with Ashland Forest Resiliency (AFR) would occur within the Neil Creek and Ashland Creek watersheds; analysis for both AFR and AWPP concluded that there would be no risk for adverse cumulative effects to fisher in the local population from these actions (USDA-FS 2008*b*).

As is the case for ski area expansion, habitat data for fisher analyses was derived from Geographic Information System (GIS) mapping. For the purpose of this analysis, fisher denning/resting habitat was also defined as coniferous forest greater than 60 percent canopy closure and greater than 24 inch diameter trees. Fisher dispersal and foraging habitat is coniferous forest (sapling/pole or larger) greater than 60 percent canopy closure. In addition, for the purpose of analyzing effects to fisher populations as a result of the proposed project, the local population was defined as those individuals residing within the entire Mt. Ashland Late-Successional Reserve plus federal lands within 5 kilometers of the LSR, except on the eastern edge, where Interstate 5 defines the edge of the fisher analysis area due to its potential to act as a barrier to movement and dispersal.

Effects to fisher from the AFR Preferred Alternative are as follows: in stands where treatments reduce overall canopy closure to approximately 60 percent, opportunities for fishers to locate suitable areas for den and rest sites within the stand may be reduced. However, due to variation in canopy closure at a fine-scale within a stand after treatment, and mitigation measures provided for fisher throughout the project areas, clumps of large trees with canopy closures greater than 80 percent would still remain within the stand. Therefore, stands that are reduced to approximately 60 percent canopy closure overall would retain patches of trees and snags that provide den and rest sites for fisher.

In stands where treatments reduce overall canopy closure to between 40 percent and 60 percent, opportunities for fishers to locate suitable areas for den and rest sites within the stand become more limited. Mitigation measures for fisher require retaining a minimum of one ½-1 acre untreated patch per 40 acre block of the largest diameter trees, snags, and coarse woody material where the overstory canopy closure is greater than 80 percent. Research has shown that fishers use the largest trees available for both natal and maternal dens and rest sites (Aubry and Raley 2006, Yaeger 2005). Treatments from the Preferred Alternative are designed to retain the largest trees, however, the Preferred Alternative would result in the loss of some large trees which may reduce resting/denning opportunities for fisher. It is estimated that a maximum of 0-3 trees/acre greater 24 inches in diameter and 0-13 trees/acre 17-24 inches in diameter would be cut.

Surface fuel treatments, particularly underburning, pile burning, and the associated smoke could have adverse effects to fishers during the denning period (natal or maternal or both). In southwest Oregon, the denning period is from approximately late March when females give birth to late July when juveniles are more mobile and able to travel with their mothers (Aubry and Raley 2006).

Effects of smoke production on denning fishers and their young have not been described. However, it is assumed that heavy smoke concentrations could cause females to move their kits or could cause mortality in the young through excessive smoke inhalation or destruction of the den structure by the fire. Because restrictions on burning (timing and duration) would be required within ¼ mile of nine spotted owl nest sites, this would provide benefits for denning fishers in these areas. In addition, efforts would be made to reduce impacts to the ½-1 acre untreated patches during underburning operations.

Ashland Forest Resiliency would reduce fisher habitat (≥60 percent canopy closure) by 1,292 acres. These acres are widely dispersed across 7,600 acres. Late-successional habitats on south and west facing slopes in the Ashland Research Natural Area and northernmost portions of the project area would be most affected due to reduction of canopy closure and fuels projects.

Within these areas, there may be some shifting or expansion of fisher home ranges from reductions in habitat quality. This could potentially influence 2-3 female home ranges and 1-2 male home ranges. This approximates 5-6 percent of the estimated local population, and 0.25-0.5 percent of the estimated total population.

Mt. Ashland Late-successional Reserve Habitat Restoration and Fuels Reduction Project

The Mt. Ashland LSR Habitat Restoration and Fuels Reduction Project was in the initial planning stages and the extent of potential habitat modifications was unknown at the time of Mt. Ashland Ski Area expansion ROD (2004) because no proposed action had been identified.

This project was proposed by the Klamath National Forest, Oak Knoll Ranger District. The Notice of Intent (NOI) for a forthcoming EIS was published on October 7, 2005 Vol. 70, Number 194. No new road construction was identified in the NOI and the acreage stated was 5,013 acres. This Klamath NF project is almost entirely within previously managed stands less than 80-90 years of age which are not considered suitable denning and resting habitat, but may be suitable forage habitat for fisher and therefore could influence up to 2 female home ranges and 1 male home range.

The May 2008 Record of Decision for this project documents a reduction in road density under the Selected Alternative, as 9.12 miles of roads will be decommissioned or hydrologically stabilized and closed. Under the Selected Alternative, 1.7 miles of spur road construction will occur, but these roads will be closed after project completion. The Mt. Ashland LSR Habitat Restoration and Fuels Reduction Project FEIS included consideration and calculation for ski area expansion actions conditionally authorized by the Rogue River-Siskiyou NF at Mt. Ashland.

Based on the 2008 Record of Decision, the Klamath National Forest will enact thinning and fuel reduction treatments in the southern portion of the Mt. Ashland LSR. Treatments are designed to promote the development of late-successional habitat and reduce the potential of stand-replacement fire. Thinning designed to promote the development of late-successional habitat will not remove important structural components of late-successional habitat such as large-diameter trees, snags, and coarse woody material. Trees infected with mistletoe may be removed; however silvicultural prescriptions have been designed to ensure that this habitat component will remain well distributed across the landscape. Silvicultural prescriptions have also been designed to retain 60 percent canopy cover in suitable spotted owl habitat. Prescriptions for underburning have been designed to imitate low-intensity fire, thus, underburning is not expected to significantly impact the amount and distribution of large snags and coarse woody material.

Other fuel reduction treatments such as hand piling and burning of fuels and mastication (crushing or grinding woody material) will retain Mt. Ashland Late-Successional Reserve Assessment recommendations for snags and coarse woody material. Because the structural elements of late-successional habitat will be retained, thinning designed to promote the development of late-successional habitat and fuels reduction treatments are not expected to remove late-successional habitat.

Because the only proposed silvicultural prescription is thinning, stands will be thinned to a variable density including 15 percent of each stand to remain un-thinned, an average of 60 percent canopy closure will be retained in true fir stands and the lower half of north and east facing slopes, an average of 40 to 60 percent canopy closure will be retained on south and west facing slopes, and 60 percent canopy cover will be retained on all other aspects.

According to the Klamath National Forest's analysis, thinning prescriptions are designed to promote the development of late-successional habitat and will not create large openings or significantly reduce forest cover and will retain a high level of habitat connectivity. Additionally, actions within one site potential tree of riparian reserves are limited to pre-commercial thinning which is not expected to affect the connectivity function of these areas.

Under the 2008 decision, thinning to create the Siskiyou Gap Defensible Fuel Profile Zone (DFPZ) will downgrade approximately 4 acres of late-successional habitat in stand 339 by reducing canopy cover to 40 percent. While thinning in DFPZs may remove discrete structural components of late-successional habitat outside of stand 339, silvicultural prescriptions have been designed to retain late-successional habitat where it occurs within DFPZs, ensuring that these activities will not remove any additional late-successional habitat. Additionally, the removal of large snags or groups of snags within DFPZs will be limited to situations where they pose a hazard to operations.

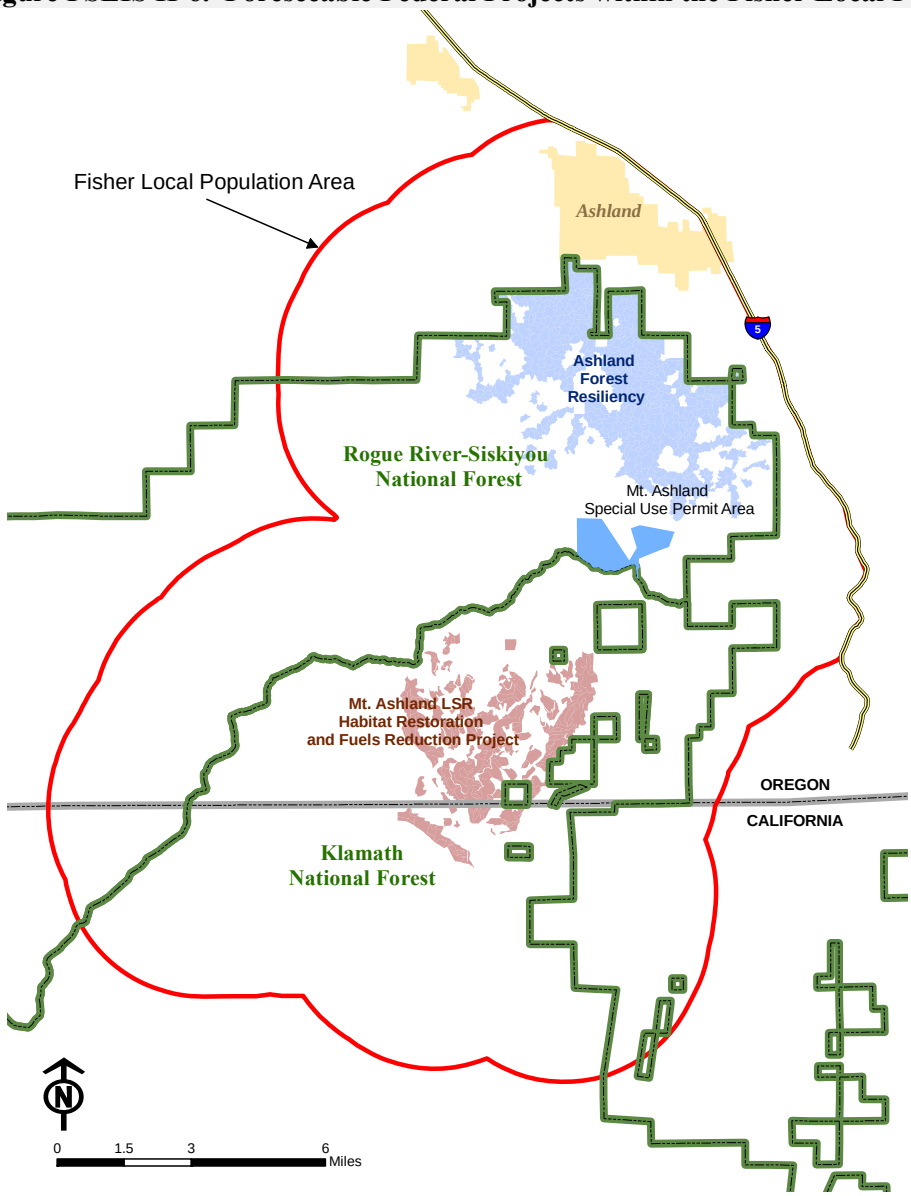
Based on the findings documented in the 2008 ROD, in the long term, thinning and fuel reduction treatments are expected to have substantial benefits to late-successional species by increasing the amount and distribution of late-successional habitat and by reducing fuels to a level that would result in an acceptable fire behavior and post fire stand condition. Forest Vegetation Simulation (FVS) modeling indicates that 50 years post thinning the average tree diameter within a stand would increase to between 24 and 27" and 14 to 15 trees per acre >30" would be expected. More large stems per acre would also increase recruitment of large snags and coarse woody material. Stands with this type of structural complexity contain the specific habitat requirements for this species. The fuels extension of FVS modeling indicates that thinning and subsequent fuels treatment will generally reduce crown fire potential and maintain a surface fire type and substantially reduce predicted stand mortality in the event of a fire start. These factors indicate that stands will be more resistant to large-scale fires but will burn with sufficient intensity to create small openings within forested habitat. This type of pattern, would create a mosaic of stands in different successional stages, and be consistent with patterns under historical fire regimes. This pattern of successional stages would likely benefit late-successional species by creating horizontal diversity of habitat across the landscape.

Based on the 2008 ROD, approximately 0.12 miles of temporary road construction is proposed in late-successional habitat. Because construction of temporary roads would remove large diameter trees and create approximately a thirty foot gap in the canopy, it is expected that this activity would remove between 0.7 and 1.1 acres of late-successional habitat. To ensure that impacts to late-successional habitat are minimized, all trees >24" that need to be felled during temporary road construction will be left on site. One landing is proposed to be constructed in late-successional habitat, resulting in the removal of 0.5 acre of late-successional habitat.

Road-related activities, including maintenance, closures, and decommissioning are not expected to remove any important structural components of habitat. Combined, thinning to create the Siskiyou Gap DFPZ and construction of temporary roads and landings would be expected to remove between 0.7 and 5.5 acres or 0.05 to 0.43 percent of the extant late-successional habitat in the Project Area. Proposed actions are not expected to affect habitat connectivity.

The Ashland Watershed Protection Project, Ashland Forest Resiliency, the Mt. Ashland LSR Habitat Restoration and Fuels Reduction Project, and the Mt. Ashland Ski Area expansion area are shown in the context of the Pacific fisher local population area on Figure FSEIS II-6.

Figure FSEIS II-6. Foreseeable Federal Projects within the Fisher Local Population Area



Wagner Gap Timber Sale
An additional project, the Wagner Gap Timber Sale thinned (in 2009) 417 acres of overly dense young stands located on the Siskiyou Mountains Ranger District, on the outer western edge of the local population area. Based on canopy reductions associated with the Wagner Gap sale, fisher would not likely continue to use approximately 324 acres of affected stands. This would result in a short term reduction of fisher habitat within the local population area and could affect up to 1 female and 1 male fisher.

Private Timber lands
There are approximately 5,700 acres of privately owned lands within the local fisher population area; some of that is industrial timber lands that are subject to frequent harvest. The amount of late-successional habitat on private land is unknown, though it is likely to be relatively low. Under the harvest regimes usually carried out in the Rogue Valley and surrounding area, the typical rotation age is 40 to 60 years. Given the location of private lands on the landscape and the past activities, it likely that those activities have reduced denning and resting habitat and will continue to do so for the long term for up to 2 male and 4 female fisher. These stands however, will likely continue to provide foraging habitat for fisher in the form of young closed canopy stands between harvests.

The Forest assumes that these past management practices will continue and reduce the amount of late-successional habitat on non-federal lands over time. Harvest activities on state and private lands can be expected to impact late-successional species located within adjacent federal lands by removing and fragmenting habitat.

3. Determinations - Pacific Fisher

The supplemental analysis documented in this FSEIS has explained how the 1999 Biological Evaluation was updated and incorporated into the 2004 FEIS. This FSEIS has supplemented the current conditions for the fisher population in and around Mt. Ashland and identified current amount and types of habitat. It presents a summary of the latest research on the Pacific fisher species biology and habitat requirements. This is designed to allow use of habitat as a proxy for population viability. The effects on fisher species and habitat from ski area expansion are disclosed. The supplemental sections include all steps of the Biological Evaluation process required by the LRMP, for the Pacific fisher. This FSEIS has supplemented the disclosure of impacts to the corridor linking the Klamath-Siskiyou region and the Southern Cascades, from ski area expansion. It has supplemented the analysis for cumulative effects on the Pacific fisher from future projects in the vicinity of the MASA expansion area, for impacts to the local fisher population area.

a. Sensitive Species Determination

Table IV-24, at page IV-146 of the 2004 FEIS documented a determination of effect for the Pacific fisher as "**MIIH**" (defined in the table footnote as) "**May impact individuals or habitat, but will not likely contribute to a trend toward federal listing or cause a loss viability to the population or species."** This determination was applicable to all Action Alternatives; the 2004 ROD documented a similar finding for Modified Alternative 2 (ROD-44).

The following shaded supplemental text ***supplements*** FEIS pages IV-152 and IV-153 for the Pacific fisher:

The 2010 supplemental analysis found that the [decision for] the Mt. Ashland Ski Area Expansion project would remove 44 acres of denning/resting habitat and an additional 17 acres of dispersal/foraging habitat for fishers. Within these areas, there may be some shifting or expansion of fisher home ranges resulting from reductions in habitat quality. This could potentially influence 1 female home range and 1 male home range. This approximates 2-4 percent of the estimated local population, and 0.1-0.2 percent of the estimated total population.

The total area impacted by the decision for the Mt. Ashland Ski Area Expansion project is considered to be 220 acres because Runs 12, 15, 18 and Surface Lift 15 fragment this area from the remaining habitats within the local population area due to removal of trees. Therefore, the entire 220 acres is unlikely to function as fisher habitat or be included in an individual's home range.

Due to reductions in the extent of denning/resting and dispersal/foraging habitat for fisher within the local population area, as a Forest Service Sensitive species, all Action Alternatives for the Mt. Ashland Ski Area Expansion project are "**MIIH - May impact individuals or habitat, but will not likely contribute to a trend toward federal listing or cause a loss viability to the population or species**." The decision for the Mt. Ashland Ski Area Expansion would not likely result in a loss of viability within the local population area nor cause a trend to federal listing or a loss of species viability range wide" for Pacific fisher.

For the selected alternative in the 2004 ROD, supplemental analysis has identified a more precise prediction of impacts, including a slightly refined (increased) extent of habitat change. However, this supplemental analysis identifies an identical finding to that predicted in the 2004 FEIS, for which the 2004 ROD was based, for the Pacific fisher, as a Forest Service Sensitive species.

b. Cumulative Effects

Cumulatively, all the past, current, and foreseeable future projects could impact a portion of the fisher within the local population. Based on 100 percent occupancy, Federal actions could reduce resting and denning habitat by up to 1,620 acres from both Klamath NF (4 acres) and Rogue River-Siskiyou NF (1,616 acres) projects. Since it is possible that not all habitat is occupied, fewer fisher may be impacted than this analysis represents. Past activities on non-federal lands have likely reduced habitat for fisher on up to 5,700 acres within the local population area.

The loss of up to approximately 7,320 acres (of which 5,700 acres are non-Federal) of habitat within the local population area could impact up to 10-11 female and 6-7 male fisher; potentially impacting up to 20-37 percent of the estimated local fisher population, and up to 1-2 percent of the entire estimated fisher population NW California and SW Oregon (see page II-12 for population size estimates).

D. SUPPLEMENTAL INFORMATION - RIPARIAN RESERVES AND RESTRICTED WATERSHED TERRAIN

1. Restricted Riparian and Restricted Watershed Terrain - NFMA Claims

For analysis purposes this Section of the FSEIS will identify portions of the Special Use Permit Area as Restricted Riparian (MS 26) and Restricted Watershed (MS 22), and analyze the effects of expansion against applicable (soils) standards and guidelines.

a. Failure to Designate Restricted Riparian (MS 26) and Restricted Watershed (MS 22)

The Court of Appeals found the Forest Service violated the NFMA by failing to appropriately designate "Riparian Reserves" and "Restricted Watershed" terrain as required by the Rogue River LRMP and the Northwest Forest Plan (NWFP).

The rules governing the Forest Service's designation and management of Riparian Reserves and watersheds are complex and overlapping. The Court of Appeals noted that the principal source of these rules is the NWFP and derivatively, the Aquatic Conservation Strategy (ACS), adopted pursuant to the NWFP. The Forest Service must also comply with the Rogue River LRMP's more restrictive standards and guidelines for lands designated Restricted Riparian, Management Strategy 26 (MS 26) and lands designated Restricted Watershed, Management Strategy 22 (MS 22)[15].

Supplemental Information
The following shaded text ***supplements*** FEIS Chapter III, Sections 8 and 9 (pages III-40 through III-76, for Watershed Resources and Water Quality.

RESTRICTED RIPARIAN (MS 26)

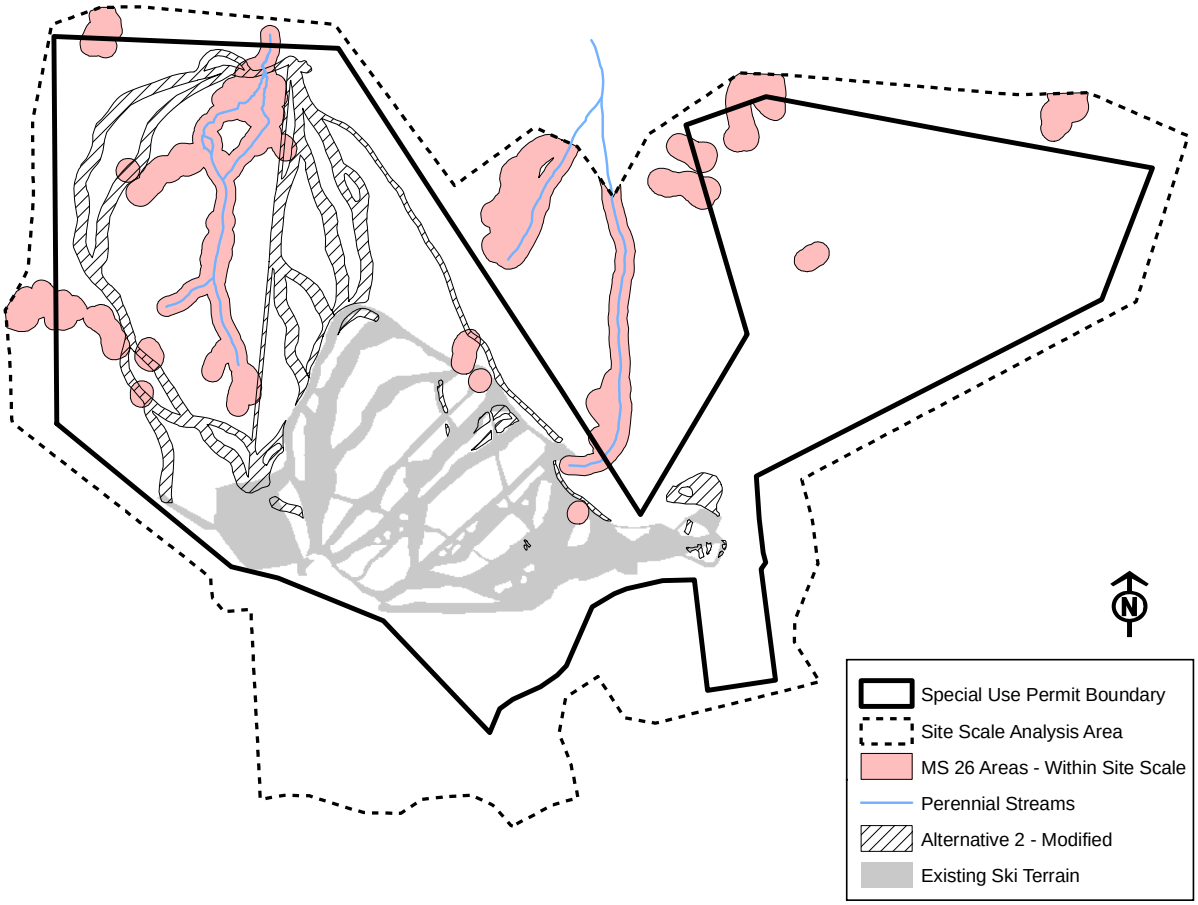
Portions of the Special Use Permit Area are identified as Restricted Riparian (MS 26). According to **DESCRIPTION (LRMP page 4-298)**:

> "This strategy can be applied only to those acres designated as suitable for riparian habitat. This Area includes all perennial streams, Class I, II and III in the Forest Service classification system and their associated riparian habitat.
>
> Areas managed for restricted riparian include lakes and perennial streams and wetlands, and at a minimum, land within 100 feet horizontal distance from them or the riparian vegetation associated with them. Geographical boundaries of these areas are determined by on-site characteristics of soil and vegetation."

Figure FSEIS II-7, depicts all perennial streams and wetlands within the Special Use Permit Area as Restricted Riparian (MS 26). Perennial streams and wetlands were inventoried on-the-ground by SE Group in 2002 and documented in the Wetland and Stream Survey contained in the 2004 FEIS as Appendix E. According to the LRMP, lands within 100 feet horizontal distance from perennial stream and wetlands define the area that will be evaluated for MS 26 standards and guidelines.

[15] Court of Appeals Opinion at 13068

Figure FSEIS II-7. Management Strategy 26 (Restricted Riparian) within Special Use Permit Area at the Site Scale Analysis Area[16]



Based on supplemental analysis, there is a total of 128.25 acres of Restricted Riparian (MS 26) terrain within the Site Scale Analysis Area; 71.61 acres of this are within the Special Use Permit Area.

The area of MS 26 affected by the decision for the Mt. Ashland Ski Area Expansion involves areas associated with Run 10A, Run 12, Run 14, Chairlift LC 6, and the Skiway (Run 18) for a total of 3.83 acres. The disturbance from this action will be discussed further in this supplemental analysis (starting at page II-30).

Supplemental Information
The following shaded text ***supplements*** FEIS Chapter III, Sections 8 and 9 (pages III-40 through 76, for Watershed Resources and Water Quality.

RESTRICTED WATERSHED (MS 22)

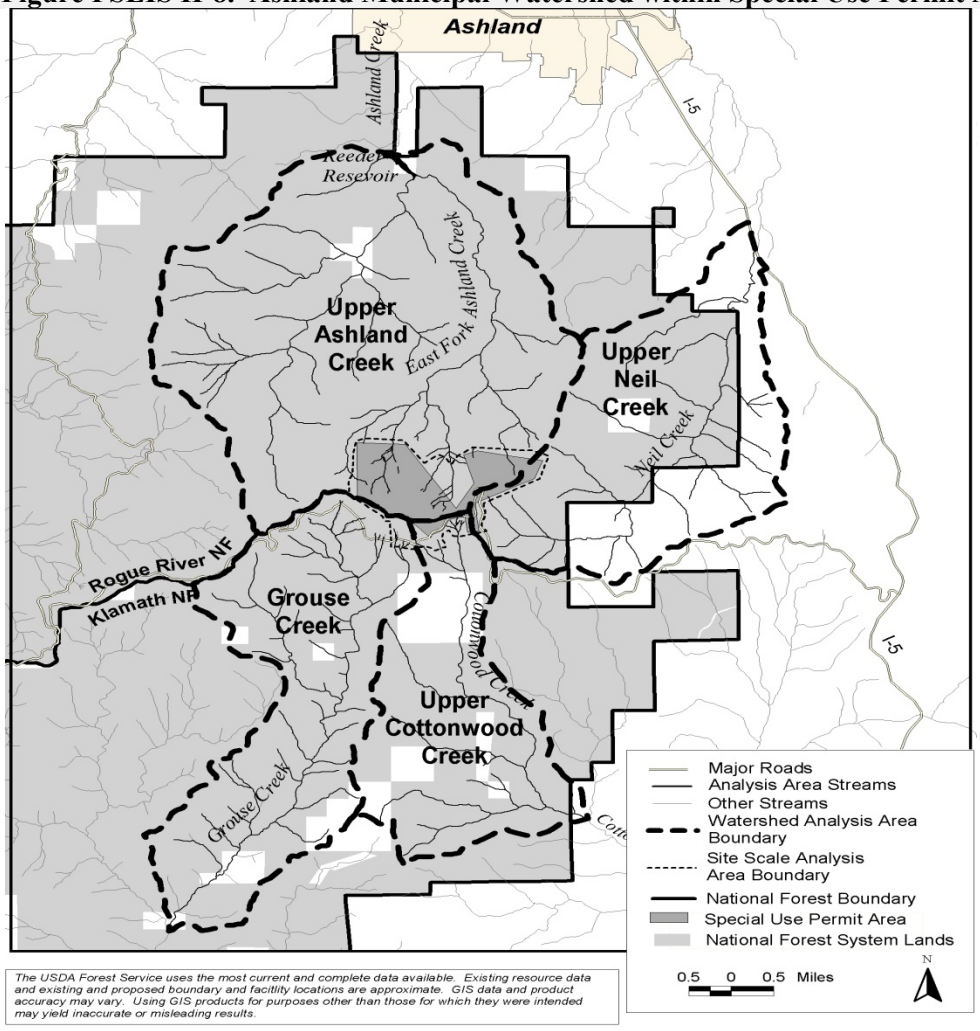
Portions of the Special Use Permit Area are considered to be allocated to Restricted Watershed (MS 22). According to **DESCRIPTION (LRMP page 4-265):**

> "This strategy can be applied only to those acres designated as suitable for Municipal Supply Watersheds. These areas are Medford, Ashland and Talent watersheds."

[16] The Site Scale Analysis Area includes the entire MASA Special Use Permit area and additional, adjacent area outside of the SUP area. This additional area was included to provide the basis of analysis of watershed conditions that may be affected by proposed expansion activities (see more complete definition of analysis area scales at FEIS page III-40).

As described and shown at FEIS Chapter III, page III-42 and 43 (and included here), approximately 796 acres of the Special Use Permit Area are within the Upper Ashland Creek watershed (Figure FSEIS II-8). This area is within the Ashland Municipal Watershed and subject to standards and guidelines for MS 22.

Figure FSEIS II-8. Ashland Municipal Watershed within Special Use Permit Area



Site Scale and Watershed Scale Analysis Areas (from 2004 FEIS page III-43)

b. Failure to Evaluate Soils Standards and Guidelines for MS 26 and MS 22

The Court of Appeals found that the Forest Service violated the NFMA by failing to demonstrate compliance with the Rogue River LRMP standards and guidelines. The Rogue River LRMP includes specific soils disturbance standards and guidelines and requires compliance for management activities in areas designated as Restricted Riparian (MS 26), and Restricted Watershed (MS 22) terrain.

Supplemental Information

The LRMP directs the use of the Soil Resource Inventory for designing and evaluating projects. As documented in the 2004 FEIS (page III-18 and III-19), soils within the Special Use Permit Area occur on eight landtype units. These units correspond to mapping done for the *Soil Resource Inventory for the Rogue River National Forest* (Badura and Jahn 1977) but at a more detailed scale based on recent (2002) site-specific field surveys. Landtypes are mapping units of a land classification system used in mountainous terrain. They are a product of the interaction between soils, geology, landforms, vegetation and climate. Soils are discussed in relationship to the landtypes where they occur (FEIS Table III-7, page III-18).

These revised landtypes are portrayed on FEIS Map III-4 (page III-19). FEIS Table III-7 (page III-18) describes inherent physical properties, and displays the acreage within each landtype, for the Site Scale Analysis Area. This table did not include soil erosion potential as extracted from the Soil Resource Inventory because specially designed and more restrictive thresholds for soils, erosion and site productivity were designed for ski area expansion activities, as documented in the 2004 Record of Decision, Attachment C, Monitoring Plan (see pages C-16 through 19).

The following shaded text ***supplements*** FEIS Chapter III, Sections 5 and 6 (pages III-18 through 32, for Soil Processes: Erosion and Sedimentation, and specifically for soils standards and guidelines for Restricted Riparian and Restricted Watershed:

The following table portrays the soil erosion potential rating from the Soil Resource Inventory, Table of Erosion and Hydrologic Interpretations, (Badura and Jahn 1977, pages 117 through 119), for the revised landtypes within the Special Use Permit Area.

Table FSEIS II-1. Soil Erosion Potential from Soil Resource Inventory (SRI)

SRI Landtype	SRI Soil Erosion Potential
52	Slight
80	Moderate – severe
80a	Severe
83	Slight
93	Not applicable
94	Variable
95a	Variable
95b	Variable

EVALUATION OF SOILS STANDARDS AND GUIDELINES for MS 26 and MS 22

The following shaded text ***supplements*** the 2004 FEIS, Chapters III and IV, Section C, 3 and 5; it provides more restrictive soil quality thresholds for the ski expansion, and text from the Rogue River LRMP soils standards and guidelines (bold) for Restricted Riparian (MS 26) and Restricted Watershed (MS 22).

The decision for the Mt. Ashland Ski Area Expansion as documented in the 2004 ROD developed specific and more restrictive soil quality thresholds for disturbed sites that would be associated with the proposed ski expansion at Mt. Ashland. These more restrictive thresholds are shown in Table FSEIS II-2 (shown below from ROD Attachment C, Table ROD C-3, page C-17):

Table FSEIS II-2. Soils and Site Productivity Thresholds

Activity	Distance to Streamcourse	% Maximum Bare Soil	Maximum % Detrimental Soil Conditions	Monitoring Unit	% of Monitoring Units Sampled
Ski and tubing run construction through forested areas	<100'	5	3	Ski Run in Forest	100%
	>100'	25	6	Ski Run in Forest	10%
Ski Runs constructed through meadows and open forested stands	<100'	10% lower than existing % bare soil	3	Ski Run in Openings	100%
	>100'	Existing bare soil %	6	Ski Run in Openings	10%
Construction of fill slopes or on bare surfaces (ski runs, buildings, terminals, towers, etc)	<200'	10	NA	Fillslopes and Surfaces	100%
	>200'	25	NA	Fillslopes and Surfaces	10%
Construction of parking lot fill slopes	<200'	5	NA	Fillslopes and Surfaces	100%
	>200'	15	NA	Fillslopes and Surfaces	10%
Activities within wetlands	Within Wetland	NA	1	Ski Run in Forest	100%

As stated in the ROD Attachment C, page C-17:

> "These thresholds are based around the issues of soil erosion and sedimentation. They are not based on soil and site productivity qualities, since the Developed Recreation land allocation does not contain standards and guidelines for detrimental soil conditions. Soil erosion and sedimentation are very important issues on this project and is why the percent minimum bare soil (cover) and percent detrimental soil conditions are more restrictive within 100 feet of streamcourses than the guidelines that have been stated in the Forest Plan for other land allocations."

Compliance information and evaluation of impacts associated with the decision for the Mt. Ashland Ski Area Expansion project and the Action Alternatives are presented below:

Standards and Guidelines – SOILS: LRMP page 4-307 for Restricted Riparian (MS 26)

1. Address the potential for detrimental soil displacement, compaction, puddling, severe burning, mass wasting and surface soil erosion in project environmental analysis.

For all Action Alternatives associated with ski area expansion, the potential for detrimental soil displacement, compaction, puddling, severe burning, mass wasting and surface soil erosion are addressed in FEIS Chapter III and IV, Sections C, 3 and C, 5.

2. Alternative management practices will be developed or mitigating measures planned and implemented when activities are likely to result in detrimental displacement, compaction, mass wasting or erosion.

For all Action Alternatives associated with ski area expansion, specially designed mitigation measures for displacement, compaction, mass wasting or erosion are presented in FEIS, Chapter II, Section G-8, a, b, c (pages II-90 through 102).

3. No more than 10 percent of an activity area should be compacted, puddled or displaced upon completion of project (not including permanent roads or landings). No more than 20 percent of the area should be displaced or compacted under circumstances resulting from previous management practices, including roads and landings. Permanent recreation facilities or other permanent facilities are exempt.

[a] According to the 1998 Regional Supplement to the Forest Service Manual FSM 2520 – Watershed Protection and Management, R-6 Supplement 2500-98-1, detrimental soil quality conditions occur in areas that exhibit compaction, puddling and displacement. Note that detrimental soil effects are a subset of the total area of effect, e.g., not all affected acres result in detrimental soil conditions.

The "activity area" is the total area of MS 26 (Restricted Riparian) within the area of effect for Modified Alternative 2, which equals 3.83 acres (see Figure FSEIS II-7). The activities that have the potential to affect MS 26 include lift and run clearing. Clearing for ski area expansion would not detrimentally compact, puddle or displace more than 10 percent of the activity area because of mitigation measures (see ROD Attachment B, pages B-3 through 10) including the use of low ground pressure construction equipment. It is predicted that approximately 0.06 acres of detrimental soil would result from the footings and excavation associated with the Lower Wetlands Bridge Construction crossing of the Middle Fork; however, the footings are not located in wetlands. Therefore, detrimental soil conditions are predicted at 1.6 percent[17] for activities within MS 26, which is in compliance with the 10 percent standard and guideline.

There would be no detrimental soil conditions created within MS 26 wetlands because there would be no clearing of ground vegetation or grading within wetlands. In addition, Soils and Site Productivity Thresholds, from Table FSEIS II-2, defines specific thresholds by activity, which is more limiting than the 10 percent in the LRMP. The specially designed threshold for activities within wetlands is 1 percent; for ski runs constructed through meadows the threshold is 6 percent. All of the thresholds required for implementation of this project (Modified alternative 2) would be met and are lower than the 10 percent Standard and Guideline in the LRMP, and therefore would be in compliance. FEIS Alternative 2 would have slightly more impact than the decision (Modified Alternative 2); Alternative 6 would be similar; the other Action Alternatives would be less.

[b] In regard to the 20 percent portion of the standard, there is no previous (or existing) detrimental soil disturbance within the 3.83-acre "activity area", including roads and landings, and therefore it would not apply and the MS 26 standard would be met.

[c] As stated in the standard and guideline above, the ski area is a permanent recreation facility and could be excluded from the detrimental soil portion of the standards and guidelines. However, as displayed above, the project would meet soil standard and guideline number 3 for detrimental soil conditions.

4. Landslide hazard evaluation will be used to assess potential mass wasting risk by the project. The Rogue River National Forest landslide, slope stability and hazard rating maps will be used to determine need for detailed slope stability mapping.

For all Action Alternatives associated with ski area expansion, evaluation for ski area expansion utilized the Forest's Landslide Zonation And Risk Evaluation (LAZARE) technique as documented at FEIS Chapter III and IV, Section C, 3.

5. Design management activities to retain effective ground cover. The mineral soil exposure should not exceed the following limits overall, based on the erosion hazard rating of the soil type, as defined in the Rogue River National Forest Soil Resource Inventory:

[17] Conversion of 0.06 acres to percent of total activity area (0.06 acres/3.83 acres=0.0157 or 1.6 percent).

(a) Twenty percent mineral soil exposed on soils classed as very slight, slight, low or moderate erosion hazard soils.

(b) Ten percent exposure on high or severe erosion hazard soils.

(c) Seven percent exposure on very high or very severe erosion hazard soils.

As noted above, the "activity area" for MS 26 is assumed to be the total area of effect for lift and run clearing (3.83 acres). The only activity that would create mineral soil exposure within MS 26 is associated with the Lower Wetlands Bridge Construction crossing of the Middle Fork. This activity would occur within Landtype 52. There would be no mineral soil exposure created within wetlands because there would be no clearing or grading in wetlands.

The mineral soil exposure standard for MS 26 within Landtype 52 is 20 percent. Note that mineral soil exposure is a subset of the total area of effect, e.g., not all affected acres result in mineral soil exposure. The mineral soil exposure from ski area expansion is projected as 0.06 acres within the 3.83 acre activity area within MS 26, or 1.6 percent[18]. The 0.06 acres of mineral soil exposure is resultant of the footings for the Lower Wetlands Bridge Construction crossing of the Middle Fork that is within MS 26. The rest of the clearing within MS 26 would not result in bare mineral soil exposure; brush, slash, small downed logs and other mineral and vegetative material would be retained and low vegetation would be allowed to occupy the site as effective ground cover (see ROD Attachment B at pages B-7 and B-8). Mineral soil exposure conditions are predicted at 1.6 percent for activities within MS 26, well below the 20 percent standard and guideline.

The specially designed thresholds for maximum bare (mineral) soil from ski run construction is 10 percent or less (see Table FSEIS II-2, Soils and Site Productivity Thresholds). FEIS Alternative 2 would have slightly more impact than the decision (Modified Alternative 2); Alternative 6 would be similar; the other Action Alternatives would be less.

6. Rehabilitate adversely impacted sites.

All Action Alternatives associated with ski area expansion require specially designed mitigation measures that include the rehabilitation of sites disturbed by project implementation, as documented in FEIS, Chapter II, Section G, 8a and b. In addition, all Action Alternatives associated with ski area expansion include multiple restoration projects, as documented in FEIS Chapter II, Section F, 7.

Standards and Guidelines – SOILS: LRMP page 4-272 for Restricted Watershed (MS 22)

1. Address the potential for detrimental soil displacement, compaction, puddling, severe burning, mass wasting and surface soil erosion in project environmental analysis.

For all Action Alternatives associated with ski area expansion, the potential for detrimental soil displacement, compaction, puddling, severe burning, mass wasting and surface soil erosion are addressed in FEIS Chapter III and IV, Sections C, 3 and 5.

2. Alternative management practices will be developed or mitigating measures planned and implemented when activities are likely to result in detrimental displacement, compaction, mass wasting or erosion.

For all Action Alternatives associated with ski area expansion, specially designed mitigation measures for displacement, compaction, mass wasting or erosion are presented in FEIS, Chapter II, Section G-8, a, b, c (pages II-90 through 102).

[18] Conversion of 0.06 acres to percent of total activity area (0.06 acres/3.83 acres=0.0157 or 1.6 percent).

3. Prohibit [no] more than 10 percent of an activity area to be compacted, puddled or displaced upon completion of project. A maximum of 20 percent can be displaced or compacted under circumstances resulting from previous management practices and/or unique topographic conditions. This 20 percent includes roads and landings built into roads. Permanent recreation facilities and other permanent facilities that operate on a seasonal basis are exempt.

[a] According to the 1998 Regional Supplement to the Forest Service Manual FSM 2520 – Watershed Protection and Management, R-6 Supplement 2500-98-1, compaction, puddling and displacement are considered to result in detrimental soils. Note that detrimental soil effects are a subset of the total area of effect, e.g., not all affected acres result in detrimental soil conditions.

For the Mt. Ashland Ski Area Expansion project the "activity area" within MS 22 (Restricted Watershed) is the total developed area for ski expansion within the Upper Ashland Creek Watershed (74 acres). Activities would include run and lift clearing. Effects from compaction, puddling or displacement are minimized because of mitigation measures including the use of low ground pressure construction equipment and the use of helicopters for tree removal. The 2004 Record of Decision disclosed an estimated percent of detrimental conditions at 16.5 percent for Modified Alternative 2 (the decision); refer to Table ROD-4 (page ROD-20). The estimated 16.5 percent represents the total detrimental soil conditions for all affected watersheds. The predicted detrimental soil impact for activities within Restricted Watershed MS 22 (specifically the Upper Ashland Creek Watershed) is 8.7 percent detrimental disturbance (6.45 acres)[19], which is in compliance with the 10 percent Standard and Guideline.

To compare direct detrimental soil effects between alternatives refer to FEIS Table IV-7, page IV-63). The difference in detrimental soil effects between the decision for the Mt. Ashland Ski Area Expansion project in all affected watersheds and for the inclusion of MS-22 in only the Upper Ashland Creek Watershed is shown below in Table FSEIS II-3. The "Conventional Excavator" acres shown in this table are "zero" because although there would be use of a conventional excavator, the area of detrimental effect is already accounted for in the total of all grading detrimental acres (and not double counted).

Table FSEIS II-3. Supplemental Direct Detrimental Soil Effects for MS-22 (Restricted Watershed)

	2004 Modified Alternative 2 All Watersheds*	2010 Inclusion of MS-22 for Upper Ashland Creek Watershed
Total Grading Acres	12.7	6.1
Conventional Excavator (acres)	0	0
Low Ground Pressure Excavator (acres)	.35	.35
Total Detrimental Effect (acres)	13.05	6.45
Total Developed Area (acres)	79	74
Total Estimated Percent Detrimental Conditions of Cleared Area	16.5%	8.7%

***From 2004 Table Rod-4, page ROD-20**

[19] Conversion of 6.45 acres detrimental disturbance to percent of total activity area (6.45 acres/74 acres=0.0871 or 8.7 percent).

[b] In regard to the 20 percent portion of the standard, there is some detrimental disturbance from previous management such as road and lift construction. These previously impacted areas are included in the 8.7 percent figure (6.45 acres). As stated in the standard and guideline above, the ski area is considered a permanent recreation facility, which operates on a seasonal basis and is excluded from this portion of the standard and guideline. However, as displayed above, the project would meet all standards and guidelines for MS 22.

4. Landslide hazard evaluation will be used to assess potential mass wasting risk by the project. The Rogue River National Forest landslide, slope stability and hazard rating maps will be used to determine need for detailed slope stability mapping.

All Action Alternatives associated with ski area expansion utilized the Forest's Landslide Zonation And Risk Evaluation (LAZARE) technique as documented at FEIS Chapter III and IV, Section C, 3.

5. Design management activities to retain effective ground cover. The mineral soil exposure should not exceed the following limits overall, based on the erosion hazard rating of the soil type, as defined in the Rogue River National Forest Soil Resource Inventory:

(a) Forty percent mineral soil exposed on soils classed as very slight, slight, low or moderate erosion hazard soils.

(b) Thirty percent exposure on high or severe erosion hazard soils.

(c) Fifteen percent exposure on very high or very severe erosion hazard soils.

As documented in this FSEIS, for MS 22 (Restricted Watershed), Landtype 80 (the Landtype for which the majority of clearing activities would occur) has a mineral soil exposure standard of 30 percent. According to the thresholds designed specifically for this project (see Table FSEIS II-2) the resultant bare mineral soil exposure would not be allowed to exceed 25 percent (the least restrictive) and in most situations would be much less than 25 percent for the various activities.

In some cases the threshold is the current level of existing bare soil, or 10 percent lower than the existing percent bare soil. These thresholds and predicted consequences would therefore result in conditions that would be in overall compliance with the standard and guideline for MS 22; 30 percent or less for Landtype 80. Note that no soil types where clearing activities would occur have the more restrictive mineral soil exposure standard of 15 percent, and therefore would also be in compliance with the standard and guideline.

The threshold figures from Table FSEIS II 2 include some planned construction within previously impacted areas such as the Arrival Services Building, Skier Plaza, and road reconstruction in the Comer Chairlift area (within Ashland Creek Watershed). The other Action Alternatives would have similar impacts assuming the more restrictive thresholds were adopted.

In regard to the 20 percent portion of the standard, there is some detrimental disturbance from previous management such as road and lift construction. These previously impacted areas are included in the 8.7 percent figure (6.45 acres). As stated in the standard and guideline above the ski area is considered a permanent recreation facility, which operates on a seasonal basis and is excluded from this portion of the standard and guideline. However, as displayed above, the project would meet all standards and guidelines for MS 22.

6. Rehabilitate adversely impacted sites.

All Action Alternatives associated with ski area expansion require specially designed mitigation measures that include the rehabilitation of sites disturbed by project implementation, as documented in FEIS, Chapter II, Section G, 8a and b. In addition, all Action Alternatives associated with ski area expansion include multiple restoration projects, as documented in FEIS Chapter II, Section F, 7.

2. Riparian Reserves - NFMA Claim

a. Failure to Designate Landslide Hazard Zone 2 as Riparian Reserve

The Court of Appeals found that the Forest Service failed to designate the Landslide Hazard Zone 2 (LHZ) land as Riparian Reserve and that results in violations of the Rogue River LRMP, the NWFP (and Aquatic Conservation Strategy), and the NFMA. For analysis purposes, this section of the FSEIS will include Landslide Hazard Zone 2 as part of the Riparian Reserve, and analyze and disclose the land cover (vegetation) effects of expansion against revised Riparian Reserves.

Supplemental Information
The 2004 FEIS displays Landslide Hazard Zonation in MAP III-3 (page III-16). A summary of the acreage within the four Landslide Hazard Zones, within the Site Scale Analysis Area was presented in the FEIS on page III-15. The Court of Appeals found that Landslide Hazard Zone 2 should be included within the Riparian Reserve allocations as associated with the Northwest Forest Plan[20]. The following shaded text ***supplements*** FEIS Chapter III and IV, Section 3 (pages III-12 through 17, and IV-10 through 20, for Geologic Slope Stability, and FEIS Chapter III and IV, Section 10 (pages III-76 through 86, and IV-98 through 107) for Aquatic Conservation Strategy.

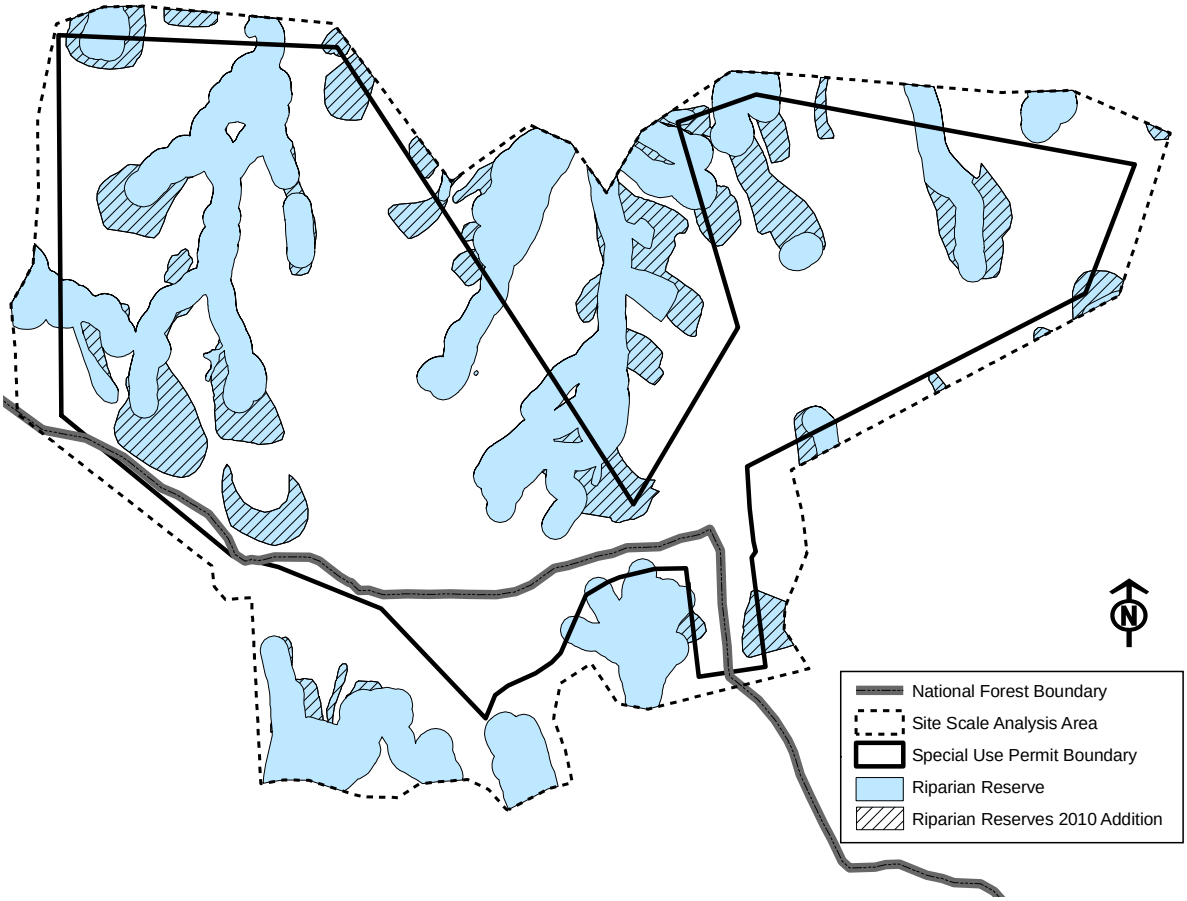
LHZ 2 as RIPARIAN RESERVE

The following figure (FSEIS II-9) and table (FSEIS II-3) portray revised Riparian Reserve delineations based on inclusion of Landslide Hazard Zone 2. At the Site Scale Analysis Area, this equates to an **increase of 145.13 acres** (from 333.34 to 478.47). This is an approximate 44 percent increase over the 2004 FEIS. Note that the total acres of LHZ 2 as discussed in the 2004 FEIS do not all directly add to the Riparian Reserve; this is because some of the LHZ 2 acres were already included in the Riparian Reserve, based on their distance from the channel or stream course.

Most of the area being added to Riparian Reserve is associated with intermittent or ephemeral streams (see Figure FSEIS II-8). Also note that much of the additional LHZ 2 area being added is in an upland position outside of the 150 foot horizontal distance from the channel originally mapped as Riparian Reserve, and not associated with perennial streams.

[20] This zone is the second highest risk terrain. It is land characterized as terrain with slopes from approximately 50-69 percent, and is typically located upslope from Zone 1 (2004 FEIS page III-13). This zone [was not] designated as Riparian Reserve under the NWFP by the project Geologist and co-designer of the LAZARE technique.

Figure FSEIS II-9. Riparian Reserve including LHZ 2 (not previously included) at Site Scale



Supplemental Information
Riparian Reserves are established as a component of the Aquatic Conservation Strategy (ACS), designed primarily to restore and maintain the health of aquatic systems and their dependent species. Riparian Reserves also help to maintain riparian structures and functions and conserve habitat for organisms dependent on the transition zone between riparian and upland areas. The width of the Riparian Reserves for wetlands and streams on the RRNF and the KNF in the Site Scale Analysis Area was determined based on the rationale presented in FEIS Table III-19.

The following shaded text ***supplements*** FEIS Chapter III and IV, Section 10, pages III-76 through 86, and IV-98 through 107 for Aquatic Conservation Strategy.

RIPARIAN RESERVE LAND COVER CONDITIONS

The current revised areas of Riparian Reserves within the Site Scale Analysis Area, as well as the degree to which the revised Riparian Reserves are changed under the decision for the Mt. Ashland Ski Area Expansion project, are summarized in Table FSEIS II-4. Land cover (vegetation) changes are expressed in terms of clearing (tree falling, vegetation cutting) and grading (tree and vegetation removal and moving soil).

Table FSEIS II-4. Supplemental Riparian Reserve Land Cover Conditions – Site Scale Analysis Area

Parameter	2004 Decision (Modified Alternative 2)*	Modified Alternative 2 - Revised 2010 for inclusion of LHZ 2	Change From 2004 Decision
Total Acres of Riparian Reserves	333.34	478.47	+145.13
Vegetation Clearing in Riparian Reserves (acres)	4.74	14.82	+10.08
Grading in Riparian Reserves	1.24	1.80	+0.56
Total Forested Cover in Riparian Reserves	218.67	378.58	+ 159.91
Remaining Forested Cover in Riparian Reserves (acres) after expansion	213.55	363.76	
Reduction in Forested Cover in RiparianReserves(percent)	- 2.3%	- 3.9%	

***From 2004 Table Rod-8, page ROD-23**

Table FSEIS II-4 portrays revised Riparian Reserve delineation based on inclusion of Landslide Hazard Zone 2 (LHZ 2) in both total acres of Riparian Reserves and total forested land cover within Riparian Reserves.

Inclusion of LHZ 2 increases the total acres of Riparian Reserves by 145.13 acres (from 333.34 to 478.47). This is an approximate 44 percent increase over the 2004 decision.

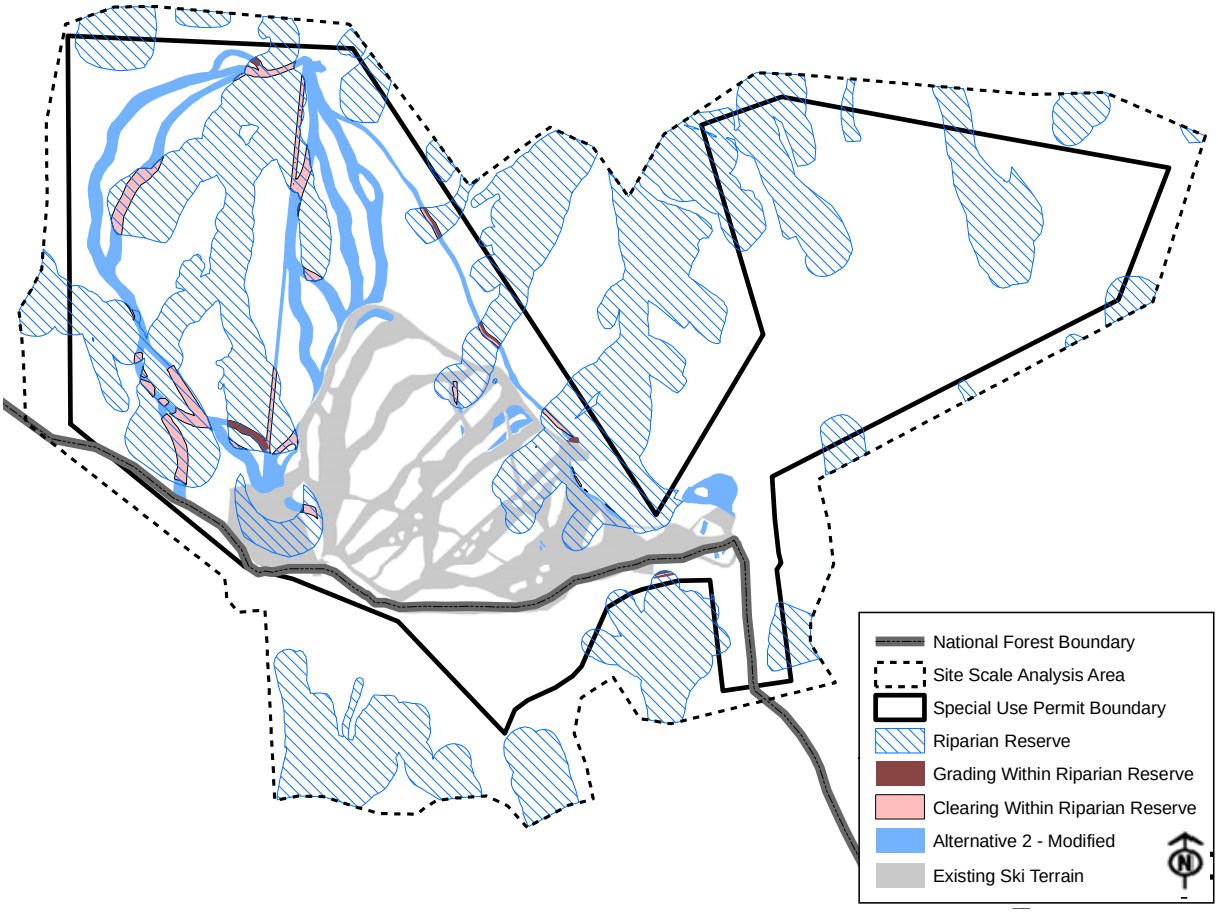
Inclusion of LHZ 2 in Riparian Reserves results in an increase of 10.08 acres (from 4.74 to 14.82) of vegetation clearing within Riparian Reserves. This is an approximate 208 percent increase over the 2004 decision.

Inclusion of LHZ 2 in proposed grading in Riparian Reserves results in an increase of 0.56 acres (from 1.24 to 1.80). This is an approximate 45 percent increase over the 2004 decision.

The total forested land cover within Riparian Reserves with the inclusion of LHZ 2 is 378.58, a 159.91 increase in acres (from 218.67 to 378.58). This is an approximate 73 percent increase over the 2004 decision.

Changes from the ski area expansion with inclusion of LHZ 2 would result in a reduction in forested land cover of 14.82 acres (from 378.58 to 363.76) or a 3.9 percent reduction. Comparatively, the decrease in the 2004 decision was 5.12 acres (from 218.67 to 213.55) or a 2.3 percent reduction. These revised conditions are shown on the following supplemental figure, Figure FSEIS II-10:

Figure FSEIS II-10. Summary of Riparian Reserve Land Cover Conditions, Site Scale Analysis Area



Note that changes in acreages associated with supplemental Riparian Reserve information affect the current condition, which then provides the baseline for effects of the alternatives. Alternatives 2 and 6 are the focus of the FSEIS (as noted above and by the Appeals Court). The consequences of the other Action Alternatives (i.e., Alternative 3, 4 and 5) would be relative to the current condition; in other words, any change in current condition would trigger an equivalent change in effects and would affect all Action Alternatives in the same way. Alternative 1 (No-Action) would not change the current conditions; Alternative 3 would impact about half the amount of Riparian Reserves compared to Alternative 2/6; Alternative 4 would impact a similar amount of Riparian Reserves in the Knoll area; and Alternative 5 would impact the least amount of Riparian Reserves, primarily in the area of the current facility (see Table IV-13, 2004 FEIS page IV-101).

Supplemental Information

As noted above, this FSEIS has identified for analysis purposes, several land allocation changes based on the Court of Appeals Opinion. The following shaded text ***supplements*** FEIS Chapter I and replaces the 2004 FEIS Map I-3 (page I-20):

SUPPLEMENTAL LAND ALLOCATIONS

The following figure FSEIS II-11 portrays the addition of Restricted Riparian (MS 26) and Landslide Hazard Zone 2 to the Riparian Reserves. Note that the Upper Ashland Watershed portion of the Special use Permit Area (796 acres) is also considered to be Restricted Watershed (MS 22), but is not included in this figure.

Figure FSEIS II-11. Supplemental Land Allocations

3. Determinations - Riparian Reserves and Restricted Watershed Terrain

The supplemental analysis documented in this FSEIS has analyzed portions of the Special Use Permit Area as Restricted Riparian (MS 26), and Restricted Watershed (MS 22) and has analyzed the potential effects of expansion in regard to applicable (soils) LRMP standards and guidelines. This FSEIS has analyzed Landslide Hazard Zone 2 as part of the Riparian Reserve, and analyzed and disclosed the land cover (vegetation) effects of expansion against revised Riparian Reserves**.**

a. Restricted Riparian (MS 26)

Based on supplemental analysis, with inclusion of perennial streams and wetlands, there is a total of 128.25 acres of Restricted Riparian (MS 26) terrain within the Site Scale Analysis Area; 71.61 acres of this are within the Special Use Permit Area and subject to applicable (soils) standards and guidelines.

For the Mt. Ashland Ski Area Expansion project regarding MS 26, the "activity area" is assumed to be the total area of effect for lift and run clearing (3.83 acres; see FSEIS page II-28 and Figure FSEIS II-7). Clearing for ski area expansion would not detrimentally compact, puddle or displace more than 10 percent of this activity area because of mitigation measures including the use of low ground pressure construction equipment. Approximately 0.06 acres of detrimental soil is predicted from the footings and excavation associated with the Lower Wetlands Bridge Construction crossing of the Middle Fork that is within MS 26.

Detrimental soil conditions are predicted at 1.6 percent for activities within MS 26, in compliance with the 10 percent standard and guideline. There would be no detrimental soil conditions created within MS 26 wetlands because there would be no clearing or grading within wetlands; these areas are part of a ski run that would only be used in the winter.

The only activity that would create mineral soil exposure is associated with the Lower Wetlands Bridge Construction crossing of the Middle Fork that is within MS 26. This activity would occur within Landtype 52. There would be no mineral soil exposure created within MS 26 wetlands because there would be no clearing of ground vegetation or grading in wetlands. The mineral soil exposure standard for MS 26 within Landtype 52 is 20 percent. **Mineral soil exposure from ski area expansion within MS 26 is predicted at 1.6 percent, in compliance with the 20 percent standard and guideline.** The 0.06 acres of mineral soil exposure is resultant of the footings for the Lower Wetlands Bridge Construction crossing of the Middle Fork that is within MS 26. The rest of the clearing within MS 26 would not result in bare mineral soil exposure; brush, slash, small downed logs and other mineral and vegetative material would be retained and low vegetation would be allowed to occupy the site as effective ground cover.

Ski area expansion would also comply with the other soils standards and guidelines for MS 26, as documented above in the previous section beginning at FSEIS page II-31.

b. Restricted Watershed (MS 22)

Based on supplemental analysis, there are approximately 796 acres of the Special Use Permit Area within the Upper Ashland Creek watershed. This area is also within the Ashland Municipal Watershed and subject to (soils) standards and guidelines for Restricted Watershed (MS 22).

For the Mt. Ashland Ski Area Expansion project regarding MS 22, the "activity area" is the total developed area of impact (74 acres) for ski area expansion within the Upper Ashland Creek watershed. Effects from compaction, puddling or displacement are minimized because of mitigation measures including the use of low ground pressure construction equipment. The 2004 Record of Decision disclosed an estimated percent of detrimental conditions at 16.5 percent for Modified Alternative 2 (the decision). This figure was for the total developed area within all affected watersheds; **the predicted detrimental soil impact for activities within MS 22 (Ashland Creek Watershed) is 8.7 percent detrimental disturbance, in compliance with the 10 percent standard and guideline.**

As documented in this FSEIS for analysis purposes, for MS 22, Landtype 80 (the Landtype for which the majority of clearing activities would occur) has a mineral soil exposure standard of 30 percent. **According to the required monitoring threshold standard (see Table ROD C-3, page C-17, the resultant bare mineral soil exposure would not be allowed to exceed 25 percent (**the least restrictive) and in most situations would be much less than 25 percent for the various activities. In some cases the threshold is the current level of existing bare soil or less. These **thresholds and predicted consequences would therefore result in conditions to be in overall compliance with the standard and guideline for MS 22 of 30 percent or less for Landtype 80.** Note that no other soil types where clearing activities would occur have the more restrictive mineral soil exposure standard of fifteen percent, and therefore would also be in compliance with the standard and guideline.

Ski area expansion would also comply with the other soils standards and guidelines for MS 22, as documented above in the previous section beginning at FSEIS page II-33.

c. Landslide Hazard Zone 2 as Riparian Reserves

The supplemental analysis documented in this FSEIS has determined a revised Riparian Reserve delineation based on inclusion of Landslide Hazard Zone 2. At the Site Scale Analysis Area, this equates to an increase of 145.13 acres (from 333.34 to 478.47). This is an approximate 44 percent increase over the 2004 FEIS. The total acres of LHZ 2 as discussed in the 2004 FEIS do not all directly add to the Riparian Reserves; this is because some of the LHZ 2 acres were already included in the Riparian Reserves, based on their distance from the channel or stream course. Also note that much of the additional LHZ 2 area is in an upland position outside of the 150 foot horizontal distance from the channel originally mapped as Riparian Reserves, and not associated with perennial streams.

Based on inclusion of Landslide Hazard Zone 2 as Riparian Reserves, supplemental analysis has determined that the decision for the Mt. Ashland Ski Area Expansion project would affect an additional 10.08 acres of Riparian Reserves for a total of 14.82 acres with proposed clearing (Figure FSEIS II-10). As seen in FEIS Maps III-3 and IV-2 (pages III-16 and IV-19), this clearing would occur primarily within upper portions of LHZ 2, not associated with perennial streams or wetlands. Much of this area is non- or sparsely-forested (see Figure FSEIS II-3).

Supplemental analysis determined an additional 0.56 acres of grading within Riparian Reserves for a total of 1.24 acres; as seen in Figure FSEIS II-10 this additional grading is primarily near the top of the proposed C-6 Lift, relatively high on the slope in open sparsely forested dry areas and not associated with streams or wetlands.

Although there is an increase in acres classified as Riparian Reserves, standards and guidelines would continue to be met because of the design of the proposed expansion facilities. The effects associated with LHZ 2 were described in the 2004 FEIS (pages IV-1- through IV-20). New developed recreation facilities would have an impact within Riparian Reserves at the site scale; however, developed recreation facilities are not prohibited within Riparian Reserves (see FEIS Table IV-14 and pages IV 101 through 105). Mitigation Measures would be employed to reduce effects at the Site Scale. Restoration projects would also be implemented to improve existing localized degradation in Riparian Reserves within the Special Use Permit Area.

This project is designed to contribute to maintaining or restoring conditions at the site, watershed analysis, and fifth-field watershed scales over the long term. Based on the above discussion, inclusion of LHZ 2 not previously included into the Riparian Reserves, changed the reduction in forested cover from 2.3 percent as documented in the 2004 FEIS to 3.9 percent in the 2010 revision. Due to the relatively small change (1.6 percent increase) in the overall reduction of forested cover in Riparian Reserves, it is not expected to affect the attainment of Aquatic Conservation Strategy Objectives.

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CHAPTER IV - LIST OF PREPARERS AND CONTRIBUTORS

This Final Supplemental EIS document was prepared by the USDA Forest Service, Rogue River–Siskiyou National Forest. A Forest Service Interdisciplinary Team (IDT) provided technical review of research and analysis. The following coordinators and resource specialists participated in the overall preparation of the Final Supplemental EIS.

A. FOREST SERVICE CONTRIBUTORS

The following Rogue River–Siskiyou National Forest and Regional Office personnel (including contractors and former employees) provided leadership and input for this Final Supplemental EIS. Responsibilities included conducting the supplemental environmental analysis process, and organization of information and documentation under the National Environmental Policy Act (NEPA).

CONTRIBUTOR	EDUCATION & EXPERIENCE	CONTRIBUTION
Donna Mickley District Ranger, Siskiyou Mountains Ranger District	BS Geology. 22 years with FS; 11 years as engineering geologist; 10 years as Special Project Coordinator overseeing environmental analysis and implementation of large-scale projects; 1 year as District Ranger.	Overall management of NEPA process and documentation.
Steve Johnson Recreation Specialist, Siskiyou Mountains Ranger District	BA English; graduate work in American Literature. 30 years. FS; 18 years Snow Ranger/Permit Administrator/Winter Sports Specialist	Interdisciplinary Team Leader and Project Coordinator.
Don Boucher Resource Planner and Analyst, Siskiyou Mountains Ranger District	Undergraduate studies Forestry and Engineering. 28 years FS; in FS planning, NEPA documentation and Geographic Information Systems.	Analysis of Pacific fisher effects; mapping and consequence analysis for land allocations, and analysis for standards and guideline compliance.
Ken Grigsby NEPA Contractor	BA Biology. 33 years in FS environmental planning, NEPA review, analysis and documentation (former Forest Planner).	Writer/Editor; overall document compilation, NEPA strategy and Forest Plan interpretation.
David Clayton Forest Biologist, Rogue River-Siskiyou National Forest	BS Biology. 13 years as FS Wildlife Biologist. 4 years with USFWS.	Pacific fisher analysis and documentation, including scientific literature review.
Jeff von Kienast Wildlife Biologist, High Cascades Ranger District	BS Fish and Wildlife; MS Wildlife. 18 years as Forest Service Wildlife Biologist.	Pacific fisher analysis and documentation, including scientific literature review
Dave Steinfeld Soil Scientist, FS Regional Office	BS Soil Science; post-graduate studies in geology. 13 years as FS soil scientist and 21 years at J. Herbert Stone Nursery	Analysis and documentation of soil processes including erosion, sedimentation, and standard and guideline compliance.
Peter Jones Geotechnical Engineer, FS Regional Office	BS Geology and MS Geological Engineering. 26 years primarily as geologist. Cert. Engineering Geologist, OR; Reg. Professional Geologist, OR.	Analysis of slope stability and LHZ 2.
Wayne Rolle Forest Botanist, Rogue River-Siskiyou National Forest	BS Science-Math; graduate studies in botany. 21 years as Forest Botanist and several years as private consultant botanist.	Review of Survey and Manage botanical species.
Joni Brazier Hydrologist/Soil Scientist, Grants Pass Interagency Office	BS Natural Resources, with focus on wildland hydrology. 8 years as FS Hydrologist and 2 years as FS Soil Scientist.	Review of hydrologic analysis, Riparian Reserves and standard and guideline compliance for MS 22 and 26.
Ellen Goheen Plant Pathologist, SW Oregon Forest Insect and Disease Service Center	BS Forestry, MS Plant Pathology. 27 years Pacific Northwest Region Insect and Disease Group, last nine years in SW Oregon.	Review of latest literature and discussion on climate change effects.

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CHAPTER V - LIST OF AGENCIES AND ORGANIZATIONS TO WHOM COPIES OF THE STATEMENT ARE SENT

This Final Supplemental Environmental Impact Statement (FSEIS) has been prepared, circulated and filed in the same fashion (exclusive of scoping) as the draft and final statement (40 CFR 1502.9(c)). Copies of the FSEIS have been distributed to the following organizations and government agencies in the form of a hard copy, compact disc, or have been notified that the document is available on the Internet. Those individuals specifically requesting a copy of the FSEIS have also been mailed a hard copy or compact disc.

Copies of the FSEIS are available for review at the following locations:

Rogue River-Siskiyou National Forest
Supervisor's Office
Medford Interagency Office
3040 Biddle Road
Medford, OR 97504

Rogue River–Siskiyou National Forest
Siskiyou Mountains Ranger District
Ashland Ranger Station
645 Washington St.
Ashland, OR 97520

FEDERAL AGENCIES

Advisory Council on Historic Preservation

Agriculture, U.S. Department of
- APHIS PPD/EAD
- Forest Service, National Forest Supervisor's Offices (SO) and Ranger Districts (RD)
  - Klamath SO
    - Happy Camp RD
  - Fremont-Winema SO

- Forest Service, Regional Office (Region 5)
- Forest Service, Regional Office (Region 6)
- Forest Service, Washington Office
- National Agricultural Library
- Natural Resource Conservation Service

Commerce, U.S. Department of
- National Marine Fisheries Service
  - Habitat Conservation Division

Defense, U.S. Department of
- Army Corps of Engineers

Environmental Protection Agency
- Office of Federal Activities, EIS Filing Section
- Region 10, EIS Review Coordinator

U. S. Coast Guard
- Environmental Management

Interior, U.S. Department of the
- Bureau of Land Management
  - Medford district Office
- Fish and Wildlife Service
- Office of Environmental Policy and Compliance

STATE AGENCIES

State of Oregon
- Department of Environmental Quality
- Department of Fish and Wildlife
- Department of Forestry
- Governor's Natural Resources Office
- Water Resources Department

NATIVE AMERICANS

Confederated Tribes of Siletz Indians of Oregon
Confederated Tribes of the Grand Ronde Community of Oregon
Hoopa Valley Tribe
Karuk Tribe of California
Quartz Valley Indian Reservation
Yurok Tribe

ELECTED OFFICIALS

U.S. Senator Jeff Merkley (Oregon)
U.S. Senator Ron Wyden (Oregon)
U.S. Representative Greg Walden (Oregon)

COUNTY

Jackson County Administrator
Jackson County Board of Commissioners

CITY

City of Ashland
City of Medford
City of Yreka

LIBRARIES

Jackson County, Ashland
Jackson County, Medford
Siskiyou County, Yreka
Southern Oregon University

ORGANIZATIONS

Ashland Chamber of Commerce
Grants Pass/Josephine Chamber of Commerce
Klamath Siskiyou Wildlands Center
Mt. Ashland Association
National Ski Areas Association
Northwest Ecosystem Defense Center
Oregon Wild
    Portland
    Eugene
Pacific Northwest Ski Areas Association
Sierra Club
    Rogue Group
National Center for Conservation Science and Policy
Ski Area Citizen's Coalition
Soda Mountain Wilderness Council
Southern Oregon Nordic Club
Wild Wilderness

OTHERS

Ashland's Daily Tidings
Medford's Mail Tribune
Siskiyou Daily News

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APPENDIX A

New Information and Changed Circumstances Evaluations

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Appendix A
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Mt. Ashland Ski Area Expansion
July 2, 2007

Evaluation of information to determine whether there are substantial changes in the proposed action that are relevant to environmental concerns or there are significant new circumstances or information relevant to environmental concerns and having a bearing on the authorized decision or its impacts.

I. INTRODUCTION

The Mt. Ashland Ski Area is situated on National Forest land at the crest of the Siskiyou Mountains, just north of the California-Oregon border and about 7 air miles from the City of Ashland. The Forest Service has issued a Special Use Permit ("SUP") authorizing operation of the ski area. Construction of the present ski area commenced in 1963; the area opened in 1964.

During its first three decades, the ski area was operated by a succession of private, for-profit companies, for whom it proved a financial disappointment. In 1992, the private operator decided to close the ski area. Plans were drawn up to dismantle the chair lifts and other improvements (Mt. Ashland Ski Area Restoration EA--AR 4784-4837). The City of Ashland then interceded, acquiring the Special Use Permit and facilities (AR 4921-43). The City leased the ski area, for a nominal sum, to Mt. Ashland Association (MAA), a non-profit entity established for the purpose of operating the ski area (AR 4862-4920).

The ski area currently occupies about 287 acres. It includes a day lodge, ski rental shop, four chairlifts, and approximately 123 acres of ski runs. Expanding the Mt. Ashland ski area is not a new idea. Various plans have been proposed over the past 40 years.

In 1991, the Forest Service approved expansion of the ski area in concept. Mount Ashland Ski Area Master Plan Record of Decision ("1991 Master Plan"), AR 4404-23. See also AR 4131-4403 (Final Environmental Impact Statement for 1991 Master Plan). Additional environmental analysis was planned to consider the details, such as the precise location of each component and the construction design. AR 4411.

The City's lessee, MAA, submitted a new expansion proposal in 1998. A draft environmental impact statement (DEIS) was circulated in January 2000 (AR 12569-13208). It generated considerable public comment, in part because the only two action alternatives evaluated were perceived as too similar (AR 19354- 62, 22130-32). A new draft EIS was circulated in 2003 (AR 22140-23222).

The Forest Service has studied the proposal and its impact for years via the Environmental Impact Statement process and considered thousands of pages of public comment. The Forest Service issued a Final Environmental Impact Statement (FEIS) in 2004. In the FEIS, the Forest Service studied six alternatives (SAR 191-311). It discussed the affected environment and environmental consequences in depth. The Forest Service analyzed, for example, issues of climate, avalanche and natural hazards, minerals and seismic conditions, soil processes including erosion and sedimentation, watershed resources, water quality, aquatic conservation, air quality, landscape ecology, current vegetation conditions, outstanding or unusual plant communities, and wildlife species (SAR 108-16,315-521,528-703).

The Forest Service ultimately issued a Record of Decision and approved a "Modified Alternative 2." in September 2004 (SAR 1-97). Twenty-eight notices of appeal were filed (AR 28574). All administrative appeals were denied in December 2004.

Oregon Natural Resources Council Fund (ONRC), Sierra Club, and the National Center for Conservation Science and Policy (formerly known as Headwaters), brought suit under NEPA and NFMA challenging the FEIS and the approval of the expansion on multiple grounds. The district court granted summary judgment in favor of the Forest Service. ONRC has appealed to the Ninth Circuit Court of Appeals. At this time, there has been no action to implement expansion activities.

II. ONRC'S REQUEST FOR SUPPLEMENTAL EIS

In a letter dated February 4, 2007, plaintiffs (ONRC) raised seven points they suggest constitute new information requiring preparation of a Supplemental EIS (SEIS), per 40 CFR § 1502.9(c)(1)(ii). On May 31, 2007, they added to their arguments via email noting "the recent overturning of the 2004 version of the ACS rules." On June 11, 2007, they added to their SEIS arguments "the recent court-ordered reinstatement of the Clinton-era roadless rule." On June 18, 2007, they noted additional evidence supporting the need for an SEIS due to the draft EIS for the Mount Ashland LSR Fuels Reduction Project (Klamath National Forest, Region 5).

Forest Service policy for implementing regulations under the National Environmental Policy Act (NEPA) outlines a procedure for review of actions that are awaiting implementation when new information or changes occur and should be considered for correction, supplementation, or revision (FSH 1909.15, section 18).

Forest Service policy is to review new information received after a decision has been made. If new information or changed circumstances relating to the environmental impacts of a proposed action or decision come to the attention of the responsible or deciding official after a decision has been made and prior to implementation, the official must review the information carefully to determine its importance (FSH 1909.15, section 18.1). If, after an interdisciplinary review and consideration of new information within the context of the overall project or decision, the Responsible Official determines that a correction, supplement, or revision to an environmental document is not necessary, implementation should continue and the results of the interdisciplinary review is to be documented in the project file (FSH 1909.15, section 18.1).

III. METHODOLOGY

The claims for new information and/or changed conditions was evaluated by the core project coordinators and interdisciplinary team leadership for the EIS and project development, including Steve Johnson (IDT Leader, Project Coordinator and Recreation Specialist), Ken Grigsby (Forest Planner, NEPA Specialist and EIS Managing Editor), and Don Boucher (Environmental Coordinator and Lead EIS Analyst).

Interdisciplinary evaluation was done on each claim to determine whether it was **sufficient** (complete and accurate) to warrant consideration. If sufficient, the information was then evaluated to determine whether it was **new,** meaning it had not been considered in preparation of the MASA FEIS. The information was determined not to be new if it was directly addressed by text in the FEIS.

If the information was determined to be new, it was then evaluated as to whether it was **relevant** to the project and the decision made for ski area expansion at MASA (i.e., if it has a bearing on decisions for actions and effects of ski area expansion). If the information was determined to be new and relevant, it was further evaluated to determine if it was significantly different from the information that was presented in the FEIS, i.e., is the new information **significant**?

IV. EVALUATION OF ONRC'S NEW INFORMATION CLAIMS

A. The following numbered items correspond to ONRC's February 4, 2007 letter from Marianne Dugan regarding the need for a Supplemental EIS

1. DEQ states that it will be setting a TMDL for the currently impaired watershed.

This claim is not specific as to what constitutes new information or why it is relevant. It is an accurate statement. According to the FEIS, "Reeder Reservoir is currently listed as a water quality limited (WQL) waterbody for sedimentation under Section 303(d) of the Federal Clean Water Act. As a tributary, Upper Ashland Creek is considered impaired, although it is not listed. Because Reeder Reservoir is listed, a Water Quality Management Plan (WQMP) is required by the ODEQ to provide a strategy for reducing sedimentation to acceptable background levels. In coordination with the Forest Service and the BLM, ODEQ is currently developing a Water Quality Management Plan (WQMP) to address the 303(d) listed non-point sources of pollution for the entire fifth-field Bear Creek Watershed. Completion of this plan is the responsibility of ODEQ and is now anticipated to be completed in 2005 (ODEQ website)." (FEIS III-73).

"Reeder Reservoir is currently listed as a water quality limited waterbody for sedimentation under Section 303(d) of the Federal Clean Water Act." (FEIS IV-91).

The entire Bear Creek Watershed WQMP and TMDLs has gone through a formal public comment period, having ended on March 9, 2007. ODEQ is finalizing their plan and will submit to EPA for approval. Following approval by EPA, TMDLs will be communicated to all affected parties.

This claim is not new, having been discussed in the FEIS. A forthcoming WQMP was anticipated. Having a finalized WQMP is not a requirement of the ski area expansion decision. The FEIS analysis and ROD for expansion will not conflict with the forthcoming WQMP. It will not conflict because no adverse impacts to water quality are predicted (FEIS III-73 and IV-90-93). This situation is not significantly different than that analyzed in the FEIS. Without a conflict, there is no information that a supplemental EIS could inform.

2. Army Corps has state dit (sic) will be delineating wetlands in order to issue either a nationwide permit or individual permit for fill of wetlands prior to the project moving forward.

The need for permitting under the Clean Water Act was discussed in the FEIS. This claim is not specific as to what constitutes new information or why it is relevant. It is an accurate statement, and is discussed in the FEIS:

> "The US Army Corps of Engineers (Corps) would provide the regulatory authority necessary to evaluate the Action Alternatives under Section 404 of the Clean Water Act. The Proposed Action and alternatives evaluated in the Final EIS have been developed with the objective of placing no dredged or fill material in jurisdictional wetlands or other Waters of the United States. As such, no Corps permit would be required, provided that the approved project can proceed with no placement of fill into jurisdictional streams or wetlands.
>
> In the event that minor discharges of dredged or fill material would be required, these activities would be designed to meet the requirements of the new and/or modified nationwide permits (e.g., Nationwide Permit #18 - Minor Discharges or Nationwide Permit #42 - Recreational Facilities).
>
> Similarly, the Oregon Department of Environmental Quality (ODEQ) would provide the water quality certification for such a permit action under Section 401 of the Clean Water Act. This certification could include additional permit conditions." (FEIS I-44)

This claim is not new, having been discussed in the FEIS. Forthcoming permitting by the Corp is part of project implementation under the ski area expansion decision. The situation regarding permitting is not significantly different that that analyzed in the FEIS analysis and ROD for expansion. There is nothing that a supplemental EIS could inform.

3. MAA now states that it plans to build an "interim lodge," which was not included in the EIS as part of proposed project. The plan appears to be to build an 8,000 sq ft lodge and then to rebuild or expand it later. Even if this is just a "Ticket Building" or "Arrival Services Building," there is nothing in the FEIS or ROD that states that there would be any interim building and no analysis of the impacts of the interim building.

The Forest Service has not received a formal proposal from MAA or the City of Ashland and the statement above is unclear (base lodge or moraine lodge location). Therefore this claim is not sufficient. The following excerpt from the FEIS discusses options for interim buildings and minor changes:

> **"Comment #60: Combine Arrival Services and Ticket Buildings into one structure (2504) Combine the Arrival Services and Ticket Buildings into one structure for utility efficiency and less intrusion upon the environment. (D03-920, page 2)**
>
> **Response:** Under the action alternatives, exact locations and function of each building(s) would be determined at implementation. Utility efficiency, visual concerns, guest flow, and other factors would determine if these two buildings could be combined into one structure. Based on public comment, the FEIS will analyze increased and expanded building footprints between the Base Lodge and Rental Shop (including expansion of the Base Lodge) for the purpose of disclosing environmental consequences under NEPA." (FEIS Appx A-24-25)

The following excerpt from the ROD discusses minor changes:

> "Minor changes may be needed during implementation to better meet on-site resource management and protection objectives. Minor adjustments to ski runs, facilities, and infrastructure elements may be needed during final design for resource protection, to improve operational feasibility, and to better meet the intent of my decision. Many of these minor changes will not present sufficient potential impacts to require any additional specific documentation or action to comply with applicable laws. Notable changes will be documented through implementation monitoring and made available to the public." (ROD-46)

This claim does not represent new information, nor is it sufficiently complete for meaningful assessment. The potential for building changes was discussed in the FEIS and ROD, and assessment of significance concerning existing NEPA documentation cannot be conducted until formal and detailed requests for specific changes are submitted by the permittee for consideration. Forthcoming actual proposals were discussed in the FEIS analysis and the ROD recognized this flexibility. This type of minor adjustment does not represent significant effects that were not foreseen or analyzed. There is nothing that a supplemental EIS could inform.

4. MAA now states that it will be renovating the existing lodge (Clark supp. Decl. At 3), another project that is not included in the expansion EIS.

This claim is not specific as to what constitutes new information or why it is relevant (not sufficient). Assuming that "renovation" means not expanding the current footprint, then there is no change from the current condition, no additional environmental effect, and therefore no need for NEPA analysis at all. MAA "renovates" the existing lodge almost every summer (e.g., widening stairways, remodeling food service area, etc.). These renovations are annually approved in the Summer Operating Plan.

Additionally, an expanded footprint for the current base lodge was analyzed under other Action Alternatives in the FEIS (Alternatives 3 and 6), but was not selected in the ROD.

This claim (a proposal to remodel an existing building) is not new, having been discussed in the FEIS, nor would it be significant since the FEIS analysis and ROD for expansion would not conflict with such a proposal, if it were forthcoming. Without a conflict, there is nothing that a supplemental EIS could inform.

5. Significantly increased cost of the project, dramatically changing the economic cost-benefit analysis; and the related issue of the use of borrowed funds versus fundraising (both of these issues were discussed in detail in the more recent filings with the court).

This claim is not specific as to what constitutes new information or why it is relevant (not sufficient). The use of borrowed funds and fundraising was discussed in the FEIS (not new information). The position of the Forest Service regarding financial feasibility is discussed in FEIS Appendix B, which is quoted below.

> "*1)* The financial ability of the MAA to finance an expanded ski area (if authorized) is not within the purview of the Forest Service. The Forest Service is processing a request under Special Use Permit provisions for an expanded ski area; the ability of the MAA (as a non-profit corporation) to finance proposed improvements is not an issue that is germane to Federal analysis under NEPA. Although irrelevant, the prudence of this corporation has been demonstrated through many years of compliance with the terms of the Special Use Permit, including payments to the Government for permitted use, under national policy and provisions of law. Further, as provided under law, the MAA has contributed substantial funding held in Collection Agreements available to the Forest Service for analysis and planning under NEPA for ski area expansion.
>
> *2)* The recent and current financial status of the MAA is not within the purview of the Forest Service, and is not germane to the NEPA analysis process being conducted for expansion at Mt. Ashland. Proposals being analyzed in detail include provisions for staging of the implementation, over periods of up to 10 or more years. If ski area expansion were to be authorized, each stage of implementation would be reviewed and authorized annually (or more often) by the Forest Service, dependant on the needs (and presumably financial ability) and request of MAA at that particular time. The Forest Service cannot require that financial capital to implement the entire authorized action be solvent at the time of initial development, or at any stage." (FEIS Appx B-6-7).

The FEIS analysis and ROD for expansion are not based on precise or current economic figures, only relative figures. As explained in FEIS Appx. A:

> The financial analysis includes/incorporates the cost of debt to service the loan. It assumes that the ski area would take on debt to finance the first phase of improvements and begin fundraising at the same time to finance Phase 2 and 3 improvements. Furthermore, the analysis incorporates a "discount rate" to account for a variety of factors associated with financial risks and costs, including the borrowing rate for debt incurred in Phase 1, and the risks associated with undertaking improvements, the potential for poor snow years, changing economic conditions and other factors. This analysis is conservative for the following reasons:
>
> - The Ski Area has stated that it plans to fund improvements in all phases through fundraising or retained earnings, rather than through a loan. This would substantially reduce the cost of improvements and increase overall net revenues.
> - The analysis incorporates a relatively high discount rate (20%). Use of a lower discount rate would make the analysis more financially favorable.

- The analysis assumes a gradual growth in skier visits, rather than an early spike associated completion of improvements, which is probably more likely to occur. Use of the discount rate reduces the value of longer term growth in comparison to shorter term growth, making this assumption about gradual growth conservative.
- The analysis includes low, medium, and high visitation growth scenarios to account for potential variations in snowfall (e.g., several bad snow years in a row), overall economic conditions and other factors."

This situation is not significantly different from that analyzed in the FEIS. There is nothing that a supplemental EIS could inform.

6. Failure to meet purpose and need due to changing the phasing of Lift 15 (as discussed in recent briefing). MAA now plans to include construction of Lift 15 in Phase 2 instead of Phase 1. Purpose and Need #1 states that MAA intends to "develop additional Novice to Intermediate level skiing and snowboarding terrain." (Page I-9). Without Lift 15, no novice or low intermediate skiers would be able to access the C-6 lift and the Middle Branch, because they would have to take Ariel up to the top of the mountain and then ski down upper intermediate terrain in order to access C-6. There is language in the FEIS indicating that Phase 2 and 3 may never be built.

The Forest Service has not received a formal proposal regarding implementation and phasing plans from MAA or the City of Ashland and the statements above are unclear. Therefore this claim is not sufficient. Additionally, this claim does not appear to be accurate since Intermediate skiers could access C-6 via the Windsor Lift. They would not have to take Ariel. The Forest Service position on phasing is described below from Chapter II of the FEIS:

> "A detailed listing of implementation phasing by alternative is **not** included in this Chapter of the FEIS; it is now discussed in the financial analysis appendix (FEIS Appendix I). This was done because scenarios for phasing are for analysis only. The primary use for scheduling and phasing is in predicting financial and economic consequences; phasing in these exact scenarios is not necessarily being proposed, would not be prescribed by the Forest Service (except for watershed restoration), and would be the responsibility of and at the discretion of the proponent if an expansion alternative were selected.
>
> Actual implementation progression, timing of the individual projects, interim project 'steps', and determination of necessity for individual projects within the alternatives would be dependent upon an ongoing analysis of the priority for each project or group of associated authorized projects (by MAA) and the availability of construction capital. It is possible that some projects would be moved to later phases, or not implemented at all after further analysis or experience. Overall completion under any expansion alternative may take ten or more years.
>
> For purposes of analysis, the phasing documented in Appendix I assumes that both mitigation and monitoring are ongoing, and that environmental systems are functioning as stated in this Final EIS. The actual approval of projects on an annual basis would hinge upon review by the Forest Service or appropriate specialists, and approval by the authorized officer, commensurate with the success of Mitigation Measures as determined by monitoring (see Monitoring, above)." (FEIS II-111-112).

This claim is not sufficient for assessment since no such proposal has been submitted; it is not accurate, since C-6 is accessible via the Windsor lift; and it is not new since phasing was discussed in the FEIS. The FEIS analysis and ROD for expansion would not conflict with this proposal, if it were forthcoming. Without a conflict, there is nothing that a supplemental EIS could inform.

7. Replacement of Ariel lift (as discussed in recent briefing). The Clark supplemental declaration (at 3) states that MAA expects to move ahead with this in the next few years.

This proposal has not been submitted to the Forest Service and is not considered a reasonably foreseeable action. It is therefore not sufficient to the consideration of a supplemental EIS. If, and when it is proposed, the Forest Service will analyze the proposal. Replacement of Ariel was analyzed in the FEIS under Alternative 5. This is not new information, nor is it accurate. There is nothing that a supplemental EIS could inform.

B. The following numbered item corresponds to Marianne Dugan's May 31, 2007 email regarding the need for a Supplemental EIS

1. We are adding to our arguments the recent overturning of the 2004 version of the ACS rules. The FEIS (pages I-21 and III-76-77) (especially the last paragraph, right before section "a" on page III-77) makes clear that your client relied on the 2004 version of the ACS rule (now overturned). Compare the 2000 DEIS, which relied on the prior ACS rule, and therefore discussed local and fifth field watershed scale analysis. In contrast, the 2004 FEIS declines to discuss local scale ACS compliance.

This claim is sufficient because the stated ruling of the court is accurate. It is new because the court ruling in fact, occurred after the ski area expansion ROD was issued. The Forest Service does not find it to be relevant, simply because the court removed the 2004 ACS decision. As noted in the claim, this project was analyzed under both interpretations of the ACS (the 1994 version in the draft EIS and the 2004 version in the final EIS). It would not have been appropriate for the ski expansion decision to rely on the 1994 Northwest Forest Plan ACS interpretation, while a 2004 ROD had authorized clarification of the language in the 1994 plan to amend wording about the Aquatic Conservation Strategy.

It is not an accurate claim that the ski area expansion 2004 FEIS does not discuss local scale ACS compliance. An in-depth discussion of scales of analysis is found at FEIS III-42 & 43. Effects are actually analyzed at three scales; the Special Use Permit Area (960 acres), the Site Scale (i.e., local scale; 1,065 acres), and the Watershed Scale (four separate affected watersheds, not equivalent to fifth-field, actually smaller).

As far as compliance with the 1994 ROD for the Northwest Forest Plan regarding ACS consistency, the FEIS clearly documents a description and analysis of the current condition for each affected fifth-field watershed at multiple and smaller scales, a description and analysis of the range of natural variability, and the analysis documents how the project will maintain the existing condition or will move (i.e., restore) conditions toward the range of natural variability.

The Forest Service finds no difference in the consequences for this project, regardless of which ACS interpretation is utilized (not relevant). All actions were analyzed in the context of the Watershed Scale, all of which have existing Watershed Analyses, which was used to inform the decision. All actions are compliant with all applicable ACS components and standards and guidelines, including those for Riparian Reserves (FEIS IV-98 through 107).

While the 2004 FEIS and ROD did not specifically label the nine ACS Objectives in the documents, they did discuss and analyze fully the elements and components of each one. Consistency with the nine objectives is discussed and referenced below:

ACS Objective 1. Maintain and restore the distribution, diversity, and complexity of watershed and landscape-scale features to ensure protection of the aquatic systems to which species, populations and communities are uniquely adapted.

Hydrologic function—ROD page 20
Wetlands— ROD page 21
Riparian Reserve function— ROD page 23
Riparian Reserve standards & guidelines— ROD page 43

ACS Objective 2. Maintain and restore spatial and temporal connectivity within and between watersheds. Lateral, longitudinal, and drainage network connections include floodplains, wetlands, upslope areas, headwater tributaries, and intact refugia. These network connections must provide chemically and physically unobstructed routes to areas critical for fulfilling life history requirements of aquatic and riparian-dependent species.

Cumulative effects— ROD page 25

ACS Objective 3. Maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations.

Vegetation/woody material— ROD page 19

ACS Objective 4. Maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. Water quality must remain within the range that maintains the biological, physical, and chemical integrity of the system and benefits survival, growth, reproduction, and migration of individuals composing aquatic and riparian communities.

Water quality— ROD page 23

ACS Objective 5. Maintain and restore the sediment regime under which aquatic ecosystems evolved. Elements of the sediment regime include the timing, volume, rate, and character of sediment input, storage, and transport.

Soils/site productivity— ROD page 18

ACS Objective 6. Maintain and restore in-stream flows sufficient to create and sustain riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing. The timing, magnitude, duration, and spatial distribution of peak, high, and low flows must be protected.

Hydrologic function— ROD page 20
Flow— ROD page 22

Objective 7. Maintain and restore the timing, variability, and duration of floodplain inundation and water table elevation in meadows and wetlands.

Hydrologic function— ROD page 20

Objective 8. Maintain and restore the species composition and structural diversity of plant communities in Riparian Reserves and wetlands to provide adequate summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration and to supply amounts and distributions of coarse woody debris sufficient to sustain physical complexity and stability.

Land cover conditions— ROD page 23
Riparian Reserve function— ROD page 23
Engelmann spruce— ROD page 27
Late-successional ecosystems— ROD page 31

ACS Objective 9. Maintain and restore habitat to support well-distributed populations of native plant, invertebrate, and vertebrate riparian-dependent species.

Land cover conditions— ROD page 23
Riparian Reserve function— ROD page 23
Engelmann spruce— ROD page 27
Late-successional ecosystems— ROD page 31

While new information, there is no additional analysis that a supplemental EIS could inform. An overall (ultimate) conclusion associated with the existing analysis and decision could be made that none of the impacts associated with the ski area expansion decision, either directly, indirectly, individually or cumulatively, will prevent attainment of Aquatic Conservation Strategy, nor the nine ACS Objectives, at the site, watershed or landscape scales. Therefore, this new information is not significant.

Further, in accordance with the latest (11 June 2007) ACS decision (Case No: C04-1299RSM), there are no projects including Mt. Ashland Ski Area Expansion that used the 2004 rule, that have been enjoined.

C. The following numbered item corresponds to Marianne Dugan's June 11, 2007 email regarding the need for a Supplemental EIS

1. We are adding to our SEIS arguments the recent court-ordered reinstatement of the Clinton-era roadless rule. The Forest Service itself noted that: "The main concern with MASA is the effect to connectivity corridors (i.e., links) along the Siskiyou Crest. Most of the Special Use Permit area is not currently a core area, but may provide some linkage to core areas such as those contained in the McDonald Peak IRA [Inventoried Roadless Area]." SAR 864.

This claim is sufficient because the stated ruling of the court is accurate. It is new because the court ruling in fact, occurred after the ski area expansion ROD was issued. The Forest Service does not find it to be relevant because the ski area expansion was essentially and effectively planned and analyzed under the referenced (current) roadless rule.

Decisions regarding roadless area conservation since the 2004 Ski Area ROD was signed were primarily concerned with State's involvement in planning and designating actions within inventoried roadless areas. These previous roadless decisions would not have changed the authorized actions at Mt. Ashland. The latest court ruling removed these provisions and reinstated the 2001 Rule.

2001 Roadless Area Conservation Rule contains a specific exemption for ski areas. This ski area expansion decision qualifies for exemption, as discussed in FEIS I-25:

> "In a March 20, 2002 letter to the Regional Forester from the Acting Forest Supervisor for the Rogue River National Forest, the situation was outlined in regard to the MASA Expansion proposal. Approximately 298 acres of the SUP area is within the McDonald Peak IRA and ski area expansion would occur within this roadless area under several of the alternatives being considered in detail (including the Proposed Action). Vegetation clearing for ski runs and lifts that include removal of trees of commercial value would be required to implement these alternatives. Construction and/or reconstruction of maintenance roads are also being considered, however no road activities are proposed within the IRA.
>
> The 2001 interim directive reserved to the Chief of the Forest Service, the decision authority for timber harvest projects in IRAs unless the project met one of the exception situations specified in the interim directive. Effective July 16, 2004, Federal Register (69 FR 42648), this Interim Directive (ID) was reinstated, with two changes, the direction previously issued in ID No. 1920-2001-1 to implement the Chief's 1250/1920 letter of June 7, 2001, regarding Delegation of Authority/Interim Protection of Roadless Areas.

Because the timber harvest resulting from ski expansion activities is incidental to the construction of new ski runs or ski lifts, and ski area development is not prohibited in this area under the RRNF LRMP, MASA Expansion meets the exemption criteria in FSM 1925 .04a, 2, (2), b *(cutting, sale, or removal of timber incidental to the implementation of a management activity not otherwise prohibited under the LRMP).* Therefore, delegation of authority to approve or disapprove timber harvest associated with this proposed expansion project (within a roadless area) remained unchanged by the most recent roadless interim directive.

The Regional Forester concurred with the Forest Supervisor recommendation and determination in a May 8, 2002 letter that the authority and responsibility to approve process steps and sign decision documents related to the MASA Expansion would remain with the Forest Supervisor of the RR-SNF. The McDonald Peak IRA is located entirely on lands administered by the RR-SNF."

This situation has been recently reviewed with the Regional Office and remains as planned and decided in 2004. Ski area expansion meets exemption criteria for: cutting, sale, or removal of timber incidental to the implementation of a management activity not otherwise prohibited under the LRMP (FEIS pages III-174 & 5).

Since this information is procedurally new only and the authorized exemption for ski area expansion remains, this information is not significant and there is nothing that a supplemental EIS could inform.

D. The following numbered item corresponds to Marianne Dugan's June 18, 2007 email regarding the need for a Supplemental EIS

1. Regarding the recent DEIS regarding the Mount Ashland LSR fuels reduction project. That project proposes seven new road miles within three miles of the expansion area. The documentation in the DEIS supports my client's concern that the existing (and planned) road density in this area is already significant and is likely to have a significant cumulative effect on the environment when combined with the proposed ski area expansion.

The Mount Ashland LSR Habitat Restoration and Fuels Reduction Project was in the initial planning stages and the extent of potential habitat modifications was unknown at the time of Mt. Ashland Ski Area expansion signing because no proposed action had been identified. Cumulative effects analyses for Mt. Ashland Ski Area expansion did not include this Klamath project (Beaver Creek Watershed) as there was no agency proposed action at the time of the ROD. The extent of the proposal was not known at the time of analysis and decision for ski area expansion and was therefore not reasonably foreseeable.

This project is proposed by the Klamath National Forest, Oak Knoll Ranger District. The Rogue River-Siskiyou NF became aware of this project in late 2004. The NOI was published on October 7, 2005 Vol 70, Number 194 (over one year after the ROD for ski area expansion). No new road construction was identified in the NOI and the acreage stated was 5,013 acres.

The Plaintiffs assert that activities on adjacent Klamath NF lands to the south are not considered. However, the Klamath NF project is almost entirely within previously managed stands less than 80 - 90 years of age which should not be considered suitable habitat for late-successional habitat dependent species and therefore should have little to no cumulative effect to these species.

The proposal as documented in the recent draft EIS is new information. The claim from ONRC is not accurate. This new project would not include 7 new road miles within 3 miles of the expansion area. This project is contained within the Beaver Creek Watershed, for which only restoration is planned under the expansion project. Forest Service analysis of the draft EIS information indicates that only about 0.2 mile of temporary road is proposed within 3 miles of the expansion area.

The Mount Ashland LSR Habitat Restoration and Fuels Reduction Project draft EIS utilizes Equivalent Roaded Area (ERA) modeling for cumulative effects (as did ski area expansion) and determined no significant threat for adverse cumulative effects. As temporary roads, road density would not be permanently increased, and the project would actually decrease existing road density via road decommissioning. The Mount Ashland LSR Habitat Restoration and Fuels Reduction Project draft EIS includes consideration and calculation for ski area expansion actions authorized at Mt. Ashland. There is no potential for significant cumulative effects resulting from this new project. There is nothing that a supplemental EIS could inform.

V. CONCLUSIONS

The information submitted by ONRC does not present a substantially different picture of the environmental consequences of the Mt. Ashland Ski Area Expansion Project from what was already presented and considered in the FEIS. None of the information submitted by ONRC shows that the actions authorized for ski area expansion will affect the quality of the human environment in a significant manner or to a significant extent not already considered in the FEIS.

Most of the information evaluated was determined not to be new because it was, in some fashion, considered in the FEIS. Two items reviewed were found to be not relevant (*e.g.*, 1994 ACS interpretation vs. 2004 now removed, and current roadless area direction). One item was found to be new and relevant (Klamath NF *Mount Ashland LSR Habitat Restoration and Fuels Reduction Project)* but without significance to the decision already made.

The authors of this evaluation conclude that none of the information submitted by ONRC shows that the effects of the Mt. Ashland Ski Area Expansion Project are significantly different from what was described in the 2004 Mt. Ashland Ski Area Expansion Project FEIS.

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Mt. Ashland Ski Area Expansion
September 22, 2009

Additional evaluation of information to determine whether there are substantial changes in the proposed action that are relevant to environmental concerns or there are significant new circumstances or information relevant to environmental concerns and having a bearing on the authorized decision or its impacts.

I. INTRODUCTION

On July 2, 2007, the Forest Service documented an evaluation of new information and changed circumstances for potential relevance to the September 2004 decision. A number of items evaluated there had been raised by the Oregon Natural Resources Council (ONRC) at that time. Some of those same issues were raised again on September 5, 2008 by Tom Dimitre, Chair of the Rogue Group of the Sierra Club. This document will not repeat the evaluation of 2007 for those items. The 2007 evaluation stands as adequate consideration for those matters concerning the 2004 decision.

Oregon Natural Resources Council Fund (ONRC), Sierra Club, and the National Center for Conservation Science and Policy (formerly known as Headwaters), brought suit under NEPA and NFMA challenging the FEIS and the approval of the expansion on multiple grounds. The district court granted summary judgment in favor of the Forest Service. ONRC appealed to the Ninth Circuit Court of Appeals. On September 4, 2007 the Ninth Circuit issued its ruling, upholding the US Forest Service on a number of counts, yet finding that the agency "failed to properly evaluate the impact of the proposed MASA expansion on the Pacific Fisher" and failed "to appropriately designate Riparian Reserves and Restricted Watershed terrain, as required by the Rogue River National Forest Land and Resource Management Plan."

II. PURPOSE OF THIS REVIEW

The Rogue River-Siskiyou National Forest will **complete a Supplemental Environmental Impact Statement (SEIS) to address those matters found inadequate by the Ninth Circuit Court of Appeals Opinion.** The purpose of this additional new information and changed circumstances review is to identify other matters that may be relevant to the 2004 Record of Decision that would appropriately need to be addressed in the SEIS at the same time.

Forest Service policy for implementing regulations under the National Environmental Policy Act (NEPA) outlines a procedure for review of actions that are awaiting implementation when new information or changes occur and should be considered for correction, supplementation, or revision (FSH 1909.15, section 18).

Forest Service policy is to review new information received after a decision has been made. If new information or changed circumstances relating to the environmental impacts of a proposed action or decision come to the attention of the responsible or deciding official after a decision has been made and prior to implementation, the official must review the information carefully to determine its importance (FSH 1909.15, section 18.1). If, after an interdisciplinary review and consideration of new information within the context of the overall project or decision, the Responsible Official determines that a correction, supplement, or revision to an environmental document is not necessary, implementation should continue and the results of the interdisciplinary review is to be documented in the project file (FSH 1909.15, section 18.1).

III. METHODOLOGY

To begin this additional review, a survey of Rogue River-Siskiyou National Forest resource specialists was conducted to elicit information they had concerning new information, research, or changed conditions that warrant consideration here. Additionally, District Ranger Linda Duffy sent emails to environmental organizations who have been active in this project in the past, soliciting their views concerning new information or changed circumstances worthy of review. As discussed above, some of the matters addressed in the 2007 review were raised again by these organizations and will not be repeated here. Other comments merit evaluation and are included in the list below.

The claims for new information and/or changed conditions was evaluated by a core team of project coordinators and interdisciplinary team leadership for the EIS and project development, including Steve Johnson (IDT Leader, Project Coordinator and Recreation Specialist), Don Boucher (Environmental Coordinator and Lead EIS Analyst), and Rob Shull (Forest Ecosystems Staff Officer).

As was done for the July 2007 review, interdisciplinary evaluation was done on each item or claim to determine whether it was **sufficient** (complete and accurate) to warrant consideration. If sufficient, the information was then evaluated to determine whether it was **new,** meaning it had not been considered in preparation of the MASA FEIS. The information was determined not to be new if it was directly addressed by text in the FEIS. If the information was determined to be new, it was then evaluated as to whether it was **relevant** to the project and the decision made for ski area expansion at MASA (i.e., if it has a bearing on decisions for actions and effects of ski area expansion). If the information was determined to be new and relevant, it was to be further evaluated to determine if it was significantly different from the information that was presented in the FEIS, i.e., is the new information **significant**?

IV. EVALUATION OF NEW INFORMATION OR CHANGED CIRCUMSTANCES

A. New information or changed circumstances identified by the Forest Service since the July 2007 review

As discussed above, the Ninth Circuit Court of Appeals found NEPA documentation deficiencies in the evaluation of the impact of the proposed MASA expansion on the **Pacific Fisher**, and in the **designation of Riparian Reserves and Restricted Watershed terrain**. Since a SEIS will be conducted to address these matters, a preliminary review of them in this document is unnecessary, and is not included here.

1. Ashland Forest Resiliency Project

The Forest Service, Rogue River-Siskiyou National Forest recently completed (September 2008) a Final EIS for Ashland Forest Resiliency Project. The Objection Process under 36 CFR 218 was conducted for this project and a Record of Decision is expected soon. The evaluation here will assume a decision adopting the Forest Service Preferred Alternative. In the Final EIS for Ashland Forest Resiliency, the Forest Service developed and analyzed an additional Action Alternative, designed and identified as the Preferred Alternative. This alternative was developed from the results of analysis of the two Action Alternatives analyzed in detail in the Draft EIS, further collaboration with the City of Ashland and their representatives, and the extensive comments received on the Draft EIS during the Comment Period. The Preferred Alternative was designed to include the most effective and efficient treatment methodologies, in the most strategic locations. The Preferred Alternative identifies approximately 7,600 acres of treatment, which is less than the Proposed Action (8,150 acres) for which was assumed in the cumulative effects analysis in the Mt. Ashland Ski Area Expansion FEIS.

This situation is sufficient because it is an accurate assessment of current conditions. It does not represent new information as the Ashland Forest Resiliency Project was contemplated and considered as foreseeable in the analysis for Mt. Ashland Ski Area Expansion. Actions associated with Ashland Forest Resiliency would occur within the Neil Creek and Ashland Creek watersheds; analysis for both projects concluded that there would be no risk for adverse cumulative effects to these watersheds from these actions. Environmental analysis as documented for the ski area expansion project remains adequate and there is nothing that a supplemental EIS could inform.

2. Latest Roadless Rule Situation and Court Rulings

In the July 2, 2007 new information review, the Forest Service evaluated the (then recent) reinstatement of the 2001 Roadless Rule by the U.S. District Court for the Northern District of California. Evaluation concluded that decisions regarding roadless area conservation since the 2004 Ski Area ROD was signed were primarily concerned with State's involvement in planning and designating actions within Inventoried Roadless Areas (IRAs). These previous roadless decisions would not have changed the authorized actions at Mt. Ashland. That court ruling removed these provisions and reinstated the 2001 Rule.

The 2001 Roadless Area Conservation Rule contains specific exemptions for ski areas. This ski area expansion decision qualifies for exemption, as discussed in FEIS I-25. Because the timber harvest resulting from ski expansion activities is incidental to the construction of new ski runs or ski lifts, and ski area development is not prohibited in this area under the RRNF LRMP, MASA Expansion meets the exemption criteria in FSM 1925 .04a, 2, (2), b *(cutting, sale, or removal of timber incidental to the implementation of a management activity not otherwise prohibited under the LRMP).* Therefore, delegation of authority to approve or disapprove timber harvest associated with this proposed expansion project (within a roadless area) remained unchanged by the roadless interim directive.

Since 2007, there have been numerous changes in policy and court orders affecting activities in Inventoried Roadless Areas. Following the order reinstating the Roadless Rule, the project was reviewed to determine whether it could go forward. The U.S. District Court for the District of Wyoming issued an injunction on August 12, 2008, finding the Roadless Rule to be invalid and enjoined the Roadless Rule nationwide. This situation puts the courts in conflict, with the Ninth Circuit that previously ruled that the Roadless Rule was illegally repealed, setting aside the State Petitions Rules, and reinstating the Roadless Rule nationwide.

On November 4, 2008, Barack Obama was elected President, establishing a new administration. On May 1, 2009, the Obama Administration requested more time to respond to the Roadless Rule situation. On May 28, 2009, USDA Secretary Thomas J. Vilsack reserved final decision authority over certain forest management and road construction projects in inventoried roadless areas. The Secretary's Memorandum 1042-154 was intended to assure the careful evaluation of actions in inventoried roadless areas while long term roadless policy is developed and relevant court cases move forward.

To Reiterate:
The Mt. Ashland ski Area Expansion is partially within the McDonald Peak Inventoried Roadless Area. The Forest Service (Forest Supervisor Scott Conroy) issued a Record of Decision for expansion activities in September 2004. Ski Area Expansion does not involve the construction/reconstruction of roads within the Roadless Area. It does involve the cutting of trees, administrative sale and removal of timber incidental to the implementation of an existing special use authorization (Ski Permit Area).

On August 3, 2009, the Forest Service received re-delegation of authority from the Secretary to authorize: "b) Approval of any timber cutting, sale, or removal in inventoried roadless areas incidental to the implementation of an existing special use authorization. Road construction/reconstruction is not authorized through this re-delegation without further project-specific review. The local line officer is delegated authority to make these decisions."

This latest situation regarding IRAs is sufficient because it is accurate to warrant consideration. It is new because these court rulings, change in administration and Forest Service policy in fact, have occurred after the ski area expansion ROD was issued. This situation is relevant because the ski area expansion is partially within an Inventoried Roadless Area, for which policy and directives are applicable.

Since ski area expansion was essentially and effectively planned and analyzed under the 2001 Roadless Rule, it is consistent and compliant with that rule (if it were to exist). Ski area expansion was designed to be sensitive to roadless area conservation (if the Roadless Rule does not exist) and the effects on roadless character were analyzed in the FEIS. Therefore this situation is not significantly different from the situation that was presented in the FEIS. The environmental analysis as documented remains adequate, this situation is not significant to the decision already made, and there is nothing that a supplemental EIS could inform regarding the effect on roadless character.

The concern for Inventoried Roadless Areas remains primarily a social-political issue, with the relevant concern at this time being the appropriate review of decisions and compliance with law and policy. The position of the Forest is that a ski area expansion decision has already been made, does not involve road construction or reconstruction, and that the approval of timber cutting, sale, or removal is incidental to the implementation of a ski area expansion decision under an existing special use authorization. The authority to enact ski area expansion implementation activities remain with the Forest Supervisor.

As discussed above, the Ninth Circuit Court of Appeals found NEPA documentation deficiencies in the evaluation of the impact of the proposed MASA expansion on the Pacific fisher, and in the designation of Riparian Reserves and Restricted Watershed terrain. As noted in the 2007 evaluation, a potential concern with ski expansion is the effect to connectivity corridors (i.e., links) along the Siskiyou Crest. Most of the Special Use Permit area is not currently a core area, but may provide some linkage to core areas such as those contained in the McDonald Peak IRA. Since a SEIS will be conducted to address the Pacific Fisher, this concern will be addressed there, as applicable.

Pending the results of the Supplemental EIS, it is at this time uncertain if a new Record of Decision would be issued to the Final Supplemental EIS and the existing FEIS, or if a determination will be made that the existing Record of Decision stands as adequate, based on the existing FEIS and the Final Supplemental EIS. That situation will include Forest Service Regional Office, Washington Office, Office of General Counsel and USDA Secretary review as necessary.

3. Situation regarding Survey and Manage

At this time, the Forest Service is aware that the March 22, 2004 ROD for the Final Supplemental Environmental Impact Statement *To Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* is under litigation. This litigation may result in the removal of this decision and may result in a requirement that projects that are within the range of the northern spotted owl be subject to the survey and management direction in the *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines* (USFS et al. 2001)(2001 ROD).

This latest situation regarding Survey and Manage is sufficient because it is accurate to warrant consideration. It is new because court rulings and Forest Service policy in fact may change, with this change occurring after the ski area expansion ROD was issued. This situation is relevant because the ski area expansion is within the range of the northern spotted owl (Northwest Forest Plan).

Ski area expansion was essentially and effectively planned and analyzed under the 2001 ROD for Survey and Manage, and is consistent and compliant with that decision (if it were to be directed by the courts). Ski area expansion as documented in the 2004 FEIS discussed relevant species, their existence and habitat, as excerpted below from the 2004 FEIS pages IV-153-154:

"d. Direct, Indirect, and Cumulative Effects on Other Terrestrial Species

Under the March 22, 2004 ROD for the Final Supplemental Environmental Impact Statement *To Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines*, none of the species that were covered by the Survey and Manage Mitigation Measure standards and guidelines are listed as Threatened or Endangered under the Endangered Species Act, nor are any proposed for listing. All of the Survey and Manage species were evaluated for inclusion in the agencies' Special Status Species Programs.

This Section further discusses terrestrial wildlife species that were previously Survey and Manage species that are now not listed as Forest Service Sensitive. Also discussed are other terrestrial wildlife species of interest that may or may not be present in the SUP area.

Bats
Under Alternative 1, No-Action, there would be no change to bat habitat. The continued use of the existing ski area would not result in any adverse effects to bat habitat.

Under all Action Alternatives, potential bat roost habitat in the form of snags exists within the SUP area, primarily on ridge tops and near edge habitat. Proposed Run 12 construction (Alternatives 2 and 6) could affect these species by removing roost habitat from the ridge top: other run construction may also affect potential roost habitat. In addition, if this roost habitat is felled when the species are present within the roosts, it is likely that the individuals would not survive. To mitigate for this potential loss of suitable habitat for these species, hard snags that are not immediate hazards to safety on this ridge would be retained.

This project was analyzed for potential adverse cumulative effects along with other past, current, proposed, and reasonably foreseeable future actions. Proposed underburning associated with the Ashland Watershed Protection Project and Ashland Forest Resiliency could also affect bats by reducing potential snag roosts within the watershed, particularly along ridge tops.

In the post fire suppression era (since early 1900s), snag habitat along ridges has increased to high levels in the Ashland Watershed due to lack of stand maintenance from historical low intensity wildfires. This increase in snag density has benefited bats by increasing roost habitat. Many ridge tops within the Ashland Watershed would remain untreated by the proposed ski expansion, the Ashland Watershed Protection Project, or Ashland Forest Resiliency.

Great Gray Owl
See Sensitive species section.

Mollusks
The SUP area does not contain habitat for the mollusk species on the Ashland ranger district for which pre-project surveys were required (Version 3.0 protocol, February 2003) *Monadenia chacena).* Therefore, there would be no effects to this species from the ski area expansion proposal.

Red Tree Vole
Surveys for red tree vole are triggered on Federal lands below 5,500 feet in elevation, because the red tree vole in not generally known to occur above this elevation (Version 2.1 protocol, October 2002). The SUP area is above 5,500 feet in elevation, and therefore surveys for the red tree vole are not required. Surveys were accomplished in 2000 (under previous protocols) and no red tree voles were found. No effect to the red tree vole is expected from this proposed project. There are no cumulative effects because the SUP area is outside the defined range for the species."

Therefore the current situation is not substantially different from the situation that was presented in the 2004 FEIS. The environmental analysis as documented remains adequate, this situation is <u>not significant</u> to the decision already made, and there is nothing that a supplemental EIS could inform regarding the effects on Survey and Manage species.

B. New information or changed circumstances claims raised by Tom Dimitre, Chair of the Rogue Group of the Sierra Club

The following claims were raised on September 5, 2008 by Tom Dimitre, Chair of the Rogue Group of the Sierra Club. As noted, on July 2, 2007, the Forest Service documented an evaluation of new information and changed circumstances for potential relevance to the September 2004 decision. A number of items evaluated there had been raised by the Oregon Natural Resources Council (ONRC) at that time. Some of those same issues were raised again and may warrant further discussion because of further change or further need for clarification. If no further discussion is needed regarding certain claims, this document will not repeat the evaluation of 2007 for those items.

1. The ODEQ has issued new TMDLs for Ashland Creek. It is our understanding that there can be no new, additional sediment placed into Ashland Creek.

The 2007 changed circumstances review discussed this claim as "DEQ states that it will be setting a TMDL for the currently impaired watershed", and was discussed in section IV, A, 1 of that evaluation. This claim is based on the fact that TMDLs (Total Maximum Daily Loads) have actually been issued at this time. This information has been categorized as new since the 2004 decision.

The TMDL discussed here was approved by the US Environmental Protection Agency on October 2, 2007 and is now being implemented. It deals with the violation of three water quality parameters: bacteria, temperature and sedimentation. In the sedimentation TMDL, the pollutant is sediments that enter Ashland Creek and are deposited into Reeder Reservoir located above the City of Ashland. The sources for these additional sediments were identified as forest management, and road construction and maintenance practices that may destabilize slopes and increase the velocity of runoff. Excessive levels of sediment may result in impaired salmonid habitat or spawning.

The claim that raised this TMDL discussion as new information characterizes compliance as though "there can be no new, additional sediment placed into Ashland Creek." The language in the TMDL, however, states that there is to be "no significant increased delivery of sediment to Reeder Reservoir over that which would occur naturally." The difference is twofold, whereas the claim stated there is to be "no additional sediment," the actual rule states "no significant increased delivery". Also, the claim characterized the sediment delivery point to be Ashland Creek, whereas the actual rule cites Reeder Reservoir. This claim is therefore not accurate, but is considered sufficient for further evaluation.

To summarize, the <u>new</u> information is that the State of Oregon has issued a new TMDL limitation on sediment in the Ashland watershed that prohibits significant increased delivery of sediment into Reeder reservoir. The <u>relevance</u> of this information is that the ski area expansion would be new construction, and construction was specifically mentioned in the TMDL rule as a potential source of increased sediment. Since the information is new and relevant, the remaining question concerns whether or not the information is significant, i.e., whether the information is different than what was presented in the FEIS.

This information is <u>not significant</u> because the ruling itself is based on the analysis included in the FEIS, and thus does not contradict what is there, nor assume impacts that were not already analyzed and disclosed. Clear evidence of this is found in DEQ's response to public comments it received when considering the TMDL decision. On page 21 in the "Bear Creek Watershed TMDL – Response to Public Comments July, 2007" the following response is provided to a comment that cited the Mt. Ashland Expansion as an example of a construction project that should not be allowed under this TMDL:

"The TMDL has been revised to include an actual erosion loading target for the Upper Watershed. In the revised section, soil erosion is used as the surrogate for sedimentation with volumes expressed as a total load per day of soil for the watershed. It should be acknowledged however that erosion and resulting sedimentation is typically episodic in nature with the majority of movement occurring in a short period of time (Bestcha, 1978 reference added). For implementation, ODEQ believes it is more practical to assess the impact of load reductions on an annual or even 10 year basis (ODEQ, 2007 Tenmile Lakes TMDL).

For the Ashland watershed, considerable research has been undertaken over the last 30 years to determine natural erosion rates and there continues to be considerable debate over the accuracy of this work (Ashland & Montgomery 1980, USFS 2004). The TMDL uses the most recent estimates, the Water Erosion Prediction Project (WEPP) model developed as part of the Mt Ashland Ski Area Expansion FEIS July 2004 (USFS, 2004), to determine background erosion rates under natural conditions. The model is the most recent iteration in a long evolution of erosion models and is the best model currently available to describe conditions found in mountainous terrain (page 18, USFS ROD, 2004). The model takes into account both the soil erodibility and slope stability indices to determine natural background rates. Using the model output as per TMDL Appendix C of the FEIS it is determined that the soil erodibility index is 2, an estimated 0.041 – 0.55 cubic yards per decade and the slope stability index is 2 at an estimated 1.0 and 2.0 cubic yards per acre per decade (USFS, 2004). Given the size of the Upper Ashland Creek watershed (12,698 acres) and using the lower estimate in each range as a margin of safety, the annual load is 1,320 cubic yards or 3.62 cubic yards total per day for the watershed.

Although taking place on federal lands and subject to the National Environmental Policies Act (NEPA), the Mt. Ashland expansion project will be required to obtain a 1200-C construction erosion control permit to ensure that erosion control practices are implemented and that the potential impacts from construction are kept to an absolute minimum."

It is clear therefore, that though the decision on the TMDL is new and relevant, it is not significant because it does not reveal impacts or implementation consequences that were not already displayed in the EIS. There is nothing that a supplemental EIS could inform.

2. MAA states that it plans to replace the double chair Windsor lift with a triple chair lift which is not analyzed in the EIS or ROD

First and foremost, this plan has not been formally advanced to the Forest Service, and follow-up with Mt. Ashland Association reveals that this internal consideration of theirs was dropped. Thus the information is <u>not sufficient</u> for consideration.

Secondly, a replacement of an existing facility, with a newer version or upgrade of the same facility within the same environmental footprint, does not create environmental impacts that warrant assessment in an environmental impact statement. Such re-construction is generally categorically excluded from documentation in an Environmental Assessment or an Environmental Impact Statement. If this information had been sufficient and new, it would not be relevant to the decision on ski area expansion since it does not introduce new environmental impacts not already accepted in the current operation and thus considered in the 2004 decision. There is nothing that a supplemental EIS could inform.

3. The following information is cited that some believe speaks to Mt. Ashland Association's financial capability to achieve what is planned in this expansion effort:

"The EIS states that the MAA will fundraise all of the money for the proposed expansion. It has been shown in the last year that MAA does not have the ability to raise the amount of money that will be necessary to build any part of the proposed expansion."

"It has also been shown, through MAA financial statements that their financial situation has deteriorated significantly over the past two years - to such an extent that they were in danger of not opening in 2007/08 and 2008/09."

"New prices for season and weekend passes"

"The impact of the failing economy on skier visitation"

Parallel comments were suggested for consideration in the changed circumstances review conducted in 2007. Questions were raised at that time, as they are here, that certain circumstances speak to a financial risk of the Mt. Ashland Association not being financially able to complete what is being committed to in the 2004 decision. The answer provided in 2007 citing the position of the Forest Service regarding financial feasibility as discussed in FEIS Appendix B, is relevant now as well, and is repeated here:

> **"**The financial ability of the MAA to finance an expanded ski area (if authorized) is not within the purview of the Forest Service. The Forest Service is processing a request under Special Use Permit provisions for an expanded ski area; the ability of the MAA (as a non-profit corporation) to finance proposed improvements is not an issue that is germane to Federal analysis under NEPA. Although irrelevant, the prudence of this corporation has been demonstrated through many years of compliance with the terms of the Special Use Permit, including payments to the Government for permitted use, under national policy and provisions of law. Further, as provided under law, the MAA has contributed substantial funding held in Collection Agreements available to the Forest Service for analysis and planning under NEPA for ski area expansion.
>
> The recent and current financial status of the MAA is not within the purview of the Forest Service, and is not germane to the NEPA analysis process being conducted for expansion at Mt. Ashland. Proposals being analyzed in detail include provisions for staging of the implementation, over periods of up to 10 or more years. If ski area expansion were to be authorized, each stage of implementation would be reviewed and authorized annually (or more often) by the Forest Service, dependant on the needs (and presumably financial ability) and request of MAA at that particular time. The Forest Service cannot require that financial capital to implement the entire authorized action be solvent at the time of initial development, or at any stage." (FEIS Appx B-6-7).

Based on the discussion cited above, the information concerning Mt. Ashland Association's financial capabilities is <u>not sufficient</u> to warrant consideration in relation to relevancy and significance to the 2004 decision.

4. The impact of global warming on the current and future operations of the ski area

The National Center for Conservation Science and Policy provided a paper that had been published in the Journal of Hydrometeorology in October 2006 titled "Mapping "At Risk" snow in the Pacific Northwest by Anne W. Nolin and Christopher Daly. This paper presents the modeling results of possible effects of global warming on current snow-dominated winter precipitation regimes. A map is presented that predicts "at risk" snow zones concentrated in the Cascades and the Olympic Mountains of the Pacific Northwest and ski areas in these mountains are listed and compared according to their risks of a significant increase in the relative frequency of warm winters.

The director of the National Center for Conservation Science and Policy stated in their submission letter that "even a slight, consistent decrease in snowpack will have a significant impact on the ski area's economic viability and may very well have ecological impacts related to peak spring flows interacting with the highly erosive soils in the area".

For the purposes of this evaluation of new information, the focus will be on the paper and what is supported there. The consequences postulated by the director here are considered to be opinions of the Center, not those drawn by the authors of the paper. No data is submitted to substantiate the Center's speculation *that a slight decrease in consistent snow pack will have significant impact on economic viability* of the Mt. Ashland Ski Area. As such, the conclusions presented by The National Center for Conservation Science and Policy are not sufficient for consideration. The same holds for their speculation regarding ecological impacts. The information isn't sufficient for meaningful evaluation.

It is, however, reasonable that decrease in snow pack could have an effect, but supporting information is lacking that a *slight* increase in temperature leads to *significant* impact. Snow fall is not currently an economic challenge to Mt. Ashland. The current economic challenges to Mt. Ashland Ski Area come from an inadequate mix of skier terrain, which is addressed as the purpose and need in the expansion EIS. Economic risk for this hill is currently not associated with weather conditions or risk of inadequate snow, and a slight decrease in snow cover is not believed sufficient to push Mt. Ashland over an economic brink.

To address the relevance of the Nolin and Daly paper, the interdisciplinary team considered whether this information contained more detail than that already considered and displayed in the FEIS. The Mt. Ashland Ski Area Expansion FEIS addressed climate change on pages III-8 through III-9, and IV-5 through IV-6. Snow fall was mentioned as a factor in economic viability assessments on page IV-268, but not carried into models of economic viability for lack of sufficient data or reliability of predictions as discussed on pages III-8-9.

Nolin and Daly cite numerous data sources concluding that the Pacific Northwest experienced a warming of winter temperatures in the latter half of the 20th century. The FEIS had already discussed this trend on page III-8. The paper goes on to present modeling results indicating a possibility that the Cascades could see an increase in rain-dominated winters from what is experienced currently. The EIS includes an analysis by Associate Professor Gregory Jones of Southern Oregon University comparing (testing) such model results against actual temperatures recorded in Southern Oregon (pages III8 and III-9), concluding that such models overestimate the actual rise in temperatures by 1.5 ^{o}C. The Nolan and Daly paper conducts no such test, nor presents data that indicate its modeled results are any more accurate than those tested by Associate Professor Jones. As such, the interdisciplinary team concluded that the Nolan and Daly paper provided no additional information not already more thoroughly evaluated in the FEIS.

Though the climate and modeling information is not new, the paper does display a comparison of ski areas in the northwest with varying modeled risks of warmer winters. From this information it is instructive to see how Mt. Ashland might rank if the scenarios modeled come to pass. From the information in the model, it is clear that Mt. Ashland is one likely to survive longer than most. The paper presented here shows that Mt. Ashland has the highest base area of all ski areas displayed. Accordingly, the data show that it is the 5th (out of 19 ski areas) of those with the lowest modeled relative frequency (4 out of ten winters) of likely having winters with a mean December, January, and February temperature exceeding -2 degrees Celsius (28.4 degrees Fahrenheit). That is to say, it is among the top five least likely to have winters averaging over 28.4 degrees F. Less than one out of ten winters was modeled for Mt. Ashland to have average winter temperatures above 32 degrees F (freezing point).

In summary, Mt. Ashland appears to be more likely than most northwest ski areas to survive longer under a global warming scenario. If the agency were to make global-warming policy decisions that would affect permitting decisions of local ski areas, the Mt. Ashland location might likely be one favored over others for continued investment. Indeed, its economic challenges to date are neither snow nor weather related. Mt. Ashland's economic challenges come from an inadequate mix of terrain, which is the focus of their permit application for expansion and the whole purpose of the FEIS.

In conclusion, this paper does not present climate information that is new as discussed above, nor does it provide functional or economic viability information significantly different, e.g., contravening, from that in the 2004 FEIS supporting the decision to expand as provided in the Record of Decision. There is nothing that a supplemental EIS could inform.

V. CONCLUSIONS

As noted, the Rogue River-Siskiyou National Forest will complete a Supplemental Environmental Impact Statement (SEIS) to address those matters found inadequate by the Ninth Circuit Court opinion. Since a SEIS will be conducted to address these matters, a preliminary review of them is not included here.

The relevant information evaluated by the agency or claims submitted by Tom Dimitre, Chair of the Rogue Group of the Sierra Club in this additional evaluation do not present a substantially different picture of the environmental consequences of the Mt. Ashland Ski Area Expansion Project from what was already presented and considered in the FEIS.

Forest Service

Rogue River-Siskiyou National Forest

3040 Biddle Road
Medford, OR 97504-4119
541-618-2200

File Code: 1950 **Date:** February 2, 2010

Subject: Evaluation of New Information or Changed Conditions

To: Mt. Ashland Ski Area Project Administrative Record

Forest Service policy is to review new information received after a decision has been made. If new information or changed circumstances relating to the environmental impacts of a proposed action or decision come to the attention of the responsible or deciding official after a decision has been made and prior to implementation, the official must review the information carefully to determine its importance (FSH 1909.15, section 18.1). This letter documents my review of the evaluation of new information or changed conditions as associated with the 2004 Record of Decision for Mt. Ashland Ski Area Expansion.

I have reviewed the evaluation of potentially new information and changed conditions prepared by the core leadership team on July 2, 2007. This evaluation was primarily based on claims submitted by Oregon Natural Resources Council Fund. I have also reviewed the evaluation of potentially new information and changed conditions prepared by a core leadership team on September 22, 2009. This evaluation was primarily based on claims submitted by Tom Dimitri, Chair of the Rogue Group of the Sierra Club. These evaluations are attached. I hereby adopt the findings and conclusions in these evaluations.

These evaluations did not identify any claims of new information or changed circumstances that would warrant preparation of a correction, supplement, or revision to the Final Environmental Impact Statement for the Mt. Ashland Ski Area Expansion, as documented in August 2004.

Oregon Natural Resources Council Fund (ONRC), Sierra Club, and the National Center for Conservation Science and Policy (formerly known as Headwaters), brought suit under NEPA and NFMA challenging the FEIS and the approval of the expansion on multiple grounds. The district court granted summary judgment in favor of the Forest Service. ONRC appealed to the Ninth Circuit Court of Appeals. On September 4, 2007 the Ninth Circuit issued its ruling, upholding the Forest Service on a number of counts, yet finding that the agency "failed to properly evaluate the impact of the proposed MASA expansion on the Pacific Fisher" and failed "to appropriately designate Riparian Reserves and Restricted Watershed terrain, as required by the Rogue River National Forest Land and Resource Management Plan."

A Supplemental Environmental Impact Statement (SEIS) process will be conducted to address matters identified by the Ninth Circuit Court of Appeals. Since a SEIS document will be prepared, a preliminary review of Pacific fisher and designation of Riparian Reserves and Restricted Watershed terrain in the September 22, 2009 evaluation document was not included.

Sincerely,

SCOTT D. CONROY
Forest Supervisor

cc: Steven R Johnson, Pamela S Olson

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Mt. Ashland Ski Area Expansion

December 1, 2010

Additional evaluation of information to determine whether there are substantial changes in the proposed action that are relevant to environmental concerns or there are significant new circumstances or information relevant to environmental concerns and having a bearing on the conditionally authorized decision or its impacts.

I. INTRODUCTION

On July 2, 2007, the Forest Service documented an evaluation of new information and changed circumstances for potential relevance to the September 2004 decision. A number of items evaluated had been raised by Oregon Natural Resources Council (ONRC) at that time. Some of those same issues were raised again on September 5, 2008 by Tom Dimitre, Chair of the Rogue Group of the Sierra Club. On September 22, 2009, the Forest Service documented an additional evaluation of claims of new information and changed circumstances for potential relevance to the September 2004 decision.

The relevant information evaluated by the agency or claims submitted as noted above in these evaluations did not present a substantially different picture of the environmental consequences of the Mt. Ashland Ski Area Expansion Project from what was already presented and considered in the 2004 FEIS. On February 2, 2010, the Forest Supervisor filed a letter to the record documenting that these evaluations did not identify any claims of new information or changed circumstances that would warrant preparation of a correction, supplement, or revision to the Final Environmental Impact Statement for the Mt. Ashland Ski Area Expansion, as documented in August 2004 (FSH 1909.15, section 18.1). This letter also confirmed that the Forest Supervisor decided to prepare a Supplemental Environmental Impact Statement to address matters identified by the Ninth Circuit Court of Appeals.

The Draft Supplemental Environmental Impact Statement (DSEIS) was prepared in March 2010. This DSEIS document was prepared in response to the September 24, 2007 Opinion of the Ninth Circuit Court of Appeals concerning the Mt. Ashland Ski Area Expansion. The Court of Appeals issued its ruling *Oregon Natural Resources Council Fund (ONRC) v. Goodman*, 505 F.3d 884 (9th Cir. 2007), upholding the Forest Service on several counts, yet finding that the agency "failed to properly evaluate the impact of the proposed MASA expansion on the Pacific Fisher" and failed "to appropriately designate Riparian Reserves and Restricted Watershed terrain, as required by the Rogue River National Forest Land and Resource Management Plan." (Opinion at 13055-13056)

A 45-day public comment period for the DSEIS for Mt. Ashland Ski Area Expansion formally began on March 27, 2010 with publication of a Notice of Availability in the Federal Register Vol. 75 No. 58 (FR page 14594). The 45-day comment period closed on May 10, 2010. A total of 845 comments to the DSEIS were received by the District at the close of the Comment Period. Approximately 60 additional comments were received after May 10, 2010. All comments received through September 30, 2010 were reviewed for substantive content and read and coded based on content and intent.

Substantive comments received generally focused on the transparency of analysis, and the detail and basis of assumptions of analysis. There were some comments that were determined to be 1) outside the scope of the DSEIS, 2) identified additional changed circumstances that warranted a changed condition assessment (FSH 1909.15 Sec 18), or 3) that were related to implementation of ski area expansion and not analysis under NEPA. This document provides an assessment of topics based on comments received on the DSEIS that identified additional new information or changed circumstances warranting a review.

II. PURPOSE OF THIS REVIEW

The purpose of this additional new information and/or changed circumstances review is to identify other matters that may be relevant to ski area expansion, the 2004 FEIS and the 2004 Record of Decision.

This document provides an assessment of topics based on comments received on the DSEIS that were considered to be within the scope of the DSEIS that claimed that they could or should be assessed for sufficiency, relevancy and significance as new information or changed conditions since the 2004 FEIS and ROD. These topics include those that were not included or specifically analyzed in The "New Information Review" of July 2, 2007 as well as the "New Information Review" of September 22, 2009 (DSEIS Appendix A). It also includes topics addressed in DSEIS Appendix A where new information or circumstances may exist since the latest assessment in September of 2009.

Forest Service policy for implementing regulations under the National Environmental Policy Act (NEPA) outlines a procedure for review of actions that are awaiting implementation when new information or changes occur and should be considered for correction, supplementation, or revision (FSH 1909.15, section 18).

Forest Service policy is to review new information received after a decision has been made. If new information or changed circumstances relating to the environmental impacts of a proposed action or decision come to the attention of the responsible or deciding official after a decision has been made and prior to implementation, the official must review the information carefully to determine its importance (FSH 1909.15, section 18.1). If, after an interdisciplinary review and consideration of new information within the context of the overall project or decision, the Responsible Official determines that a correction, supplement, or revision to an environmental document is not necessary, implementation should continue and the results of the interdisciplinary review is to be documented in the project file (FSH 1909.15, section 18.1).

As discussed above, the Ninth Circuit Court of Appeals found NEPA documentation deficiencies in the evaluation of the impact of the proposed MASA expansion on the Pacific fisher, and in the designation of Riparian Reserves and Restricted Watershed terrain. A Supplemental EIS was prepared to address these matters and review is not included here.

III. METHODOLOGY

The claims for new information and/or changed circumstances were evaluated by a core team of project coordinators and the interdisciplinary team including Steve Johnson (IDT Leader, Project Coordinator and Recreation Specialist), Don Boucher (Environmental Coordinator, Fuels Planner, AFR Project Coordinator and Lead EIS Analyst), Ken Grigsby (former Forest Planner; Managing Editor for the Mt Ashland EIS), Dave Clayton (Forest Wildlife Biologist), and Ellen Goheen (Plant Pathologist, Southwest Oregon Forest Insect and Disease Service Center [climate change review]).

As was done for the previous new information reviews, interdisciplinary evaluation was done on each item or claim to determine whether it was **sufficient** (complete and accurate) to warrant consideration. If sufficient, the information was then evaluated to determine whether it was **new,** meaning it had not been considered in preparation of the MASA FEIS, the Supplemental EIS or in previous new information reviews. If the information was determined to be new, it was then evaluated as to whether it was **relevant** to the project (i.e., if it has a bearing on decisions for actions and/or effects of ski area expansion). If the information was determined to be new and relevant, it was further evaluated to determine if it was significantly different from the information that was presented in existing documentation, i.e., is the new information **significant**?

IV. EVALUATION OF NEW INFORMATION OR CHANGED CIRCUMSTANCES

A. New Information Review Topics Identified by the Forest Service from Comments Received on the March 2010 Draft SEIS

1. Latest Direction and Information on Climate Change

Claims were made via comments to the DSEIS that there is Forest Service direction entitled *Climate Change Considerations in Project Level NEPA Analysis* that was not considered. Further claimed is that there is recent NEPA guidance from the Council on Environmental Quality (CEQ) that was not considered, and exacting standards published by the Dept. of Interior that were not considered.

Claims were made that the DSEIS fails to disclose how many tons of carbon will be emitted (greenhouse gas emissions). Comments suggested the study provided by the National Center for Conservation Science and Policy (now the GOES Institute) contained the most scaled-down analysis of climate impacts in the Rogue Basin (and was not considered). Further claims were made that the DSEIS analysis does not address the rapidly developing science regarding the effects of climate change.

Forest Service Direction for Climate Change NEPA Analysis
Since the 2004 FEIS and ROD, there has been further Regional and National Forest Service direction and guidance regarding climate change and analysis in NEPA. Regional Interim Guidance for NEPA Analysis at the Project Scale was released in April of 2008. More specific National direction for *Climate Change Considerations in Project Level NEPA Analysis* was released on January 13, 2009.

The agency direction released in January 2009 provides Forest Service guidance on how to consider climate change in project-level National Environmental Policy Act (NEPA) analysis and documentation. It introduces the agency position on climate change. Ongoing climate change research has been summarized in reports by the United Nations Intergovernmental Panel on Climate Change (www.ipcc.ch), US Climate Change Science Program's Science Synthesis and Assessment Products and the US Global Change Research Program. Climate change studies specific to the Pacific Northwest have been conducted by the Climate Impacts Group at the University of Washington. These reports concluded that climate is already changing; that the change will accelerate in the future; and that human greenhouse gas (GHG) emissions, primarily carbon dioxide emissions (CO_2), are the main source of accelerated climate change.

Projected global climate change impacts include air temperature increases, sea level rise, changes in the timing, location and quantity of precipitation, and increased frequency of extreme weather events such as heat waves, droughts, and floods. These changes will vary regionally and affect renewable resources, aquatic and terrestrial ecosystems, and agriculture. While uncertainties will remain regarding the timing and magnitude of climate change impacts, the scientific evidence predicts that continued increases in greenhouse gas emissions leads to increased climate change.

The following are the basic concepts outlined in the January 13, 2009 direction:

1. Climate change effects include the effects of agency action on global climate change and the effects of climate change on a proposed project.
2. The Agency may propose projects to increase the adaptive capacity of ecosystems it manages, mitigate climate change effects on those ecosystems, or to sequester carbon.
3. It is not currently feasible to quantify the indirect effects of individual or multiple projects on global climate change and therefore determining significant effects of those projects or project alternatives on global climate change cannot be made at any scale.
4. Some project proposals may present choices based on quantifiable differences in carbon storage and GHG emissions between alternatives.

As noted in this guidance, there are two types of climate change effects for proposed projects to consider, as appropriate:

- **The effect of climate change on a proposed project.** Examples include: effects of expected shifts in rainfall and temperature patterns on the seed stock selection for reforestation after timber harvest and effects of decreased snowfall on a ski area expansion proposal at a marginal geographic location, such as a southern aspect or low elevation.

- **The effect of a proposed project on climate change** (greenhouse gas emissions and carbon cycling). Examples include: short-term greenhouse gas emissions and alteration to the carbon cycle caused by hazardous fuels reduction projects, greenhouse gas emissions from oil and gas field development, and avoiding large greenhouse gas emissions pulses and effects to the carbon cycle by thinning overstocked stands to increase forest resilience and decrease the potential for large scale wildfire.

This direction was released after the 2004 FEIS and ROD and is therefore new and sufficient. However, the essence of this direction was followed in the analysis contained in the 2004 FEIS, i.e., **climate change effects regarding snowfall** (the effect of climate change on a proposed project) was considered as an Other Issue and "global warming" was further reconsidered in the New Information Review of September 22, 2009 (SEIS Appendix A). The position of the Forest in regard to snowfall, climate change and ski area expansion continues to be as stated in the FEIS at page III-9 and IV-6:

> "Scientific research indicates that while climatic change may affect the amount of snowfall in the future, that situation cannot be accurately predicted. Annual snowfall amounts are highly variable and will remain highly variable in the future. A ski area cannot control the snowfall in any given year, ski area management can however, adjust operations to account for the available snowfall over many years. The degree that climatic change would change the snowfall situation at Mt. Ashland is likely to be unnoticeable in the current range of snowfall variability."

Expansion at Mt. Ashland is not located on southern slopes; the majority of the ski area lies at a north/northeast aspect. While expansion activities would occur at some of the lower elevations of the Special Use Permit Area, an expanded ski area would be located at elevations of over 5,800 feet, a high elevation for southern Oregon, above the transient snow zone and would typically be covered by thick blankets of snow (FEIS page III-50). Therefore it was determined that the 2004 FEIS, ROD and subsequent new information reviews are in accordance with this guidance and direction and that this topic (climate change effects regarding snowfall) is not relevant to the project (i.e., it does not have a bearing on decisions for actions and/or effects regarding ski area expansion).

The effect of a proposed project (ski area expansion) on climate change (**greenhouse gas emissions and carbon cycling**) was likewise considered in the 2004 FEIS. It is recognized that forests play a major role in the carbon cycle. The carbon stored in live biomass, dead plant material, and soil represents the balance between CO_2 absorbed from the atmosphere and its release through respiration, decomposition, and burning. Over longer time periods, indeed as long as forests exist, they will continue to absorb carbon. Carbon emissions were analyzed and disclosed in the 2004 FEIS at page IV-108 through IV-111 (see Table IV-15. Estimated Mean Daily Vehicular Emissions by Alternative).

Results of modeling showed that for particulates, current daily groomer emission are 308 kilograms; for Alternative 2 and all other Action Alternatives, it would increase to 615 kilograms. For CO, the current levels are 0.9; under Alternative 2, they would be 1.8. For NOx, current levels are 10.4; under Alternative 2, they would be 30.8. Other emission sources were not modeled because they were considered insignificant or unlikely to affect emission related values.

The [decision for] the Mt. Ashland Ski Area Expansion is estimated to require felling of approximately 5,500 trees; 3,500 of these trees would be less than 16 inches in diameter. Slash burning is one form of disposal used for removal of vegetative material generated for lift and ski run construction. As stated in the 2004 FEIS, only minimal burning of hand piles is anticipated under any of the Action Alternatives. In compliance with the Oregon Smoke Management Plan, prescribed burning activities would require pre-burn registration of prescribed burn locations with the Oregon State Forester. Registration includes specific location, acreage, topographic and fuel characteristics. The amount of slash burning would be minimized by the removal of commercial grade timber, the lopping and scattering of slash, and the utilization of small and large woody material for erosion control. Additional debris, including woody matter less than four inches in diameter, may be chipped and used on-site, or elsewhere within the area as part of composting, re-vegetation, or other efforts to improve soil productivity.

Many proposed projects and programs would emit greenhouse gases (direct effect) and, thus, contribute to the global concentration of greenhouse gases that could affect climate (indirect effect). Since greenhouse gases mix readily into the global pool of greenhouse gases, it is not currently possible to ascertain the effects of emissions from single or multiple sources (project). Also, because Forest Service projects are extremely small in the global atmospheric CO_2 context, it is not presently possible to conduct quantitative analysis of actual climate change effects based on individual or multiple projects.

Ski area expansion was identified to have minor cause-effect relationships to greenhouse gas emissions or the carbon cycle, and was determined to be of such a minor scale at the global or even regional scale, that the direct effects would be meaningless to a reasonable decision regarding this project. As greenhouse gas emissions are integrated across the global atmosphere, it is not possible to determine the incremental cumulative impact on global climate from emissions associated with any number of particular projects. Nor is it expected that such disclosure would provide a practical or meaningful effects analysis for local project decisions. Uncertainty in climate change effects is expected since it is not possible to meaningfully link individual project actions to quantitative effects on climatic patterns. Therefore the effect of ski area expansion on climate change (greenhouse gas emissions and carbon cycling) was determined to be not relevant.

Forest Service Template for Assessing Climate Change Impacts and Management Options
The Template for Assessing Climate Change Impacts and Management Options ((TACCIMO) is a web-based tool developed by the Forest Service – Southern Research Station, Ashville, North Carolina, June 2010. It provides land owners, managers, and planners with the most current climate change science available. It compiles climate change projections, literature-based impacts and management options, and Forest Service land and resource management plans in an online database. It synthesizes these inputs based on user-defined criteria and creates and optional customized reports to aid forest planning and management.

Information generated by TACCIMO can satisfy a range of needs for a variety of users including federal planners and managers, as well as state, private, and cooperative forestry stakeholders. Its main application was found to be for forest level planning. While sufficient and new, this tool was found to be not relevant since there is no meaningful application to a project of the scale of ski area expansion at Mt. Ashland that generates little in the way of greenhouse gas emissions. Its climate change predictions are primarily compilations of other published science and its calculations are similar to other currently predictive models.

Forest Service Climate Change Resource Center
The Forest Service has established a National Climate Change Resource Center. It is web-based and offers links to ongoing publications related to climate change and to climate change tools. Of note from this source is a climate change tool entitled Carbon OnLine Estimator (COLE).

COLE is a versatile tool to use for a wide range of carbon estimation needs. COLE draws from Forest Inventory and Analysis (FIA) data to provide basic carbon inventory and growth-and-yield estimates for a particular forest, region, or state. While COLE draws from FIA plot data, the data is aggregated at the county or national forest level, so analysis can occur at this level or higher. COLE allows the user to create a growth and yield prediction of carbon pools according to forest type, ownership class, and a variety of other variables. Estimates may also be produced corresponding to the format for the inventory of US greenhouse gas emissions and sinks, and can be useful for the carbon criterion in the Montreal Process criteria and indicators for sustainability. However, the tool is not necessarily sufficient for an individual to use as a means of establishing a baseline or current carbon inventory for the purpose of enrolling a project in carbon markets or registries - this can usually only be done through a field-based inventory, conducted by a forestry professional. COLE was originally developed to aid in voluntary reporting of greenhouse gases as described in section 1605(b) of the Energy Policy Act of 1992. COLE, and NE-GTR-343 are based on similar data and conversion factors.

While sufficient and new, this tool was found to be not relevant since there is no meaningful application to a project of the scale of ski area expansion at Mt. Ashland that generates little in the way of greenhouse gas emissions.

NEPA guidance from the Council on Environmental Quality

On February 18, 2010, The Council on Environmental Quality (CEQ) provided draft guidance memorandum for public consideration and comment on the ways in which Federal agencies can improve their consideration of the effects of greenhouse gas (GHG) emissions' and climate change in their evaluation of proposals for Federal actions under the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 et seq. This draft guidance is intended to help explain how agencies of the federal government should analyze the environmental effects of GHG emissions and climate change when they describe the environmental effects of a proposed agency action in accordance with Section 102 of NEPA and the CEQ Regulations for Implementing the Procedural Provisions of NEPA, 40 C.F.R. parts 1500-1508.

While sufficient and new, this guidance was found to be similar to and in accord with existing Forest Service direction on assessment of climate change in project level NEPA. It reiterates the same context as Forest Service direction. Of note on page 3 is the threshold for evaluation for specifically calculating emissions for proposed actions that would directly emit 25,000 metric tons or more of CO_2 equivalent greenhouse gas emission on an annual basis. As noted above, ski area expansion at Mt. Ashland would generate miniscule greenhouse gas emissions in regard to this threshold. Given the determinations as described above, this guidance was found to be not relevant since it offers nothing new and current climate change analysis is consistent with its content.

Environmental Protection Agency

The Environmental Protection Agency has established a national web-site regarding climate change. This site establishes the state of knowledge for the science of climate change, it compiles climate change projections, literature-based impacts, and offers links to ongoing publications related to climate change and to climate change tools.

While sufficient and new, this web-based site was found to be similar to other federal sites, and offered consistent tools. This source was found to be not relevant since it offers nothing new and current climate change analysis for ski area expansion is consistent with its content.

National Climate Change and Wildlife Science Center

The U.S. Geological Survey (USGS), the science agency of the U.S. Department of the Interior, has established a web-site entitled The U. S Geological Survey National Climate Change and Wildlife Science Center (NCCWSC).

It focus is on the earth's climate, including changes in temperature, weather patterns, and precipitation, that are expected to have significant effects on the nation's fish and wildlife resources now and in the future. Relatively little scientific information exists on which to inform adaptation or management of fish and wildlife in the face of climate change. The Center is therefore being designed with input from federal, state, and Tribal science and management agencies; non-governmental organizations; academic institutions; and others having an interest in conserving America's fish and wildlife resources. This National Climate Change and Wildlife Science Center provides fish and wildlife partners with access to other USGS Global Change Science capabilities and products.

While sufficient and new, this web-based site was found to be similar to other federal sites, and offered consistent tools. This source was found to be not relevant since it offers nothing new and current climate change analysis is consistent with its content.

Nolin and Daly Study
The GOES Institute provided a paper that had been published in the Journal of Hydrometeorology in October 2006 titled *Mapping "At Risk" Snow in the Pacific Northwest* by Anne W. Nolin and Christopher Daly. This paper presents the modeling results of possible effects of "global warming" on current snow-dominated winter precipitation regimes. A map is presented that predicts "at risk" snow zones concentrated in the Cascades and the Olympic Mountains of the Pacific Northwest and ski areas in these mountains are listed and compared according to their risks of a significant increase in the relative frequency of warm winters. This study was considered in the New Information Review of September 22, 2009 (DSEIS Appendix A) and is therefore not new.

As summarized in the New Information Review of September 22, 2009, Mt. Ashland appears to be more likely than most northwest ski areas to survive longer under a global warming scenario. If the agency were to make climate change policy decisions that would affect permitting decisions of local ski areas, the Mt. Ashland location might likely be one favored over others for continued investment. Its economic challenges to date include snowfall as one factor amongst many in determining the economic performance. Mt. Ashland's economic challenges also come from an inadequate mix of terrain, which is the focus of the permit application for expansion and the whole purpose of the FEIS.

Other Recent Papers or Science Regarding the Effects of Climate Change:
Technical Memorandum No. 6; Effects Of Climate Change On Ashland Creek, Oregon
Another recent and site specific study *Technical Memorandum No. 6 Effects Of Climate Change On Ashland Creek, Oregon* was prepared for the City of Ashland by Alan F. Hamlet and Pablo Carrasco of the Dept. of Civil and Environmental Engineering, University of Washington, September 2010.

Global climate model simulations from the Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC AR4) project warmer temperatures and changes in the seasonality of precipitation for the Pacific Northwest region of North America. Because snowpack is sensitive to these kinds of changes, losses of snowpack and resultant streamflow timing shifts (more flow in winter, less in summer) are common impacts to water supply that have been shown in many previous studies throughout the region. In this study, the authors applied a fine-scale hydrologic model implemented over Ashland Creek to simulate the effects of projected changes in temperature and precipitation from the IPCC AR4 on snowpack and streamflow. Ten realizations of 2040s climate (each associated with a Global Climate Model) for the A1b emissions scenario are used as input to the hydrologic model and are compared to a historical baseline simulation from 1920-2000.

The hydrologic simulations (in this study) show that projected temperature and precipitation changes in the Pacific Northwest for the 2040s associated with the A1b scenario will result in substantial reductions in spring snowpack, May-September streamflow, and extreme low flows in Ashland Creek.

"Although there is considerable uncertainty in these projections because of differences in the global climate model simulations, all scenarios show reductions in average April 1 snow water equivalent in both east and west forks, and nine out of ten scenarios of combined flow show reductions in May through September streamflow. Likewise, extreme low flows in every future simulation year are lower than their historical counterparts." It is important to note that changes in the future will also vary from decade to decade due to natural variability of precipitation and temperature. In relatively cool and wet decades water supply impacts may be reduced from the averages shown above, whereas in relatively warm and dry decades water supply impacts may be larger than shown."

This study was conducted to primarily identify changes in water quantity (flow) for the Ashland Municipal Watershed supply. It was conducted as part of the City of Ashland Water Conservation and Reuse Study and Comprehensive Water Master Plan. Its findings are important to the City of Ashland concerning its water supply. Its predictions however are not specific regarding quantity or timing of snowfall. Its predictions seem to imply that due to climate change, there will be less spring snowfall. That scenario is not problematic for ski area operations as the snowpack base for skiing is formed in early winter and typically does not rely on additional snowfall in the spring. The ski area typically closes in mid-April (see table at page 13). This study also seems to predict early and sometimes wet and cold winters, which is advantageous to early snowfall at the elevation of the ski area.

This study was released after the 2004 FEIS and ROD and is therefore sufficient and new. After review of this study, the position of the Forest in regard to snowfall, climate change and ski area expansion continues to be as stated in the FEIS at page III-9 and IV-6, and earlier in this New Information Review.

Proposed expansion at Mt. Ashland is not located on southern slopes; the majority of the ski area lies at a north/northeast aspect. While expansion activities would occur at some of the lower elevations of the Special Use Permit Area, an expanded ski area would be located at elevations of over 5,800 feet, a high elevation for southern Oregon, above the transient snow zone and would typically be covered by thick blankets of snow. The degree that climatic change would change the snowfall situation at Mt. Ashland is likely to be unnoticeable in the current range of snowfall variability and not likely to be substantial within the next 20-40 years. Therefore it was determined that this study and its relationship to climate change effects regarding snowfall is not predictable and not relevant to the project (i.e., it does not have a bearing on decisions for actions and/or effects regarding ski area expansion).

Other Recent Papers or Science Regarding the Effects of Climate Change:
Oregon Climate Assessment Report
A very recent paper (December 1, 2010) was prepared by the Oregon Climate Change Research Institute, entitled *Oregon Climate Assessment Report*, by K.D. Dello and P.W. Mote (eds); College of Oceanic and Atmospheric Sciences, Oregon State University.

This recent report was reviewed for its application to ski area expansion at Mt. Ashland. According to the author, "Oregon faces some significant challenges because of a changing climate and this report synthesizes some of the best available science to gain a glimpse of our future," said Philip Mote, a professor of oceanic and atmospheric sciences at Oregon State University who directs the research institute. "Having said that, there are some clear gaps in our research knowledge that must be addressed - especially the economic impacts of climate change - if we are to help communities, businesses and organizations better prepare for the future."

Among the report's key findings (related to snowfall):

-Summer water supplies will decrease as a result of reduced snowpack and summer rain. By midcentury, snowpacks in the Cascade Mountains are projected to be less than half of what they were in the 20th century, with lower elevation snowpacks being the most vulnerable.

-The North Pacific winter storm track could shift northward in the 21st century, meaning slightly fewer, but more intense storms and more coast flooding.

This study was released after the 2004 FEIS and ROD and is therefore sufficient and new. After review of this study, the position of the Forest in regard to snowfall, climate change and ski area expansion continues to be as stated in the FEIS at page III-9 and IV-6, and earlier in this New Information Review.

Proposed expansion at Mt. Ashland is not located in the Cascades or on southern slopes; the majority of the ski area lies at a north/northeast aspect. While expansion activities would occur at some of the lower elevations of the Special Use Permit Area, an expanded ski area would be located at elevations of over 5,800 feet, a high elevation for the Siskiyou Mountains of southern Oregon, and above the transient snow zone. The degree that climatic change would change the snowfall situation at Mt. Ashland is likely to be unnoticeable in the current range of snowfall variability and not likely to be substantial within the next 20-40 years. This and previous studies warn of the uncertainties associated with modeling and predictions. In this study, a prediction of more intense storms could actually benefit the ski area. Therefore it was determined that this study and its relationship to climate change effects regarding snowfall is not predictable and not relevant to the project (i.e., it does not have a bearing on decisions for actions and/or effects regarding ski area expansion).

Summary
Ski area expansion was identified to have only minor cause-effect relationships to greenhouse gas emissions or the carbon cycle, and was determined to be of such a minor scale at the global or even regional scale, that the direct effects would be meaningless to a reasonable decision regarding this project.

Proposed ski area expansion at Mt. Ashland is not located in the Cascades or on southern slopes; the majority of the ski area lies at a north/northeast aspect. While expansion activities would occur at some of the lower elevations of the Special Use Permit Area, an expanded ski area would be located at elevations of over 5,800 feet, a high elevation for the Siskiyou Mountains of southern Oregon, and above the transient snow zone. The degree that climatic change would change the snowfall situation at Mt. Ashland is likely to be unnoticeable in the current range of snowfall variability and not likely to be substantial within the next 20-40 years.

All scientific studies warn of the uncertainties associated with modeling and predictions. It was determined that these sources of new information and their relationship to climate change effects regarding greenhouse gas emissions, the carbon cycle or snowfall are not predictable and not relevant to the project (i.e., they do not have a bearing on decisions for actions and/or effects regarding ski area expansion). Further, none of the information was determined to be substantially different from the information that was presented in existing documentation, and was found to be not significant.

The Forest will continue to review the scientific literature and federal agency direction regarding climate change for its applicability to decisions made (or to be made) at the Mt. Ashland Ski Area.

2. Engelmann Spruce Stand Events

A claim was made via comments to the DSEIS that following the 2004 FEIS, a significant disturbance took place within the Engelmann spruce stand. A heavy windstorm blew down a large number of trees. The claim was made that this impact combined with ski area expansions could affect long-term viability of this 18.2 acre stand.

In December 2002 a large number of spruce were either blown down or fell from heavy snow loading. This was discussed and accounted for in the 2004 ROD at page 27. The 2004 FEIS (page IV-115) stated the following (for Alternative 2):

> "Because the area proposed for removal under this alternative would be quite small (even assuming loss to windthrow) compared to all the occupied acres in the Watershed, and because all age classes are well represented throughout the SUP area grove and the rest of the watershed, this alternative is expected to have no effect on the long-term viability of Engelmann spruce in the Ashland Watershed."

Therefore the claim that a significant disturbance took place following the 2004 FEIS is not entirely accurate (and not sufficient). The largest natural disturbance (to date) occurred in 2002 and was documented in the 2004 FEIS, and is not new.

However, on January 3rd and 4th 2008, a powerful winter storm brought high winds and precipitation to SW Oregon. Several additional trees came down within the 18.2 spruce grove (including Shasta red fir) and throughout the Ashland Watershed. This information is sufficient and new. These events are natural, not predictable and are not associated with ski area expansion activities (as none have yet occurred). This is not a cumulative effect (under NEPA) as these events are not reasonably foreseeable. It was determined to be not relevant as these natural events would not have a bearing on decisions for actions and/or effects of ski area expansion. The determination remains as stated above, i.e., that because the area proposed for ski area expansion actions (tree removal) would be quite small (even assuming loss to windthrow) compared to all the occupied Engelmann spruce acres in the Watershed, and because all age classes are well represented throughout the 18.2 acre stand (within the Special Use Permit Area) and the rest of the Watershed, ski area expansion activities are expected to have no effect on the long-term viability of Engelmann spruce in the Ashland Watershed (not significant).

3. Climate Change Effects on Fire Regime

A claim was made via comments to the DSEIS that the Forest Service should analyze predicted changes to fire regime and threat to expanded facilities from wildfire based on Bachelet, D., J.M. Lenihan and R.P. Neilson (2007): *Wildfires and Global Climate Change: The Importance of Climate Change to Future Wildfire Scenarios in the Western United States;* Parry, M., O. Canziani, J. Palutikof, P. van der Linden and C. Hanson (2007): *Climate Change Impacts, Adaptation and Vulnerability – Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*; Running, S.W. (2006): *Is Global Warming Causing More, Larger Wildfires?*; and Westerling, A.L., H.G. Hidalgo and T.W. Swetnam (2006): *Warming and Earlier Spring Increase Western U.S. Forest Wildfire Activity.*

This claim (changes to fire regime and threat to expanded facilities from wildfire) was not specifically analyzed in the 2004 FEIS and ROD and the listed papers were published since the 2004 FEIS and ROD. This claim is therefore sufficient and new.

Most of the Special Use Permit Area is within the area covered by the 2003 Upper Bear Assessment (UBA), which provided the foundation and background for fuels management planning, including Ashland Forest Resiliency. This document identifies the ski permit area to have a fire regime with a return interval of 100+ years (IVb) and a Condition Class 1, where "Fire regimes are within or near a natural range and the risk of losing key ecosystem components is low (UBA pages 3-17 , 18 & 19). Fire frequencies have departed from natural frequencies (either increased or decreased) by no more than one return interval. Vegetative attributes (species composition and structure) are intact and functioning within a range of natural variability." Map 3-4 (UBA page 3-25) predicts a Low (fire) Risk and Hazard. In the 2008 Ashland Forest Resiliency FEIS, the area within and around the Mt. Ashland Ski Area was predicted to have a *Low* Burn Probability (AFR FEIS MAP III-1, page III-21).

Fire management planning at the project level requires an analysis of the historical role of fire by describing the types and distribution of fire regimes across landscapes. In 2004, a nationally standardized, interagency Fire Regime Condition Class (FRCC) protocol was released (Hann et al. 2005) which used the original FRCC concepts and definitions published in Hardy et al. (2001), Hann and Bunnell (2001), and GTR- RMRS-87 (Schmidt et al. 2002). This methodology provides a landscape level assessment of mapped conditions and incorporates two measures for condition class determination: 1) Succession class distribution and 2) fire frequency and severity. Since disturbances operate at landscape scale, this methodology provides a better picture of condition class by placing stand conditions in context with landscape conditions. This landscape approach recognizes that a range of stand conditions contribute to a condition class determination and is intended to capture the characteristic patterns of a fire regime.

Forest Fire Management Planners (and the primary designers of Ashland Forest Resiliency) reviewed the listed papers associated with this claim. This literature was found to discuss and predict the likelihood of more intense and severe fires due to increased rainfall and resultant increased growth of forest vegetation and subsequent heavier fuel loadings, presumably resulting from climate change (a global warming trend). While climate change and a warming trend is predictable at large or landscape scales, its effect on fire regimes at any one particular area remains highly speculative. The effect on forest vegetation and resulting fire regime at the Mt. Ashland Ski Area is highly dependent on seasonal snowpack, amounts of rainfall, etc. Further, any change to the fire regimes associated with the Mt. Ashland Ski Area (currently low with a low fire risk and hazard) is likely to take place very slowly over time and is not measurably foreseeable in the next 20-40 years. In addition, fire regimes would begin to change in a positive way at lower elevations and areas within the UBA that are treated under Ashland Forest Resiliency (AFR).

Predicted changes to the fire regime and threat to ski area facilities at Mt Ashland was determined to be not relevant as the risk and threat of damage to existing or expanded ski area facilities is currently low and is predicted to remain low in the future. This topic would not have a bearing on decisions for actions and/or effects of ski area expansion and is not significant.

4. New Information on Fuels Management Cumulative Effects

A claim was made via comments to the DSEIS that the Forest Service has not adequately considered cumulative watershed effects that may result from Mt. Ashland Ski Area expansion together with the AFR Project based on Elliot and others (2010). Further claimed was that this publication presents significant new information regarding effects of fuel management activities that was not considered in the AFR record and is potentially significant regarding cumulative effects of MASA Expansion to peak flows, soil erosion, mass wasting, sediment delivery and water quality.

The referenced publication is Elliot, William J.; Miller, Ina Sue; Audin, Lisa. Eds. (2010) *Cumulative Watershed Effects of Fuel Management in the Western United States.* Gen. Tech. Rep. RMRS-GTR-231. This publication was prepared by the U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fort Collins, CO.

This claim (cumulative watershed effects and consideration of Elliot et al.) was not specifically analyzed in the 2004 FEIS and ROD and the listed paper was published (2010) since the 2004 FEIS and ROD. This claim is therefore sufficient and new.

This publication was produced by a group of scientists who were invited by the Forest Service to synthesize the current scientific literature to answer an important question facing the managers of federal and private lands in many parts of the country. The question was: What potential cumulative environmental effects at the watershed scale might be caused by implementing land management activities that reduce forest fuels on large scales?

The main body of this report is a compilation of what they found, including both what can and cannot be concluded from the current science. The scientific principles reviewed in this report were intended to be general. The examples of fire environments, land management practices, and vegetation types are drawn primarily from the western continental United States, roughly the region west of 100° W longitude.

Forest Fire Management Planners (and the primary designers of Ashland Forest Resiliency) reviewed the publication associated with this claim. In review of this document, its clear purpose was to gather the current state of information in regard to cumulative effects analysis, with a focus on fuels management activities. While an excellent compilation of publications and papers from a number or reputable authors, it does not put forward any new or significant science. Most of the chapters and topics looked at larger scales than an area the size of the Special Use Permit Area.

This publication was determined to be not relevant as it presents nothing new associated with the science of cumulative effects analysis; it merely compiles what is currently known. The 2004 cumulative effects analysis for Mt Ashland Ski Area Expansion was very site specific to the locally affected watersheds, and was in alignment with (and not in conflict with) the principles outlined in this publication. This topic would therefore not have a bearing on decisions for actions and/or effects of ski area expansion and is not significant.

5. Downward Trend of Ski Area Visitation

A claim was made via comments to the DSEIS that the Forest Service should analyze the general downward or flat trend in ski area visitations across the West. The comment further claimed that poor visitation at Mt. Ashland is created by a declining, dying industry, shorter ski years due to climate change and the inherent high cost of skiing coupled with the down economy.

These claims make reference to conditions that have or may have occurred since the 2004 FEIS and ROD. The first claim regarding a downward or flat trend in ski area visitations across the West was not found to be accurate. According to the results of an April 2010 survey, in 2009/10 the U.S. ski industry recorded 59.7 million skier visits for the second best season ever. In spite of continued pressures from a weak economy and without the catalyst of an exceptional snow year, skier visits this season increased by 4.2 percent to an estimated 59.7 million visits, only 1.2 percent below the all time record of 60.5 million visits achieved in 2007/08. All regions exceeded ten-season visitation averages (2000/01 – 2009/10), including the Pacific Northwest (up 5.7 percent) (source: Kottke: National End of Season Survey 2009/10, April 2010).

According to this survey, 2009/2010 skier visits in Oregon were up 8.78% from the previous year. The three-year skier visit average for the State (2007-2009) was 1,935,150 and the ten-year average was 1,685,868 visits. Based on this, the industry does not appear to be flat or dying. Therefore the claim of a downward trend across the West was determined to be not sufficient (complete and accurate) to warrant further consideration.

The second claim regarding the downward trend at Mt. Ashland over the last two years was found to be accurate and therefore sufficient and new. This trend was then evaluated as to whether it was relevant to the project (i.e., if it has a bearing on decisions for actions and/or effects of ski area expansion).

As shown in the table below, within the last ten years (1999-2009) the Mt. Ashland Ski Area has opened on December 5, 17, November 30, December 19, 12, 10, 9, 15, 20, 20, and 17th. The average opening date for Mt. Ashland is December 13th. In 2010, the ski area is expected to open on December 3rd.

Year	Skier Visits	Days of Operation	Nights of Operation	Date Open	Date Closed
2000	86,569	134		12/5/1999	4/16/2000
2001	71,228	99	36	12/17/2000	3/25/2001
2002	95,170	135	50	11/30/2001	4/14/2001
2003	102,479	116	48	12/19/2002	4/13/2003
2004	102,329	116	42	12/12/2003	4/11/2004
2005	100,138	112	40	12/10/2004	4/10/2005
2006	90,741	116	37	12/9/2005	4/16/2006
2007	90,989	116	38	12/15/2006	4/15/2007
2008	91,022	100	23	12/20/2007	4/20/2008
2009	76,877	96	24	12/20/2008	4/19/2009
2010	72,578	86	20	12/17/2009	4/18/2010

Source: Pacific Northwest Ski Areas Association and MAA 2010

The downward trend at Mt. Ashland over the last two years can be attributed to at least two factors, a weak economy and a reduced operating season. In the 2008/09 season the ski area went to a 6-day operating week (as opposed to 7 days) and to 2-nights/week of night skiing (as opposed to 3 nights/week). In the 2009/10 season the ski area operated 5 days/week.

Operational aspects of MAA are not within the scope of this analysis, e.g., fewer operating days may or may not be due to a lack of snow or interest and demand from the skiing public. In fact, the lack of beginner or intermediate terrain at Mt. Ashland may be one of the causes of less days of operation, which is the basis of the purpose and need for ski area expansion. It was further determined that this variance of operational days is within a normal and predictable range over a ten year period.

An additional reason for recent fewer visits may be in the way that the Mt. Ashland Association counts visitation; it is now based on a formula of average occupants per vehicle and number of vehicles in the parking lot, as opposed to actual ticket sales and an applied season pass use formula. Two years or even ten years is not enough time to establish a downward visitation trend due to a lack of snow based on a changing climate trend predicted to be associated with global climate change.

Therefore it was determined that this recent and two year reduction of skier visits at Mt Ashland is not relevant to decisions for actions and/or effects of ski area expansion and this information is not significantly different from the information that was presented in existing documentation. This topic would therefore not have a bearing on decisions for actions and/or effects of ski area expansion and is not significant.

6. Harvest Plans of Adjacent Private Landowners

A claim was made via comments to the DSEIS that several Timber Harvest Plans (THPs) have allowed significant acreages of private land to be clearcut adjacent to the ski area in both Oregon and California since the 2004 ROD was signed. These THPs are sufficient and new, having been developed since the 2004 FEIS and ROD, and were not specifically considered.

In the cumulative effect analysis as documented in the 2004 FEIS and specifically in FEIS Appendix C, private timberlands within all affected watersheds were assumed to be primarily in an early seral vegetative stage. The assumption was that these lands would be intensively managed for timber products. For the cumulative effects analysis (*ERA Methodology*) this was part of the current condition assumptions and was not part of foreseeable actions.

According to 2004 FEIS Appendix C page C-3:

"The following table displays the coefficients used to model the satellite imagery on the RRNF:

Table 1. ERA Coefficient by Vegetation Type

Description		ERA	Coefficient
Late-successional forest	greater than 60% canopy closure, greater than 24" DBH	Undisturbed	0
	less than 60% canopy closure, greater than 24" DBH	Moderate disturbance, 20-30 years old	0.06
Mature forest	greater than 60% canopy closure, 11 - 24" DBH	Undisturbed	0
	less than 60% canopy closure, 11 - 24" DBH	Moderate disturbance, 20-30 years old	0.06
Immature forest	greater than 60% canopy closure, 6 - 11" DBH	High disturbance. 30-40 years old	0.06
	less than 60% canopy closure, 6 - 11" DBH	High disturbance, 20-30 years old	0.17
Seedling/sapling	0 – 6 " DBH	Moderate disturbance, 0-20 years old	0.11
Shrub/grass/forb[1]			0
Barren[2]		Cut/fill	1.0
Roads		Natural or aggregate surface	1.0
Non-erodible		Paved road	1.0
Private[3]		High disturbance 0-20 years old	0.21

[1] Assumes shrub and grass/forb communities are recovered or in an undisturbed, natural condition
[2] Does not include some naturally barren ground. For analysis, assumes that 50% of land mapped as barren is a result of mechanized treatment
[3] Assumes that 75% of the private lands within the analysis area have been disturbed since the satellite imagery was obtained.

Cumulative effects analysis includes past and present actions as well as reasonably foreseeable actions. Many of the past activities are accounted for in the vegetative mapping that was used (i.e. past timber harvest), as described by the current condition. Projects that have occurred since the mapping was completed or that are ongoing were accounted for in the analysis."

The ERA analysis in FEIS Appendix C (and in the above table) documents that 1) 75% of the private lands within the analytical watersheds were assumed to be disturbed, and 2) that that disturbance was considered to be "high" i.e., stands were considered to be 0-20 years old for purposes of analysis and at the time of analysis (2004).

Further analysis at this time considered if these harvest plans exceeded the cumulative prediction that 75% of private lands were in fact in an early seral vegetative stage (high disturbance). It was determined that these current harvest plans (THPs) do not exceed the 75% prediction and that this percentage remains an accurate and conservative estimate, i.e., that 25% of private lands would remain undisturbed and that the remaining lands (75%) would be considered to be highly disturbed as a current condition assumption. Therefore this new information was determined to not be a changed condition, is not relevant and is not significant.

7. Spotted Owl Recovery Plan

A claim was made via comments to the DSEIS that the 2004 FEIS and ROD for ski area expansion did not take into consideration the work on the spotted owl recovery plan, new demographic data indicating steep declines, the importance of the Klamath province to owl recovery or the impacts of disease and invasive species on the spotted owl. Range-wide, impacts to the owls from logging and fires, invasive species and other threats that continue to impact owl populations was not considered.

This claim (new spotted owl information and the spotted owl recovery plan) was not specifically analyzed in the 2004 FEIS and ROD, much of which was published since the 2004 FEIS and ROD. This claim is therefore sufficient and new.

A report summarizing the meta-analysis of demography of the spotted owls throughout its range was released in September of 2004 (Anthony et al. 2004). The report showed a decline of approximately 3.7 percent across the range of the owl and showed significant declines of populations in some areas, in particular Washington State and northern Oregon. Only four study areas within the range of the spotted owl did not show evidence of spotted owl declines. In southern Oregon, three study areas did not show declines and appeared to have relatively stable or increasing populations based on the 95 percent confidence intervals. More recently, Anthony et al. (2009) found that the spotted owl population in the south Cascades demographic study area continues to be stationary.

Courtney et al. also conducted a status review in 2004 of the spotted owl across its range, in a document known as the *Sustainable Ecosystem Institute Report*, which summarized the biology, ecology, habitat associations and trends, as well as current and potential threats to the species. The three major operational threats they identified were timber harvest, large-scale stand replacement wildfire, and barred owls. Other potential threats included effects associated with West Nile Virus, and Sudden Oak Death.

Courtney et al. (2004) found that habitat loss, the primary reason for listing of the spotted owl, had declined significantly across the range. However, there was also some concern as to the potential lag effects to spotted owl populations from past timber harvest. The greatest amount of habitat loss due to timber harvest had occurred in the Oregon Klamath and west Cascade provinces.

In a review of the US Fish and Wildlife Service (FWS) draft spotted owl recovery plan (DRP), Courtney et al. (2008) opined that the threat from wildfire was underestimated in the DRP for the dry forest provinces, and is inadequately addressed. They said that this threat is likely to increase given both current forest conditions, and future climatic change. The Courtney Team also discussed what they thought was an underestimate of the threat of habitat loss from fire and the harvest or 'salvage' of large and very large trees. The DRP threat assessment assumed that there would be no major loss of habitat currently conserved under the Northwest Forest Plan.

The Courtney Team also recommended reducing surface fuels, increasing the height to live crowns**,** decreasing crown densities, and to favor large fire tolerant trees in dry forest types such as southern and eastern Oregon and Washington**.** Specific to SW Oregon Klamath Province, they recommended that all large and old trees, either living or dead, are important wherever they occur, and suggested landscape designs that promote the increased abundance of large trees of fire tolerant species using ecologically sound landscape design criteria. The subsequent final Recovery Plan included these and other recommendations in large part for SW Oregon forests (FWS 2008).

In September of 2010, the US Fish and Wildlife Service issued a draft revised Spotted Owl Recovery Plan for review (FWS 2010). Major changes in the new plan include no Managed Owl Conservation Areas (MOCA), the introduction of a new spotted owl habitat suitability mapping effort, continued reliance on RA 32 (high quality habitat) to provide for refugia from barred owls, recommendations for no net loss of spotted owl habitat, as well as recommendations for activities in fire prone provinces. This draft is still out for review at this time.

There have been recent large fires in SW Oregon, in particular the Biscuit and the Timbered Rock fires, which reduced spotted owl NRF habitat within the Klamath Province. There is uncertainty as to how spotted owls respond to fire in southwest Oregon and research was conducted in the Timbered Rock Fire area in an attempt to answer that question.

Of the 15 spotted owl pairs affected by the Timbered Rock Fire, initially, 11 of those pairs continued to occupy their historic activity centers immediately after the fire even though their habitat was subjected to varying degrees of fire severity. However, a severe decline of owl pairs from the fire area was seen from 2004 to 2006. Survival and productivity also decreased greatly in birds from within the fire area (Clark 2007).

Barred owls have increased in southwest Oregon but not to the extent of other areas within the range of the spotted owl (Courtney et al. 2004, Anthony et al. 2004, 2005, 2006, 2007, 2008, and 2009). In the South Cascades demographic study area, there has been an increase of barred owls and they occupy up to 22 percent of historical or known spotted owl sites within that study area. However, there are far less barred owls known for southwest Oregon than other areas in the northern portion of the range and the spotted owl survival is stable in that study area as well as in the Klamath demographic study area (Anthony et al. 2009).

The other new threats of Sudden Oak Death (SOD) and West Nile virus are thought to be potential stressors to the northern spotted owl population. Sudden Oak Death or *Phytopthora* canker disease kills or injures many species of trees and shrubs, and may affect habitat components important to spotted owls and their prey. However, SOD is only known for the coastal region of NW California and SW Oregon. West Nile virus infects birds, although as of April 2005, no wild spotted owl infections have been documented; West Nile virus has been detected in Jackson County. It is unknown when and to what extent this threat may become a risk for the spotted owl.

The new information provided above and summarized by Courtney et al. (2004 and 2008) and the draft Spotted Owl Recovery Plan (USDI Fish and Wildlife Service 2010) does not alter analysis or change the effects determinations for ski area expansion. The concerns for spotted owls related to a population decline and the increase in barred owls are less in southwest Oregon than in other areas within the range of the spotted owl because the population in South Cascades is stable and the barred owl population is not as robust as in the northern portions of the range of the spotted owl (Courtney et al. 2004, 2008, Anthony 2005 and 2006). Therefore this new information was determined to be not relevant and not significant.

V. CONCLUSIONS

This document provides an assessment of topics based on comments received on the DSEIS that were considered to be within the scope of the DSEIS and were comprised of topics that claimed certain topics could or should be assessed for sufficiency, relevancy and significance as new information or changed circumstances since the 2004 FEIS and ROD. These topics included those that were not included or specifically analyzed in The "New Information Review" of July 2, 2007 as well as the "New Information Review" of September 22, 2009 (SEIS Appendix A). It also included topics addressed in SEIS Appendix A where new information or circumstances may exist since the latest assessment in September of 2009.

The sufficient and new information evaluated by the agency or claims submitted in these evaluations did not present a substantially different picture of the environmental consequences regarding Mt. Ashland Ski Area Expansion from what was already presented and considered in the 2004 FEIS and other relevant documents (see above). None of the information was found to be significant, would not lead to a change to the purpose and need for this project, and no further environmental analysis or documentation (correction, supplement, or revision to an environmental document) for these topics will be conducted.

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APPENDIX B

Responses to Comments Received on the March 2010 Draft Supplemental EIS

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APPENDIX B

Final Supplemental Environmental Impact Statement
(FSEIS)

Mt. Ashland Ski Area Expansion

Summary of Comments
And
Responses to Comments Received
on the March 2010 Draft Supplemental EIS

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November 2010

Appendix to Final Supplemental Environmental Impact Statement
Mt. Ashland Ski Area Expansion
Rogue River-Siskiyou National Forest
Siskiyou Mountains Ranger District

Responses to Comments Received on the March 2010 Draft Supplemental EIS

The Draft Supplemental EIS was made available for public review and comment under the provisions of the National Environmental Policy Act (40 CFR 1500-1508), and Notice, Comment, and Appeal Procedures for National Forest System Projects and Activities, (36 CFR 215). The Forest Service accepted written, electronic and oral comments as provided in §215.6. Pursuant to 36 CFR 215.6 (b), (1), this appendix documents the Responsible Official's consideration of all comments submitted in compliance with paragraph (a) of this section.

PUBLIC INVOLVEMENT

A 45-day public Comment Period for the Draft Supplemental Environmental Impact Statement (DSEIS) for Mt. Ashland Ski Area Expansion formally began on March 27, 2010 with publication of a Notice of Availability in the Federal Register Vol. 75 No. 58 (FR page 14594). The 45-day comment period closed on May 10, 2010.

500 paper copies and 25 compact discs of the full DSEIS were produced. Copies of the full DSEIS were distributed to federal and state agencies, local governments, elected officials, seven federally recognized tribes, media representatives, libraries, organizations, and businesses (See DSEIS, Chapter V, for a listing). The full DSEIS was provided to others upon request. The document was also made available on the Rogue River-Siskiyou National Forest website at http://www.fs.fed.us/r6/rogue-siskiyou.

SUMMARY OF PUBLIC RESPONSE

A total of 845 comments to the DSEIS were received at the close of the Comment Period. Approximately 60 additional comments were received after May 10, 2010. All comments received through September 30, 2010 were reviewed for substantive content and read and coded based on content and intent.

Summary of Comments

Substantive comments received generally focused on the transparency of analysis, and the detail and basis of assumptions of analysis. Some comments were determined to be outside the scope of the DSEIS. Other comments identified additional changed circumstances that could trigger a changed condition assessment (1909.15 Sec 18) or were related to implementation.

The majority of comments received were not considered substantive, as they primarily offered opinions or rationale for their viewpoint. These viewpoints tended to focus on support or opposition to ski area expansion. Many of these non-substantive comments were sincerely written and offered some detail in support of their opinion, from all perspectives (i.e., for or against expansion).

RESPONSE TO COMMENTS

Coding of each comment was based on the meaning and content of the sentence or paragraph as understood by Forest Service analysts. The original comment letters and copies of the letters displaying the analyst's coding are included in the Project Record.

The following sections of this Response to Comments Document identify and contain non-substantive comment statements and responses to substantive comments. After analyzing the comment statements as described below, the Planning Team with assistance from the Interdisciplinary Team grouped related topics to avoid duplication and then responded to the comments. The comments and responses are intended to be explanatory in nature; if there are any inadvertent contradictions between this Appendix and the text of the Final SEIS, the Final SEIS prevails.

Each substantive comment is captured in **bold** below, followed by the agency's response to each. To minimize duplication, substantive comments addressing essentially the same topic or concern have been consolidated among the various letters. Each comment contains an example citation and/or reference to the comment letters where contained. Every comment was read, reviewed and considered, regardless of whether it was one comment repeated many times by many people, or a comment submitted by only one person. Emphasis was placed on the content of the comment.

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Opinions

Comments coded as **001** on letters contained in the Project Record are ones that express values, opinions, beliefs or assertions, and/or convey support, agreement or a preference (vote) for a particular action, alternative or outcome, that declares the respondent's perspective but does not dispute the results of the environmental review or explain the relevance of the statement to the DSEIS and its purpose and need, or acknowledged impacts [Note: While expressions of viewpoint are legitimate feedback for the Forest Service to consider, and it is important to understand varied perspectives, an agency response is not ordinarily warranted for these types of statements.].

Selected examples of these types of comments from the input are included below:

The undersigned local, regional and national conservation organizations demand that you withdraw the draft supplemental environmental impact statement (DSEIS) regarding expansion of the Mount Ashland Ski Area (MASA). (DS-2, page 1)

The Forest Service has declined to expand the MASA consistent with obvious alternatives, ignores its own standards for protection of the Ashland Creek municipal watershed, extends outdated and fatally flawed assumptions about ski area viability. (DS-2, page 1)

The Forest Service has elected not to improve the MASA consistent with the 2004 Record of Decision ("ROD") in ways that can be implemented today. Rather than proceed with unopposed activities that it says are needed to meet the purpose and need for MASA expansion and to improve water quality, the Forest Service holds these actions hostage to its ability to implement the modified Alternative 2, as described in the ROD. (DS-2, page 1)

While I support the Ski Area and some form of expansion, I do not support expansion in the scenic, fragile and wild Middle Branch which is part of the McDonald Peal Roadless Area. Instead, I support the Community Alternative. (DS-16, page 1)

The recently released Draft Supplemental Environmental Impact Statement (DSEIS) regarding the Mt. Ashland improvement plan has strengthened the 2004 Record of Decision which scientifically support the improvement plan moving forward (DS-20, page 1)

The DSEIS confirms the Pacific fisher, a small weasel like animal, will not be negatively affected by Mt. Ashland's improvement plans. (DS-20, page 1)

*The DSEIS satisfies all concerns about restricted riparian reserves and watershed terrain by showing the impact of the project is below all federal guidelines governing such areas. (*DS-20, page 1)

I support the proposed Mt Ashland Ski Area Expansion; the current mountain places young, old and snowboarders at risk. The Community Alternative is neither from the community or an alternative as it does not meaningfully reduce harm to any of the at-risk users. (DS-357)

The ROD states on page 34: "Alternative 2 returns a positive value under both the Expected and High visitation trend scenarios. Alternative 6 returns a positive value under the High visitation trend scenario. Alternatives 3, 4, and 5 do not return a positive value under any scenario." This remains the case today and provides solid analysis that the plan of Alternative 2-Modified is the choice that provides long term economic viability. (DS-433)

The unopposed activities identified by environmental groups do not individually or collectively generate the skier visits and revenue needed to sustain Mt. Ashland into the future. They do not adequately address the core problem of expert, intermediate, beginner, and novice terrain range and balance needed for long term sustainability. (DS-433, page 2)

The decision-maker has absolutely no access to the new analysis relative to the variety of alternatives. This not only shows pre-decisional bias but fails to meet NEPA requirements of consideration of possibly more ecologically sound actions. The current DSEIS treats the decision as a foreordained formality and undermines the very purpose of NEPA. (DS-502, page 3)

Another priority should be moderating the amount of big cars carrying people up big mountains (thanks to big snowplows) to be passively lifted by big loud machines just for a temporary thrill. (DS-736)

Upgrades to the current resort infrastructure and footprint could be seen as a reasonable alternative to expansion, causing less controversy, risk, impact, and litigation. (DS-800, page 6)

We understand that the primary driver to develop this DSEIS was the need to analyze and correct specific violations identified by the Ninth Circuit Court of Appeals. We believe that the document succeeds in that regard. (DS-824, page 1)

Restatements

Comments coded as **002** on letters contained in the Project Record are ones that recite existing laws, regulations, management direction, policy, resource management knowledge, science literature conclusions/citations, definitions, existing policies (or provide a personal interpretation of such) or restate analysis or information already documented in the environmental document(s). This category also includes personal background of the commentor or their organization. **An agency response is not ordinarily warranted for these types of statements; examples or responses are not included in this Response to Comments Document.**

Lacks Specificity or Clarity

Comments coded as **003** on letters contained in the Project Record are ones that lack site specificity to identify an effects analysis deficiency, lack clarity to understand the meaning of the respondent's statement in connection with the environmental document at hand, or the comment is composed of expansive or vague assertions unsupported by data, logical line of reasoning, observation, evidence or specific relationship to the analysis under consideration. **An agency response is not ordinarily warranted for these types of statements; examples or responses are not included in this Response to Comments Document**

Comments of Others

Comments coded as **004** on letters contained in the Project Record are ones that make reference to or are based on the position or comments of others. **An agency response is not ordinarily warranted for these types of statements; examples or responses are not included in this Response to Comments Document.** These types of comments are considered to be out of the scope to this process.

DSEIS CORRECTIONS/CLARIFICATIONS

This section provides a response to comments making reference to apparent errors in the DSEIS document or need for clarification for understanding. These items are tracked and responded to below. These items are within the scope of the DSEIS and are considered to be substantive (see definitions below).

Comment #1: Horizontal axis in Figure SEIS II-5 (page II-18) should be 5000 instead of 500. (010)

Should mean traffic (horizontal axis in Figure SEIS II-5, page II-18) be 5,000 instead of 500? (DS-245, page 1)

Response:
The horizontal axis should be 5,000 instead of 500; this error originated from the source and will be corrected in the FSEIS. Also note that the new published source is Seiler, Andreas and J-O Helldin; 2006, Mortality in Wildlife Due to Transportation.

Comment #2: NEPA requires analysis to the range of alternatives relative to more accurate analysis. (011)

The court ruling to enjoin the previous decision was not simply to demand more paperwork but to require the decision-maker to consider the range of alternative relative to more accurate analysis. (DS-502, page 2; DS-793, page 2 & 7; DS-796, page 1)

Response:
In August 2004, the Forest Service released a Final Environmental Impact Statement (FEIS) in which it analyzed six expansion alternatives. As stated at page I-1 of the DSEIS, the Forest Service issued a Record of Decision and approved a "Modified Alternative 2" in September 2004 (SAR 1-97). Alternative 2 and Alternative 6 are the only two expansion alternatives relevant to this DSEIS and were the only alternatives considered by the Court of Appeals[1].

The Court of Appeals reversed the district court order and remanded the case to the district court and instructed it to enjoin the MASA expansion project contemplated in the 2004 FEIS until the Forest Service corrected the NFMA and NEPA violations found in its opinion. There was no direction from the courts to reanalyze the entire range of alternatives presented in the 2004 FEIS; only to correct violations identified as associated with the decision made via a ROD in 2004; a blend of Alternative 2 and 6.

Also see response to Comments #33 and #34.

Comment #3: DSEIS document does not identify interviewed fisher experts. (012)

The document identifies none of the interviewed experts or the content of interviews. (DS-790, page 7)

[1] Court of Appeals Opinion at 13057.

Response:
The Ashland Forest Resiliency Project (AFR) fisher analysis process conducted in 2008 was reviewed by William Zielinski, Keith Aubrey, and Robert Naney. Their comments were then incorporated by reference into the final AFR analysis and subsequently into the MASA fisher analysis.

As Stated at DSEIS page II-3:

> "The effects analysis process was conducted by the Forest Wildlife Biologist (David Clayton) and the District Biologist for the High Cascades Ranger District (Jeff von Kienast), the most experienced mammal biologists on the Forest. They first completed an extensive review of all Pacific fisher scientific literature. They then interviewed all local and regional carnivore and fisher experts as well as those currently conducting research on fisher in the Pacific Northwest.

Also see Response to Comment #14.

Comment #4: DSEIS fails to show where (or how intense) activities would occur in MS 26. (014)

It is not possible for a reader to independently verify that Modified Alternative 2 would directly affect the disclosed extent of affected MS 26 or that activities would meet standards and guidelines for MS 26 because the DSEIS fails to show where or how intensively activities would occur on that land allocation. (DS-790, page 8)

Response:
As stated at DSEIS page II-28, based on supplemental analysis, Figure SEIS II-7 showed MS 26 areas within the Special Use Permit area, and at the Site Scale Analysis Area[2]. Based on supplemental analysis, there is a total of 48.8 acres of Restricted Riparian (MS 26) terrain within the Site Scale Analysis Area; 27.9 acres of this are within the Special Use Permit area.

The area of MS 26 impacted by the 2004 Decision for ski area expansion involves Run 12, Lower Wetlands Bridge Construction, at one location (noted by blue arrow in figure SEIS II-7). The width of Restricted Riparian at this crossing (perpendicular to stream course) is projected at 300 total feet; the width of the proposed ski run at this location is 120 feet. This equates to 0.83 acres of action within MS 26. The disturbance from this action was discussed further at DSEIS page II-37:

> "The ski area expansion decision would occur within Landtype 52. The standard for MS 26 within Landtype 52 is twenty percent. The mineral soil exposure from ski area expansion is projected as 0.06 acre within this 0.83 acre area within MS 26, or 7.2%. Ski area expansion activities were designed to retain effective ground cover (FEIS Chapter II). The specially designed thresholds for maximum bare soil from ski run construction is 10% (see 2004 Table ROD C-3; Soils and Site Productivity Thresholds, page C-17)."

An improved map showing the intersection of proposed new ski runs with MS 26 and additional discussion on effects of expansion in this area of MS 26 will be provided in the Final SEIS.

[2] The Site Scale Analysis Area includes the entire MASA Special Use Permit area and additional, adjacent area outside of the SUP area. This additional area was included to provide the basis of analysis of watershed conditions that may be affected by proposed expansion activities (see more complete definition of analysis area scales at FEIS page III-40).

Comment #5: Table ROD-4; how would conventional excavator affect "0" acres? (015)

Table ROD - 4 identifies the requirement for use of low ground pressure (e.g. a "spider") but only commits to its use on 0.35 acres. It further indicates that "conventional: excavators would affect zero acres. This makes no sense given disclosure in the DSEIS that mechanical grading will directly affect an additional 0.56 acres of riparian lands at three locations more than previously disclosed. (DS-790, page 9)

Response:
The table at 2004 Record of Decision page ROD-20 (Table ROD-4) showed the direct *detrimental* soil effects of the decision, a modified Alternative 2. Note that detrimental soil effects are a subset of the total area of effect, e.g., not all affected acres result in detrimental soil conditions. The "Conventional Excavator" acres shown in this table are "zero" because although there would be use of a conventional excavator, the area of detrimental effect is already accounted for in the total of all grading detrimental acres (and not double counted). The Low Ground Pressure Excavator would create an additional 0.35 acres of detrimental soil conditions, for a total of 13.05 acres of detrimental soil conditions, equivalent to 16.5% of the total developed area.

There is an additional 0.56 acres of impact within designated Riparian Reserves (as a result of classifying some Landslide Hazard Zone 2 lands as Riparian Reserve) but no change to the overall total area of impact or resultant detrimental soil conditions. Additional discussion on effects of expansion in regard to detrimental soil conditions will be provided in the Final SEIS.

Comment #6: Clarification about invalidation of 2004 ROD. (016)

When the 9th circuit imposed an injunction on the 2004 ROD, the ROD was invalidated. The Forest Service has not withdrawn the decision. (DS-793, page 2)

Response:
As discussed in Response to Comment #1, the Court of Appeals reversed the district court order and remanded the case to the district court and instructed it to enjoin the MASA expansion project contemplated in the 2004 FEIS until the Forest Service corrected the NFMA and NEPA violations found in its opinion. There was no discussion or direction from the courts to withdraw the 2004 ROD, or that it was invalidated; only that the project was to be enjoined.

As stated at DSEIS page I-8:

> "The Forest Service Responsible Official will use the results of this supplemental analysis to determine if and how the violations identified by the Ninth Circuit will affect the 2004 decision. The Forest Service will decide whether to withdraw the 2004 decision, or issue a new or supplemental decision. If a new or supplemental decision is issued following preparation of the Final Supplemental Environmental Impact Statement, that decision will be subject to appeal in accordance with 36 CFR 215."

Comment #7: How is it that 0.06 acres of the 0.83 acre crossing will be disturbed? (017)

The Forest Service has not shown us how it came to the calculation of only 0.06 acres of the 0.83 acre crossing of the Middle Branch will be disturbed. The Forest Service should admit that the entire 0.83 acres of the crossing will not retain effective ground cover. (DS-793, page 8)

Response:
This comment is in relation to the discussion in the DSEIS at page II-28 and II-37. The 0.06 acres of mineral soil exposure is resultant of the footings for the Lower Wetlands Bridge Construction crossing of the Middle Fork that is within MS 26. The rest of the 0.83 acres of clearing would not result in bare mineral soil exposure; brush, slash, small downed logs and other mineral and vegetative material would be retained and low vegetation would be allowed to occupy the site as effective ground cover (see ROD Attachment B at page B-8).

Additional discussion on effects of the Lower Wetlands Bridge Construction in this area of MS 26 will be provided in the Final SEIS.

Comment #8: What is Biological Opinion that the project is relying on? (018)

It is not clear of the status of the Biological Opinion being relied on to allow obvious impacts of removing northern spotted owl habitat. (DS-796, page 4)

Response:
As stated in the 2004 ROD page 44: "A most recent Biological Opinion 8330.05373 (FWS log # 1-15-04-F-0537, Reinitiation for 1-7-98-F-414) is available upon request." This Biological Opinion remains the appropriate document for ski area expansion and is also contained in the Administrative Record.

Comment #9: Conflated use "mineral soil exposure" vs. "detrimental soil conditions" (019)

The DSEIS (page II-33) analysis of soil impacts under the MS-22 watershed standard is flawed because the analysis equates "mineral soil exposure" with "detrimental soil conditions." These are two different criteria and should not be conflated. (DS-798, page 7)

Response:
The discussion at DSEIS page II-33 was in error to provide predicted detrimental soil impacts in regard to standard and guideline #5 which presents limits for effective ground cover and bare mineral soil exposure. Detrimental soil conditions and bare mineral soil exposure are not the same.

The Forest Plan direction for Management Strategy 4 (Developed Recreation) requires projects to address the potential for detrimental soil conditions. It should be noted that specific standards and guidelines for MS-4 (RRNF LRMP page 4-59) do not contain specific thresholds for detrimental conditions, as is the case for many other management strategies. The Regional Guidelines (FSM 2521 R-6 Supplement 2500-98-1, Effective August 24, 1998), for soils also do not specifically apply to certain areas such as developed recreation sites (e.g., developed ski areas).

The 2004 ROD developed specific and more restrictive soil quality thresholds and monitoring methods for disturbed sites that would be associated with the proposed ski expansion at Mt. Ashland. These more restrictive thresholds are shown in Table ROD C-3 (shown below from ROD Attachment C-3, page C-17):

Table ROD C-3. Soils and Site Productivity Thresholds

Activity	Distance to Streamcourse	% Maximum Bare Soil	Maximum % Detrimental Soil Conditions	Monitoring Unit	% of Monitoring Units Sampled
Ski and tubing run construction through forested areas	<100'	5	3	Ski Run in Forest	100%
	>100'	25	6	Ski Run in Forest	10%
Ski Runs constructed through meadows and open forested stands	<100'	10% lower than existing % bare soil	3	Ski Run in Openings	100%
	>100'	Existing bare soil %	6	Ski Run in Openings	10%
Construction of fill slopes or on bare surfaces (ski runs, buildings, terminals, towers, etc)	<200'	10	NA	Fillslopes and Surfaces	100%
	>200'	25	NA	Fillslopes and Surfaces	10%
Construction of parking lot fill slopes	<200'	5	NA	Fillslopes and Surfaces	100%
	>200'	15	NA	Fillslopes and Surfaces	10%
Activities within wetlands	Within Wetland	NA	1	Ski Run in Forest	100%

As stated in ROD Attachment C, page C-17:

> "These thresholds are based around the issues of soil erosion and sedimentation. They are not based on soil and site productivity qualities, since the Developed Recreation land allocation does not contain Standards and guidelines for detrimental soil conditions. Soil erosion and sedimentation are very important issues on this project and is why the percent minimum bare soil (cover) and percent detrimental soil conditions are more restrictive within 100 feet of streamcourses than the guidelines that have been stated in the Forest Plan for other land allocations."

In the DSEIS for analysis purposes, MS 22, Landtype 80 (the Landtype for which the majority of clearing activities would occur) has a mineral soil exposure standard of thirty percent. According to the required monitoring threshold standard, the resultant bare mineral soil exposure would not be allowed to exceed 25% (the least restrictive) and in most cases would be much less than 25% (more restrictive) for the various activities. In some cases the threshold is the current level of existing bare soil or less. These requirements and predicted consequences would therefore result in conditions to be in overall compliance the standard and guideline for MS 22 of 30% or less.

For the FSEIS, the discussion of soil impacts in regard to soils standard and guideline #5 for MS 22 (effective ground cover and bare mineral soil exposure) will be clarified.

SUBSTANTIVE COMMENTS WITHIN SCOPE OF DSEIS

Substantive comments are defined as: "[c]omments that are within the scope of the proposed action, are specific to the proposed action, have a direct relationship to the proposed action and include supporting reasons for the Responsible Official to consider [36 CFR §215.2 Definitions]."

A ***substantive comment*** for this SEIS process is one that is within the scope of the Supplemental Environmental Impact Statement, its purpose and need, and/or its analytical content. Comments that were considered substantive are ones that:

Identify a new, not previously described issue or expands upon an existing issue or need for additional analysis in a new or important way;

Provide information, pertaining to existing environmental conditions, design of the consequences presented in the environmental document, which reveal an inconsistency or omission in the analysis;

Identify or recommend a specific method, procedure, system, manipulation, allowance or constraint to modify or add to potential variation in, or a differing approach to the environmental analysis that portrays an opportunity to change the magnitude, duration or significance of disclosed environmental consequences;

Pose a question or explicitly/implicitly identifies information that could improve understanding of the design of the proposal, the affected environment or anticipated impacts; or

Offer a science study/citation that was not included in the Forest Service analysis or that suggests another perspective (i.e., that provides a differing or opposing viewpoint) to support a contention that environmental impacts described are incomplete, incorrect or do not adequately reflect scientific uncertainty or disagreement.

Substantive comments were further organized into those that specifically related to Fisher Analysis, those related to Land Allocation Analysis (Riparian Reserve and Restricted Watershed Terrain), and Other.

Fisher Analysis

<u>Comment #10:</u> Analysis looked only at impact to local population, not total. (100)

The FS did not conduct a meta-population analysis to consider how the local fisher population is connected to other nearby populations and how much risk it faces in terms of isolation, inbreeding, extirpation, etc. This is required by FSM 2672.2 step (d) analysis of project "effects on local and total populations" of species. (DS-391, page 1; DS-790, page 5&6; DS798, page 3)

Response:
Compliance with the Forest Plan biological evaluation process was discussed beginning at DSEIS page II-2. Compliance with FSM 2672.2 steps (a) through (d) was discussed throughout the supplemental Biological Evaluation for Pacific fisher. As stated on DSEIS page II-9:

> **Biological Investigation**
> Because there is incomplete and a lack of precise information on local and total populations of Pacific fisher and the effects of ski area expansion, **a biological investigation was conducted to gather and predict the significance of effects (LRMP biological evaluation step 4 [d]).** This investigation includes a prediction of the local and total populations, and an investigation of effects based on habitat analysis using satellite imagery (habitat as proxy for population data and knowledge); see next steps.

The SEIS clearly stated the effects to both the local and the total populations of fisher at DSEIS page II-25 (Sensitive species determination):

> "The 2010 supplemental analysis found that the [decision for] the Mt. Ashland Ski Area Expansion project would remove 44 acres of denning/resting habitat and an additional 17 acres of dispersal/foraging habitat for fishers. Within these areas, there may be some shifting or expansion of fisher home ranges resulting from reductions in habitat quality. This could potentially influence 1 female home range and 1 male home range. This approximates 1% of the estimated local population, and 0.25-0.5% of the estimated total population."

Comment #11: Indirect and cumulative effects combined with climate change on fisher not analyzed. (101)

The DSEIS appears to indicate that because fisher populations are geographically distributed across the country, the impact on one region's population is not significant. The indirect effect of ski expansion when combined with the impact of global climate change remains unexamined. (DS-467, page 3)

Response:
It is not currently possible (or likely in the future) to quantifiably predict the effects of climate change on one particular species of mammal or any particular geographic area. If one was to speculate and assume that there will be less snow in the near future, then one might assume more habitat would be available to fisher as fisher habitat is considered to be limited to less than 5,000 feet due to deep snow which fisher do not tolerate well (Ruggerio et al., 1994). If one assumes a warming climate trend would produce more fire, then there would be less potential fisher habitat due to fire loss (a reason for the adjacent hazardous fuel reduction projects).

Comment #12: Cumulative impacts on fisher uncertain because Ashland Forest Resiliency treatments not disclosed. (102)

Its consideration of cumulative impacts to fisher habitat within the local population range in tandem with the Ashland Forest Resiliency ("AFR") Project is subject to uncertainty because the Forest Service has not determined nor disclosed where hazardous fuel treatments and associated logging will directly or indirectly effect fisher habitat, when it will do so, or how intense treatments will be. (DS-790), page 5)

Response:
The cumulative effects of AFR were clearly stated in the Cumulative Effects analysis portion of the DSEIS beginning at page II-20:

> **"Ashland Forest Resiliency**
> The Rogue River-Siskiyou National Forest completed a Final EIS (September 2008) for Ashland Forest Resiliency. The Objection Process under 36 CFR 218 was conducted for this project and a Record of Decision was issued in October 2009. In the Final EIS for Ashland Forest Resiliency, the Forest Service developed and analyzed an additional Action Alternative, designed and identified as the Preferred Alternative. This alternative was developed from the results of analysis of the two Action Alternatives analyzed in detail in the Draft EIS, further collaboration with the City of Ashland and their representatives, and the extensive comments received on the Draft EIS during the Comment Period." (*paragraph 1*)
>
> "The Preferred Alternative was designed to include the most effective and efficient treatment methodologies, in the most strategic locations. The Preferred Alternative identifies approximately 7,600 acres of treatment, which is less than the Proposed Action (8,150 acres). Actions associated with Ashland Forest Resiliency (AFR) would occur within the Neil Creek and Ashland Creek watersheds; analysis for both projects concluded that there would be no risk for adverse cumulative effects to these watersheds from these actions." (*paragraph 3*)
>
> "The Ashland Forest Resiliency project would reduce fisher habitat (≥60% canopy closure) by 1,292 acres. These acres are widely dispersed across 7,600 acres. Late-successional habitats on south and west facing slopes in the Ashland Research Natural Area and northernmost portions of the project area would be most affected due to reduction of canopy closure and fuels projects. Within these areas, there may be some shifting or expansion of fisher home ranges from reductions in habitat quality. This could potentially influence 2-3 female home ranges and 1-2 male home ranges. This approximates 5-10% of the estimated local population, and 0.25-0.5% of the estimated total population." *(summary paragraph 10*)

Comment #13: Fisher range not based on field investigation; extrapolated from literature. (103)

Fisher habitat ranges presented in the DSEIS are not based on field investigation. Rather, they are extrapolated averages gleaned from literature. No information demonstrates that these habitat range calculations, lacking peer review, comprise a reliable proxy to ensure local or total population viability of the sensitive species. (DS-790, page 7)

Response:
The fisher home ranges used in the DSEIS analysis were extrapolated from relevant literature and used all available data from the NW California fisher population. The local subpopulation is a part of the NW California population. In addition, recent (since March 2010) field investigation radio telemetry and GPS locations of two female fisher in the Ashland Watershed bears out the analysis of an approximate 10-12 km^2 home range. Telemetry of seven more fisher (six females and one male) is ongoing within the Ashland Watershed (D. Clayton, Personal Observation).

Also see Response to Comment #17; more information on the results of this recent field investigation will be provided in the Final SEIS.

Comment #14: Independent peer review standards obtuse; bias using Forest Service reviewers. (104)

The Forest Service's claim to have sought peer review of its findings in the DSEIS stands out as uniquely obtuse. Internal review by agency workers is not independent peer review. As a matter of scientific practice, authors of work subject to peer review do not choose their reviewers. The DSEIS analysis of Pacific fisher, and its claim to peer review, therefore lacks scientific integrity. (DS-790, page 7)

Response:
The review of the analysis process and documentation of Pacific fisher for this supplemental NEPA process was not conducted under the standards of scientific research for independent peer review (and should not have implied that it was: DSEIS page II-3).

William Zielinski and Keith Aubry are recognized experts in fisher ecology. Being federal researchers does not disqualify them as experts.

Also see Response to Comment #3.

Comment #15: Impact of roads not analyzed for fisher dispersal. (105)

The document does not analyze the impact of roads on the dispersal ability of the fisher. It also does not analyze the habitat availability or unavailability to the fisher due to extensive roading. (DS-793, page 7)

Response:
The Mt. Ashland LSR Habitat Restoration and Fuels Reduction Project includes temporary roads as discussed at DSEIS page II-22:

> "The May 2008 Record of Decision for this project includes 0.2-0.3 mile of temporary road within 3 miles of the expansion area. As temporary roads, road density would not be permanently increased, and the project would actually decrease existing road density via road decommissioning. The Mt. Ashland LSR Habitat Restoration and Fuels Reduction Project FEIS included consideration and calculation for ski area expansion actions conditionally authorized by the Rogue River-Siskiyou NF at Mt. Ashland."

Ski area expansion activities do not include roads, other than service roads that would be constructed in non-habitat areas within the existing ski area. The effects analysis includes discussion of existing roads to dispersal capability of fisher (DSEIS page II-14). This will be clarified in the Final SEIS.

Comment #16: Literature says fisher canopy requirements include 80-100%; not 60% as used. (106)

The analysis uses a 60% canopy closure requirement for the fisher, which does not jive with the science. The best available science states that fisher habitat requirements include 80-100% canopy closure and large living and down trees. The FS analysis did not include these important habitat requirements in its analysis. (DS-793, page 7)

Response:
The 80% canopy closure requirement relates to resting/denning habitat only, the literature shows that fisher may occupy stands with less than that for dispersal/foraging habitat. That is why the 60% analysis was used to determine removal effects to fisher and its habitat which includes all canopy closures of 60% and above (see discussion on DSEIS page II-12).

Comment #17: Assumption that all fisher habitat is occupied is flawed. (107)

Though the FS has only photographed less than a half dozen fisher (and this could be as few as two fisher, depending how many times a specific fisher was photographed), it inexplicably has determined that all of its habitat is occupied and that somewhere between 50 -100 fisher are present in the Ashland watershed area. The FS has no evidence that supports this contention, and the best available science would contradict that a species would occupy all available habitat (in fact it is unlikely that any species occupies all of its available habitat). DS-793, page 7; DS-798, page 3; DS-800, page 4)

Response:
The habitat considered was all potentially high quality habitat and is likely occupied due to the results of past survey efforts as well as current trapping efforts in the Watershed. To date, during three trapping efforts over 46 days in 2010 in the lower portion of the Watershed (below 4,200 feet in elevation), eight fisher have been trapped and collared, two more were released without collaring; this is a total of ten individuals identified in a small portion of the watershed.

In addition, 52 individual fisher have been identified over four years using genetic analysis in the Beaver Creek watershed just south of Mt Ashland; 40 individuals have been identified in the southern portion of the Mt. Ashland LSR (S. Yeager USFWS, 2010; pers. comm.)

Also see Response to Comment #13; information on the results of this recent field investigation will be provided in the Final SEIS as well as assumptions regarding fisher habitat.

Comment #18: Must assess fisher effects as a species that qualifies for listing under ESA. 108)

The Forest Service also has not analyzed the fisher based on the new status assigned by the USFWS. The new status is a candidate species. The Forest Service should have analyzed the impacts of the proposed expansion based on candidate and threatened status. (DS793, page 7; DS-798, page 4))

Response:
As stated at DSEIS page II-8:

> "The Pacific fisher was petitioned for listing by the Center for Biological Diversity and several other environmental organizations in November 2000. After a 12-month review, the US Fish and Wildlife Service found Pacific fisher to be a distinct population segment (DPS) and gave a "warranted but precluded" decision to the petition, designating the West Coast DPS a federal Candidate species (USDI Fish and Wildlife Service 2004)."

Under this designation, there is no requirement to analyze or consult for Pacific fisher under the Endangered Species Act.

Comment #19: Cumulative effects on large downed woody logs not analyzed. (109)

The FS has not analyzed the cumulative impacts of private and public lands logging, roads, fire, open areas, and areas without the requisite large downed woody logs (for example if an area has been previously logged, it is unlikely to be suitable habitat because it would probably not have large, down logs). (DS-793, page 7)

Response:
All projects that have or will occur within the foreseeable future were considered in the cumulative effects analysis (DSEIS page II-19). Disturbance mechanisms including effects to large snags and coarse woody material (downed logs) were discussed at DSEIS page II-16. In addition, there is no data on the "requisite" amounts of large down wood needed by fisher.

Specific to downed wood, the loss of suitable habitat from previous logging on non-federal lands discussed in the cumulative effects analysis includes the loss of snags and down wood in conjunction with that habitat loss. For AFR, there are snag and down wood retention requirements reflecting historical amounts of down wood and snags by Plant Association Group (PAG) that would ensure those structures would be retained on the landscape for fisher and many other species groups.

Comment #20: The condition of fisher habitat (analyzed as proxy) is not described. (110)

The FS has made the same mistake that it made in 2006; it has used habitat for proxy, but it has not used the correct habitat type as proxy. Apparently the FS does not know the condition of the habitat that it is using as a proxy. (DS-793, page 7)

Response:
Baseline habitat conditions were described in the DSEIS beginning at page II-11, as part of the biological evaluation process. Fisher denning/resting and dispersal/foraging habitat parameters were based on information derived from scientific literature, professional opinion, and satellite imagery.

Comment #21: Analysis did not consider quality of habitat as affected by hazard tree removal. (111)

The DSEIS analysis failed to adequately consider the "quality" of fisher habitat as it is affected by hazard tree removal adjacent to ski runs. (DS-798, page 4)

Response:
See Response to Comment #26. The fisher analysis as documented in the biological evaluation assumes that fisher would no longer use the entire ski area due to disturbance; consequently there would be no additional effect to fisher by the felling of any hazard trees adjacent to ski runs.

In addition, management of snags or hazard trees at the Mt. Ashland Ski Area in the past, present and future if the expansion occurs would be as follows:

Any snag that could fall into the parking lot is felled and left on site. If it falls into the parking lot, it would be pushed over the side of the parking lot fill slope.

For ski runs, only snags that in the best professional judgment pose an immediate hazard to either the chairlift or the ski runs would be felled. All other snags are left standing in place. Note: there are literally hundreds of snags between the ski runs at the current ski area.

Future snag/hazard tee management in an expanded ski area is not expected to be any different than current management. The only exception would be those hazard trees on the edges of new ski runs that violate safe OSHA working requirements during the construction of new runs would be felled.

Comment #22: Challenge to assumption that thinning will accelerate development of late successional habitat. (112)

The DSEIS (page II-23) claims that thinning young stands on the Klamath NF will accelerate development of late successional forest habitat. This analysis oversimplifies the effect of thinning young stands as a way to accelerate development of late successional habitat. Thinning may well increase the growth of large trees (a benefit to fisher resting habitat) but thinning also "captures mortality" which reduces the amount and complexity of dead wood habitat. (DS-798, page 4 & 7)

Response:
The statements at DSEIS page II-23 are related to the Mt. Ashland LSR Habitat Restoration and Fuels Reduction Project. The claims referenced here are from its purpose and need and its predicted environmental consequences. The purposes and needs for ski area expansion are not the same.

Comment #23: Challenge to assumption that logging will grow trees faster and recruit more snags. (113)

The DSEIS (p II-23) also claims that logging in the cumulative impact area will grow big trees faster and therefore recruit more large snags thus benefiting late successional species like the fisher. This is erroneous. The FS should conduct a stand simulation analysis which will reveal that thinned stands have a substantially reduced pool from which to recruit future snags and down wood, and unthinned stands continue to grow and retain much larger pool from which to recruit future large snags and dead wood. (DS-798, page 4)

Response:
The statements at DSEIS page II-23 are related to the Mt. Ashland LSR Habitat Restoration and Fuels Reduction Project. The claims referenced here are from its predicted environmental consequences. These effects are not projected for areas associated with ski area expansion.

Comment #24: No analysis of I-5 barrier and impacts from ski expansion to this dispersal route. (114)

Despite the presence of I-5 as a barrier, the FS admits that the potential for dispersal exists at three underpasses "south of the town of Ashland" (p II-18). No analysis was made as to how the ski expansion may impact these potential dispersal routes. (DS-800, page 2-3)

Response:
The fisher analysis cited survey efforts in potential dispersal areas under I-5 that found no evidence of fisher use (DSEIS page II-18). In addition, current radio telemetry data from fisher in the Ashland Watershed (see Response to Comment #18) show no movement at all across the I-5 barrier. The current data does show fisher moving north and south across the Siskiyou crest between I-5 and the ski area within previously identified forested dispersal areas. As stated in the fisher analysis, ski area expansion activities would not affect this dispersal habitat.

Also see Response to Comment #13; information on the results of recent field investigation will be provided in the Final SEIS.

Comment #25: Riparian areas are important for fisher dispersal; no identified routes includes riparian habitat. (115)

Riparian areas appear to be important elements in fisher home ranges and may be dispersal avenues, yet no delineated dispersal route (Figure SEIS II-4) includes riparian habitat. (DS-800, page 3)

Response:
Figure SEIS II-4 (DSEIS page II-15) shows dispersal corridors within the following watersheds: Ashland Creek, Tolman Creek, Neil Creek and Little Applegate River. Only a very small portion of riparian habitat would be affected by ski expansion. In addition, recent field investigation shows that riparian areas are not exclusively used for dispersal.

Comment #26: Fisher dispersal occurs in winter months, when use of the ski area is most active. (116)

According to Zielinski and Powell "all fisher travel longer distance during active period in winter", thus dispersal is often associated with winter months when human disturbance and use of the ski area is most pronounced, leaded to increased impacts. (DS-800, page 3-4)

Response:
Regardless of the season, the fisher analysis assumes that the ski area would not be used by fisher. As stated at DSEIS page II-16:

> "Activities associated with ski area expansion implementation such as felling, skidding, hauling, piling of fuels, and burning are likely to have the greatest adverse effects on reproductive females during the denning and early kit rearing periods. There could also be indirect effects from disturbance over the long-term because, if implemented, the ski runs and lifts and associated human activities would likely cause fisher to avoid the area entirely, thereby removing the ability for fisher to use the expansion impact area for the foreseeable future."

Comment #27: Since fisher populations are estimates and likely exaggerated, population effects may be as high as 50%. (117)

Zielinski and Powell (1994) warn that fisher population estimates are difficult stating "all estimates incorporate considerable sampling error". Thus it is entirely possible and likely that the population figure is exaggerated, making the cumulative impact appear less drastic and may actually be as high as 50%. (DS-800, page 4)

Response:
Current fisher field investigation in the Watershed (see Response to Comment #18) bears out the prediction of relatively high number of fisher within and adjacent to the ski permit area. As noted in Response to Comment #18, ten individual fisher have recently been identified within the Watershed and it is unlikely that all fisher occurring there have been captured and identified. Also, the Yreka US Fish and Wildlife have identified 52 individual fisher in four years on the south side of Mt Ashland in the Beaver Creek drainage south to the Klamath River. They have identified 40 fisher within the south portion of the Mt Ashland LSR (S. Yeager, USFWS, pers. comm.) The Forest believes that previous estimates are validated by this information and the cumulative effects predictions remain valid.

Comment #28: Increased human summer use on fisher not disclosed. (118)

Not discussed is that development in the area will encourage human congregation within the area year round (e. g, mountain biking), affecting the fisher population. (DS-800, page 5)

Response:
Regardless of the season, the fisher analysis assumes that the ski area would not be used by fisher (see Response to Comment #26).

On page II-16, the DSEIS stated: "There would be no foreseeable additional effects to fisher from disturbance in the summer months as no increased use of the proposed expansion area is expected or authorized." This statement was incorrect. The 2004 FEIS at pages IV-204 and 252 stated that "recreation use might increase slightly" and that "hiker use in the Middle Fork area might increase from very low (estimated at less than 40 visits per year) to low (200-300 per year). Mountain biking is currently prohibited within the current ski area boundary except for the Bull Gap Trail located near the main lodge. There are no plans to allow mountain biking within the expansion area. This situation will be clarified in the Final SEIS.

Land Allocation Analysis (Riparian Reserve and Restricted Watershed Terrain)

Comment #29: No evidence that hydrologist reviewed analysis per 1991 ROD mitigation #8, page 7. (200)

Under required mitigation #8 on page 7 of the 1991 Master Plan ROD it states "[d]evelopment will not occur in wetland or riparian areas unless there are no alternative sites available, as determined by a Forest Service hydrologist." There is no disclosure of the requisite review in relation to the new mapping a Forest Service Hydrologist. (DS-502, page 2)

Response:
Physical resource scientists (including hydrologists, soils scientists, geologists and geotechnical engineers) have been continually involved with the design and evaluation of ski area expansion, and were involved with the analysis documented in the DSEIS. Specific review and evaluation of the supplemental analysis by a hydrologist for this mitigation will be documented.

Comment #30: Changed acres and commentors claim of percentage increase. (201)

The significance of increased acreage is down played by stating a relative figure of 1.6% additional change for the entire permit area. In this case, much of the increased riparian are is in locations where no development is proposed including the Knoll and South Side.

The only relevant figure is in the increase from 4.74 acres of clearing in riparian areas to 14.82 acres, amounting to a 312% increase in riparian area impacted. As well, the increase of 1.24 acres of grading in riparian areas to 1.8 acres, amounting to a 145% change. (DS-502, page 2; DS-790, page 9; DS-798, page 7)

Response:
The content of this comment is derived from Table SEIS II-2, page II-35. The overall percentage change in forested cover changed from 2.3 percent documented in the 2004 decision (Modified Alternative 2) to 3.9 percent in the 2010 revision. The additional areas are clearly shown on Figure SEIS II-9, and shows that some of the increased acreage is within the Ashland Creek Watershed, some is within the Neil Creek Watershed and very little is on the "South Side." This figure portrays the Site Scale Analysis Area, and 30% or more of the increased Riparian Reserves due to inclusion of some LHZ 2 lands are not within the Special Use Permit Boundary. (Also see Figure SEIS-8, which shows the above-mentioned watersheds.)

The statement in the comment that the increase from 4.74 acres of clearing in riparian areas to 14.82 acres amounts to a 312% increase in riparian area impacted is inaccurate. Note that grading acres are included in the figures for clearing acres. The correct interpretation would be based on an increase of 10.08 acres (14.82 instead of 4.74), resulting in a change (increase) of approximately 213% (not 312%). Likewise, the increase from 1.24 acres of proposed grading to 1.80 acres is a 0.56 acres increase, or a change (increase) of approximately 45% (not 145%). These figures and this table and discussion will be clarified in the FSEIS.

Comment #31: No forest plan amendment for changes to Restricted Watershed and Developed Recreation. (202)

The Forest Service has failed to make a Forest Plan amendment to reclassify the 35 acres at the bottom of the C-6 lift from Restricted Watershed (MS 22) to Developed Recreation (MS 4). (DS-793, page 8)

Response:
The Appeals Court found no explanation in the record that would resolve the conflict between the 2004 FEIS statement that the 1994 NWFP "amended" existing Rogue River LRMP designations to "Administratively Withdrawn (Special Management)" and that "this allocation is complimentary to the Developed Recreation Rogue River LRMP allocation.[3]" Because there is no amendment to the Rogue River LRMP in the record permitting the contemplated change to the Watershed, the Appeals Court found that the Forest Service violated the NFMA by failing to ensure that the expansion will comply with the Rogue River LRMP standards and guidelines.

Background of Need for Forest Plan Amendments
The position of the Forest Service regarding the history and need for forest plan amendments was documented in the 2004 FEIS Chapter I, page I-1 (Changes from Draft to Final EIS):

> "The proposed Forest Plan Amendments associated with the RRNF and Klamath National Forest (KNF) have been dropped; minor inventory adjustments have been processed as an addendum or correction to the respective Forest Plans (see discussions in Chapter II, Section B, regarding these changes)."

Text at 2004 FEIS Chapter II, Section C, page II-3, subsection 2. Forest Plan Adjustments:

[3] Appeals Court Opinion at 13071

> "To account for the programmatic 1991 Ski Area Master Plan decision that expanded the ski area permit boundary, there were needs for Forest Plan adjustments. The expanded Special Use Permit (SUP) area boundary resulting from the analysis and selection of Alternative 7 of the 1991 FEIS affects lands managed under the RRNF LRMP as amended by the 1994 Northwest Forest Plan, and the 1995 KNF LRMP. The 2000 DEIS for Ski Area Expansion included a proposal for a non-significant plan amendment to correct these items (both the 1991 decision and NWFP decision) for the RRNF only. The 2003 DEIS for Ski Area Expansion included a proposal for a non-significant plan amendment to correct the NWFP decision (in terms of acres) on the RRNF, and the KNF (in terms of allocation assignment).
>
> None of these "adjustments" should have been termed Forest Plan Amendment, as they are actually adjustments that have no significance under the National Forest Management Act."

Text at 2004 FEIS Chapter II, Section C, page II-4, subsection 2, a. Rogue River National Forest:

> "The 1990 ROD/FEIS for the RRNF LRMP states "the decision to expand the Mt. Ashland Ski Area is a site-specific decision which has its own concurrent analysis. That site-specific decision and its effects are not part of this analysis" (USDA FS RRNF LRMP FEIS 1990: page IV-3). The 1991 ROD and Ski Area FEIS did not identify, disclose or amend the 1990 LRMP land allocations. Allocations associated with the 1990 RRNF LRMP and the Mt. Ashland Ski Area primarily involved Developed Recreation (Management Area (MA) 4), and Restricted Watershed (MA 22).

The Northwest Forest Plan formally amended RRNF LRMP and its land allocations in 1994. That Record of Decision allocated the SUP area to Administratively Withdrawn, based on the RRNF 1991 ROD and Ski Area FEIS. Maps associated with the 1994 Northwest Forest Plan included the expanded ski area boundary (approximately 950 acres on the RRNF). This Northwest Forest Plan allocation was intended to provide for existing ski areas and for the RRNF, this allocation is complimentary to the Developed Recreation RRNF LRMP allocation (see NWFP ROD, page 15)."

Comment #32: No disclosure of ACS attainment at multiple scales given enlarged reserve area. (203)

Even if the DSEIS corrects gross understatements of direct effects to Riparian Reserve, it fails to apply standards and guidelines that give riparian resources primary emphasis in the enlarged reserves. It further declines to consider how additional direct and indirect effects to enlarged Riparian Reserve may affect aquatic conservation objectives at relevant spatial and temporal scales. (DS-790, page 9; DS-796, page 7; DS-798, page 7)

Response:
The "New Information Review" of July 2, 2007 (pages 8-10), discussed the Aquatic Conservation Strategy Objectives associated with the 2004 decision. An in-depth discussion of scales of analysis is found at FEIS III-42 & 43. Effects are actually analyzed at three scales; the Special Use Permit Area (960 acres), the Site Scale (i.e., local scale; 1,065 acres), and the Watershed Scale (four separate affected watersheds, not equivalent to fifth-field, actually smaller). While the 2004 FEIS and ROD did not specifically label the nine ACS Objectives in the documents, they did discuss and analyze fully the elements and components of each one. Consistency with the nine objectives was discussed and referenced in this new information review.

Based on the minor amount of increased area associated with Riparian Reserves as documented in the DSEIS, the FSEIS will include discussion of Riparian Reserve standards and guideline compliance as well as consistency with the Aquatic Conservation Strategy Objectives.

Other

Comment #33: Ruling of 9th circuit was in reference to entire 2004 FEIS. (250)

The ruling of the 9th Circuit Court was in reference to the entire 2004 FEIS that gave rise to the ROD. The DSEIS presents a narrow purpose to manufacture a narrow scope of analysis as to make continuation of the prior decision a foregone conclusion. (DS-467, page 1; DS-790, page 2; DS-796, page 2; DS-798, page 2)

Response:
See Response to Comment #2. Litigation has been associated with the ski area expansion decision made in 2004. The Court of Appeals review of the District Courts opinion was in reference to the decision made by the Forest Service. As stated ad DSEIS page I-8; "The purpose and need for this supplement is to analyze and correct specific violations identified by the Ninth Circuit Court of Appeals which will allow a determination on whether and to what extent analysis of supplemental information might alter the decision to allow ski area expansion. This action is needed to address the appropriateness of the previous decision and to be responsive to the Court of Appeals Opinion and district court injunction."

The DSEIS document was designed to supplement the existing 2004 FEIS document by adding information and analysis to Chapter III (Affected Environment) and Chapter IV (Environmental Consequence) to address matters identified by the Ninth Circuit Court of Appeals. In some cases (as noted), it replaced certain sections of these FEIS chapters. Because the decision made in September 2004 approved a "Modified Alternative 2", Alternative 2 and Alternative 6 are the only two expansion alternatives relevant to the DSEIS and were the only alternatives considered by the Court of Appeals.

Comment #34: Additional acreage and new information should trigger an examination of the effects on each alternative proposed in the 2004 EIS. (251)

Different acreage under a different management scheme (and new information on fisher) should trigger cumulative effects analysis for all FEIS alternatives. (DS-467, page 1& 3)

Response:
See Response to Comment #2 and Comment #33. Note that changes in acreages associated with supplemental information affect the current condition, which then provides the baseline for effects of the alternatives. Alternatives 2 and 6 were the focus of the DSEIS (as noted above and by the Appeals Court). The consequences of the other Action Alternatives (i.e., Alternative 3, 4 and 5) would be relative to the current condition; in other words, any change in current condition would trigger an equivalent change in effects and would affect all Action Alternatives in a similar manner.

For the FSEIS, relevant changes in effects for all Alternatives Considered in Detail will be presented for new information and/or changed acreages identified in supplemental information and analysis, as appropriate.

Comment #35: No evidence of change to purpose and need after 2004 ROD was invalidated. (252)

There is no indication that the Forest Service considered any change to the purpose and need for action, the range of alternatives, or new ways to avoid or mitigate significant impacts of MASA Expansion after the 2004 ROD was invalidated by the Ninth Circuit of the U. S. Court of Appeals, which cited multiple agency violations of local and regional forest plans. (DS-790, page 2)

Response:
See Response to Comment #2, Comment #33, and Comment #34 above. The Forest Service has prepared a supplement based on new information (in this case, the ruling of an Appeals Court). As noted herein, the focus of the supplement and the stated purpose and need for this supplement is to analyze and correct specific violations identified by the Ninth Circuit Court of Appeals which will allow a determination on whether and to what extent analysis of supplemental information might alter the decision to allow ski area expansion.

This supplemental process will then allow the latest and most complete information and analysis to include the 2004 FEIS concurrent and integrated with supplemental information and analysis for the 2004 decision. As previously noted, this SEIS process tiers to the existing 2004 FEIS. This NEPA strategy is designed primarily to analyze and correct specific violations identified by the Ninth Circuit Court of Appeals.

Comment #36: Is project compliant with survey and manage Regional Forester Wagner memo of 1/15/10? (253)

The current policy is to implement the survey and manage program as described in the 2001 ROD (without relying on the ASRs) (Mary Wagner, January 15, 2010 memo to Forest Supervisors, Subject: Interim NEPA Direction for Survey and Manage Species). It is unclear from the DSEIS whether the Mt Ashland Ski Expansion project is consistent with this policy. (DS-798, page 3)

Response:
As discussed in New Information Review of September 22, 2009, ski area expansion was essentially and effectively planned and analyzed under the 2001 ROD for Survey and Manage, and is consistent and compliant with that decision. Ski area expansion as documented in the 2004 FEIS discussed relevant species, their existence and habitat from the 2004 FEIS pages IV-153-154 is contained in the New Information Review of September 22, 2009, page 4-5.

The Mary Wagner, January 15, 2010 memo to Forest Supervisors provided initial direction for compliance with Judge Coughenour's order of December 17, 2009, regarding survey and manages species in the Pacific Northwest Region (Conservation Northwest v Rey. Case No. C08-1067-JCC (W.D. Wash. Dec. 17, 2009)). Although no projects were enjoined by the Court, the Region provided direction to proceed cautiously until the course of the litigation became clearer.

This memorandum provided direction on how to evaluate projects that (a) do not yet have an approved decision document, or (b) are ready to be sent out for notice and comment. This situation does not include Mt. Ashland Ski Area Expansion as a decision was already made in 2004 and was reviewed under litigation by Oregon District Court and the Ninth Circuit Appeal Court. As noted above, this project is compliant with the requirements for survey and manage species.

COMMENTS CONSIDERED OUT OF THE SCOPE OF THE DSEIS

This section provides response to comments that were considered to be outside the scope of the proposal at hand (for example, comments not germane to the content of the DSEIS or its purpose and need as stated, or the suggested adjustment is outside of the Responsible Official's decision space. In some cases, comments were found to be related to the 2004 FEIS or ROD.

An agency response is not ordinarily warranted for these types of statements, however to provide transparency, examples of these types of comments were tracked and are included herein. This section provides a response via a reference or provides a rationale as to why it was considered to be out of scope. In some cases, reference is made to elements already considered in the evaluation of new information and/or changed conditions documented in Appendix A of the DSEIS.

Comment #37: 1991 Master plan is 19 years old and needs revision. (300)

In 1991, the Forest Service approved a Master Plan for the MASA that continues to drive its push to expand the MASA. The Master Plan is now 19 years old and needs revision to account for impacts of climate change on snowfall and economic viability of an expanded MASA, as well as other relatively new scientific findings pertaining to roadless forests. (DS-2, page 3 & 7; DS-16, page 1; DS-232, page 1; DS-257, page 1; DS-391, page 1; DS-466, page 2; DS467, page 1; DS-502, page 1; DS-784, page 1)

Response:
Ski area expansion was programmatically analyzed and decided in a Final EIS and ROD for the Mt. Ashland Ski Area, which was released in July 1991. The proposal for ski area expansion studied in the 2004 FEIS tiers to this programmatic Master Plan decision. The 2004 FEIS analysis provides review and documentation of currently proposed actions, based on current policy and regulation (such as the Northwest Forest Plan, its allocations and Standards and Guidelines, and the Endangered Species Act). Analysis was conducted and is documented that assesses the relationship of the current proposal to the 1991 programmatic "Master Plan", including items that have changed, are in need of correction, or "fine-tuning" (such as run locations, additional facilities, climate change and the acreage contained within the expanded permit area boundary). It discloses and analyzes information that was not previously discussed, such as actions partially within an Inventoried Roadless Area.

This comment is considered "out of scope" because there is no need to re-visit the programmatic decision made with the 1991 Master Plan, and it was not challenged in litigation or a subject of judicial review.

Comment #38: New information review did not consider conservation of roadless areas. (301)

The "New Information Review" of September 22, 2009 (pages 8-10), did not consider conservation of old-growth forest in the McDonald Peak Roadless Area as a means to mitigate global climate change. The Forest Service has refused to thoroughly discuss the impacts of climate change on the proposed expansion, much of which is at lower elevation than the current ski area. (DS-2, page 3; DS-232, page 1; DS-257, page 1; DS-467, page 1)

Response:
The McDonald Peak Inventoried Roadless Area was discussed and analyzed as a Significant Issue in the 2004 FEIS. Climate change and its impact on snowfall and ski area expansion was specifically analyzed in the 2004 FEIS, as an Other issue. In additional, roadless areas and climate change was further considered in the New Information Review of September 22, 2009.

This comment is considered "out of scope" because these topics were disclosed in the 2004 FEIS, the New Information Review of September 22, 2009, and were not challenged in litigation or a subject of judicial review.

Comment #39: Global climate change impact on ski area not considered. (302)

The analysis did not consider the impact of shorter ski seasons created by climate change using the best available science. (DS-7, page 1; DS-16, page 1; DS-232, page 1; DS-391, page 1; DS-467, page 2&3; DS-793, page 4; DS-796, page 4)

Response:
As noted above, climate change and its impact on snowfall and ski area expansion was specifically analyzed in the 2004 FEIS, as an Other issue. In additional, climate change was further considered in the New Information Review of September 2009. This comment is considered "out of scope" because it is inaccurate to claim that these issues were not analyzed. Note however, reference to additional new information on climate change, published since the September 22, 2009 New Information Review that will be considered as new information (see Response to Comment #59).

Comment #40: Impact of project on global climate change not considered. (303)

Despite years of public comment requesting analysis of climate change impacts and the changes in precipitation patterns, the FS has neglected to consider it as a factor on a project that depends on the right precipitation in the right time of the year. Nor has the FS offered the public any information about greenhouse gas emission impacts of the project. (DS-16, page 1; DS-467, page 2; DS-798, page 5)

Response:
As noted above, climate change and its impact on snowfall as well as the contribution of implementation of this project on climate change via greenhouse emissions (air quality) were specifically analyzed in the 2004 FEIS, as Other issues. In additional, climate change was further considered in the New Information Review of September 2009. This comment is considered "out of scope" because it is inaccurate to claim that these issues were not analyzed. Note however, reference to additional new information on climate change, published since the September 2009 New Information Review that will be considered as new information (see Response to Comment #59).

Comment #41: Skiway is actually a road in a roadless area; violates roadless rule. (304)

The proposed expansion area is within the McDonald Peak Roadless Area and proposed building roads (falsely called ski ways or ski runs) in roadless areas. This is wrong and in violation of the Roadless Rule. (DS-391, page 1; DS-793, page 6; DS-795, page 1; DS-798, page 10; DS-800, page 5)

Response:
This comment is considered "out of scope" because analysis, authority, approval and compliance with the Roadless Rule was previously determined in the expansion project Record of Decision that included the referenced Skiway and ski run components, and was not challenged in the subsequent litigation regarding the ROD.

Enabling emergency egress and providing novice skier access to LC-6, the Skiway Run is proposed to connect the existing Tempest ski run to proposed Run 9. Project 13, as described in the 1991 FEIS, "Chairlift C-6 Option B", specified "an over-the-snow route would be built for evacuating skiers during a lift failure. The route would extend from the base of LC-6 to the base of Windsor." (1991 FEIS page II-11).

Final design would incorporate alterations of width and slope in order to avoid many of the larger trees along the route. It would be used for limited summer access (e.g., maintenance) to LC-6 by MAA employees on ATVs and/or by foot (2004 FEIS page II-45).

Ski area expansion does not involve the construction/reconstruction of roads within the Roadless Area. It does involve the cutting of trees, potential administrative sale and removal of timber incidental to the implementation of an existing special use authorization (Ski Area Permit).

On August 3, 2009, the Forest Service received re-delegation of authority from the Secretary to authorize: "b) Approval of any timber cutting, sale, or removal in inventoried roadless areas incidental to the implementation of an existing special use authorization. Road construction/reconstruction is not authorized through this re-delegation without further project-specific review. The local line officer is delegated authority to make these decisions." (New Information Review of September 22, 2009, page 3). This policy was also reiterated by the Secretary of Agriculture in a more recent memorandum on May 28, 2010.

The Skiway and ski runs referenced in the comment are paths for recreation use and maintenance within the permitted ski area. They are not travelways for motor vehicles or otherwise an addition of Forest Service classified or temporary road miles, during or after construction, and are not an improvement or realignment of an existing classified road (See 36 CFR 294.11).

Comment #42: Knoll area offers alternative site where riparian areas can be avoided. (305)

The Knoll clearly offers an alternative where riparian areas and wetlands can be avoided, as demanded by the 1991 Master Plan decision. (DS-502, page 2)

Response:
As previously stated, complete re-analysis of all alternatives or consideration of new alternatives is not within the scope of the Supplemental EIS. Extensive consideration of all possible alternatives was documented in the 2004 FEIS. The 2004 decision was not made on exclusive avoidance of riparian (or any other type of) impacts; it was made on the attainment of the stated Purpose and Need with acceptable environmental impacts. This comment is considered "out of scope" because this topic was not challenged in litigation or a subject of judicial review or court direction.

Comment #43: Another design could lessen impacts on riparian; remove runs in C6 area, etc. (306)

Even within the C-6 expansion area, much more could be done within the design of the runs to minimize impacts to riparian areas. Removal of 3-4 runs could greatly decrease acres of riparian impacts. (DS-502, page 2)

Response:
As previously stated, complete re-analysis of all alternatives or consideration of new alternatives is not within the scope of the Supplemental EIS. Extensive consideration of all possible alternatives was documented in the 2004 FEIS. The 2004 decision was made on the attainment of the stated Purpose and Need with acceptable environmental impacts. This comment is considered "out of scope" because this topic was not challenged in litigation or a subject of judicial review or court direction.

Comment #44: Shift in economic conditions since 2004 comprises new information. (307)

There have been significant shifts in the economic condition following 2004. The economic collapse has impacted most sectors of the business community; the FS cannot argue that pre-2004 data on skiing demand, market conditions, market competition, and economic conditions can still be used to make a reasonable decision. (DS-502, page 3; DS-795, page 1)

Response:
The "New Information Review" of July 2, 2007 (pages 5-6) as well as the "New Information Review" of September 2009 discussed that the FEIS analysis and ROD for expansion are not based on precise or current economic figures, only relative figures. As explained in the 2004 FEIS Appendix A page A-107:

The financial analysis includes/incorporates the cost of debt to service the loan. It assumes that the ski area would take on debt to finance the first phase of improvements and begin fundraising at the same time to finance Phase 2 and 3 improvements. Furthermore, the analysis incorporates a "discount rate" to account for a variety of factors associated with financial risks and costs, including the borrowing rate for debt incurred in Phase 1, and the risks associated with undertaking improvements, the potential for poor snow years, changing economic conditions and other factors. This analysis is conservative for the following reasons:

- The Ski Area has stated that it plans to fund improvements in all phases through fundraising or retained earnings, rather than through a loan. This would substantially reduce the cost of improvements and increase overall net revenues.
- The analysis incorporates a relatively high discount rate (20%). Use of a lower discount rate would make the analysis more financially favorable.
- The analysis assumes a gradual growth in skier visits, rather than an early spike associated completion of improvements, which is probably more likely to occur. Use of the discount rate reduces the value of longer term growth in comparison to shorter term growth, making this assumption about gradual growth conservative.
- The analysis includes low, medium, and high visitation growth scenarios to account for potential variations in snowfall (e.g., several bad snow years in a row), overall economic conditions and other factors."

The "New Information Review" of July 2, 2007 (pages 5-6) restated the position of the Forest Service regarding financial feasibility as discussed in FEIS Appendix B (page B-5), which is quoted (in part) below.

> "The financial ability of the MAA to finance an expanded ski area (if authorized) is not within the purview of the Forest Service. The Forest Service is processing a request under Special Use Permit provisions for an expanded ski area; the ability of the MAA (as a non-profit corporation) to finance proposed improvements is not an issue that is germane to Federal analysis under NEPA."

The Forest Service would review Mt Ashland Association finances prior to approving an implementation plan for new construction in the expansion area, which is a standard operating procedure under the terms of the Special Use Permit.

Comment #45: Cumulative effects from Ashland Forest Resiliency not disclosed. (308)

The AFR project and other federal and non-federal actions near Mt. Ashland, including within the Upper Ashland Creek watershed and along the Siskiyou Crest biological corridor, present new, sufficient, relevant and significant information demanding a hard look. (DS-790, page 5)

Response:
As discussed in DSEIS Appendix A; New Information Review of September 22, 2009, page 2:

> "In the Final EIS for Ashland Forest Resiliency, the Forest Service developed and analyzed an additional Action Alternative, designed and identified as the Preferred Alternative. This alternative was developed from the results of analysis of the two Action Alternatives analyzed in detail in the Draft EIS, further collaboration with the City of Ashland and their representatives, and the extensive comments received on the Draft EIS during the Comment Period. The Preferred Alternative was designed to include the most effective and efficient treatment methodologies, in the most strategic locations. The Preferred Alternative identifies approximately 7,600 acres of treatment, which is less than the Proposed Action (8,150 acres) for which was assumed in the cumulative effects analysis in the Mt. Ashland Ski Area Expansion FEIS."

As stated in 2004 FEIS, page IV-95 & 96:

"The purpose of the Ashland Forest Resiliency (AFR) project is to reduce hazardous fuel conditions and to protect values at risk within the Ashland Municipal Watershed. The AFR project proposes to treat approximately 8,150 acres of hazardous fuels with various treatments including density management, prescribed fire, and vegetation treatments."

The assumptions for *Equivalent Roaded Area (ERA) Methodology* (see FEIS , page IV-94) were considered and applied to develop resultant conditions within these watersheds. Of the total 8,150 acres proposed for treatment under AFR, approximately 355 acres would occur within the Upper Neil Creek watershed and 3,055 acres within the Upper Ashland Creek Watershed. These figures were based on the most recent version of the AFR proposed action. This analysis remains conservative since the Preferred Alternative and the 2009 ROD for AFR resulted in less acres of treatment than the *ERA* Cumulative Effects analysis assumed.

This comment is considered "out of scope" because this topic was disclosed in the 2004 FEIS and was not challenged in litigation or a subject of judicial review.

Comment #46: Consideration of Nolan and Daley Pacific Northwest climate change study. (309)

Nolan and Daly (2006) map areas in the Pacific Northwest that are at-risk of converting from a snow-dominated to a rain-dominated winter precipitation regime. (DS-790, page 11)

Response:
As discussed in DSEIS Appendix A, New Information Review, September 22, 2009; The National Center for Conservation Science and Policy provided a paper that had been published in the Journal of Hydrometeorology in October 2006 titled "Mapping "At Risk" snow in the Pacific Northwest by Anne W. Nolin and Christopher Daly. This paper presents the modeling results of possible effects of global warming on current snow-dominated winter precipitation regimes. A map is presented that predicts "at risk" snow zones concentrated in the Cascades and the Olympic Mountains of the Pacific Northwest and ski areas in these mountains are listed and compared according to their risks of a significant increase in the relative frequency of warm winters."

To address the relevance of the Nolin and Daly paper, the interdisciplinary team considered whether this information contained more detail than that already considered and displayed in the FEIS. The Mt. Ashland Ski Area Expansion FEIS addressed climate change on pages III-8 through III-9, and IV-5 through IV-6. Snowfall was mentioned as a factor in economic viability assessments on page IV-268, but not carried into models of economic viability for lack of sufficient data or reliability of predictions as discussed on pages III-8-9.

Nolin and Daly cite numerous data sources concluding that the Pacific Northwest experienced a warming of winter temperatures in the latter half of the 20th century. The FEIS had already discussed this trend on page III-8. The paper goes on to present modeling results indicating a possibility that the Cascades could see an increase in rain-dominated winters from what is experienced currently.

The FEIS includes an analysis by Associate Professor Gregory Jones of Southern Oregon University comparing (testing) such model results against actual temperatures recorded in Southern Oregon (pages III8 and III-9), concluding that such models overestimate the actual rise in temperatures by 1.5 ^{o}C. The Nolan and Daly paper conducts no such test, nor presents data that indicate its modeled results are any more accurate than those tested by Associate Professor Jones. As such, the interdisciplinary team concluded that the Nolan and Daly paper provided no additional information not already more thoroughly evaluated in the 2004 FEIS.

This comment is considered "out of scope" because this topic was already considered as new information and was not specifically challenged in litigation or a subject of judicial review.

Comment #47: No analysis of new information claims provided by RG Sierra Club. (310)

The FS has refused to analyze significant, new information that was not available over four years ago; In 2008, the Rogue Group Sierra Club and others provided a list of new and significant issues that could have an impact on the proposed expansion. (DS-793, page 3)

Response:
Issue topics provided by the Rogue Group Sierra Club and others were discussed in DSEIS Appendix A, New Information Review, September 2009 and July 2007. This comment is considered "out of scope" because these topics were already considered and were not specifically challenged in litigation or a subject of judicial review.

Comment #48: Conflict between FEIS and changed condition review; visitation is related to snowfall. (311)

The RGSC provided the FS with maps, charts and graphs showing how visitation and snowfall are intertwined. In fact, the FS in the previous NEPA analysis admitted that visitation is directly related to snowfall. (DS-793, page 5; DS-796, page 5; DS-798, page 9)

Response:
The FEIS at page IV-266 stated that "variations in the ski area's economic performance may be caused by many factors, including snow conditions, the health of the regional or national economy, and changing demographics and consumer interests. Changes in any of these factors would affect ski area visitation. There are hundreds of conditions and permutations that could be tested." At IV-212, the FEIS stated "factors that affect skier demand are numerous and include natural events such as amount of snowfall, temperature, wind conditions and mix of terrain."

The New Information Review of September 2009 (Appendix A in the DSEIS; page 9) should have stated that snowfall and weather conditions are one factor amongst many affecting visitation and determining the economic performance of a ski area.

Comment #49: Economic assumptions have changed; does it change viability position? (312)

The impact of the current economy on the expansion's economic assumptions may have greatly changed the FS assumption the expansion is needed for viability; this important issue was not analyzed. (DS-793, page 5; DS-795, page 1; DS-796, page 5; DS-800, page 1)

Response:
See Response to Comment #44 (above)

Comment #50: MAA's financial reserve has changed; not able to afford expansion. (313)

The other economic question is whether the Mt. Ashland Association can afford the expansion. The MAA has less money, a more expensive expansion and has demonstrated an inability to raise the money. (DS-793, page 5; DS-800, page 1)

Response:
The "New Information Review" of July 2, 2007 (pages 5-6) restated the position of the Forest Service regarding financial feasibility is discussed in the 2004 FEIS Appendix B, which is quoted (in part) below:

"The recent and current financial status of the MAA is not within the purview of the Forest Service, and is not germane to the NEPA analysis process being conducted for expansion at Mt. Ashland. Proposals being analyzed in detail include provisions for staging of the implementation, over periods of up to 10 or more years. If ski area expansion were to be authorized, each stage of implementation would be reviewed and authorized annually (or more often) by the Forest Service, dependant on the needs (and presumably financial ability) and request of MAA at that particular time. The Forest Service cannot require that financial capital to implement the entire authorized action be solvent at the time of initial development, or at any stage." (FEIS Appendix B-6-7).

This comment is considered "out of scope" because this topic was disclosed in the 2004 FEIS and was not challenged in litigation or a subject of judicial review.

Comment #51: No compliance with NWFP survey and manage requirements (animals) (314)

The Forest Service has not complied with the Survey and Manage (S&M) requirements of the Northwest Forest Plan. Surveys are now almost 10 years old and are no longer valid. (DS-793, page 6; DS-796, page 4)

Response:
See New Information Review of September 2009 (DESIS Appendix A), pages 4 and 5. All required surveys are complete and no S&M species were found, all surveys are in compliance with the 2001 ROD. Red tree vole (RTV) surveys are valid for five years, however, surveys are now no longer required for the elevation within Mt Ashland Ski Area. In addition, RTV surveys have been conducted on over 7,600 acres in the AFR project area; no RTV were found. It is highly unlikely that RTV occurs in or adjacent to the Mt Ashland Ski Area. All mollusk surveys were conducted to protocol and there is no sunset date on those surveys; no S&M mollusk species were found within the ski permit area.

Comment #52: New TMDLs (Total Maximum Daily Loads) not analyzed. (315)

The Forest service has refused to analyze the TMDLs for Ashland Creek, despite the fact that the proposed ski runs will cut through inherently unstable terrain (LHZs). (DS-793, page 6)

Response:
This topic was discussed in DSEIS, New Information Review, September 22, 2009 and July 2, 2007. TMDLs are actually thresholds for which proposed actions would not be allowed to exceed. Ski area expansion would be in compliance with these thresholds; the amount of sediment delivery was predicted and documented in the 2004 FEIS and the now "in place" TMDLS would not be exceeded.

This comment is considered "out of scope" because this topic was already considered and was not specifically challenged in litigation or a subject of judicial review.

Comment #53: Replacement of Ariel Lift and other MAA changes not analyzed. (316)

MAA has made it clear that it intends to change one double chair to a triple chair (Windsor) and that it also intends to replace the Ariel Lift. Yet neither of these actions are considered in the Master Plan, making the Master Plan incomplete. (DS-793, page 6)

Response:
This topic was discussed in DSEIS, New Information Review, September 2009 and July, 2007. It was determined that these actions are not necessarily being proposed. Replacement of an existing facility, with a newer version or upgrade of the same facility within the same environmental footprint, does not create environmental impacts that warrant assessment in an environmental impact statement. Such re-construction is generally categorically excluded from documentation in an Environmental Assessment or an Environmental Impact Statement.

This comment is considered "out of scope" because this topic was already considered and was not specifically challenged in litigation or a subject of judicial review.

Comment #54: ACS objectives not analyzed since 2003. (317)

Because the Bush administration voided the ACS, the FEIS did not have this analysis. Since that time the ACS has been reinstated, yet the FS still does not show Ashland Creek as being degraded. There is no explanation as to why it was considered degraded in 2003 under the ACS, but is not currently considered degraded under the same ACS. (DS-793, page 6)

Response:
Although occurring during the Bush administration, the *Clarification of Language in the 1994 Record of Decision for the Northwest Forest Plan* was a proposal from the USDA and USDI in Portland Oregon (October 2003). It was designed to clarify the scale at which meaningful analysis for the Aquatic Conservation Strategy could be performed.

The Mt. Ashland Ski Area Expansion Final EIS released in 2004 included more precise and current information over the Draft EIS released in 2003. This reflected changes in design and additional mitigation of proposed actions as well as changed management direction. Under NEPA, a Final EIS supersedes documentation within a Draft EIS.

The "New Information Review" of July 2, 2007 (pages 8-10), discussed ACS Objectives for the 2004 decision. The Final SEIS will include discussion of Riparian Reserve standards and guidelines, based on an expanded area of Riparian Reserve associated with the Supplemental EIS.

Comment #55: ACS does not allow mitigation and restoration as a substitute for protection. (318)

In 2003, the DEIS showed that two of the nine objectives would be maintained, but only because the FS would rely on mitigation and restoration. The ACS does not allow mitigation or restoration to substitute for protecting these resources; this discrepancy not explained. (DS-793, page 6)

Response:
See Response to Comment #54 (above). The 2004 FEIS supersedes documentation within the 2003 Draft EIS. As noted in Response to Comments, Appendix A, FEIS; Comment #240: "The EIS did not utilize mitigation as an excuse for degradation. It does consider restoration as an action to improve the trends at watershed scales, which would help to offset the adverse physical effects which are associated with any ground-disturbing action. Mitigation is designed to reduce the effects to acceptable levels (within Standards and Guidelines)."

This comment is considered "out of scope" because this topic was disclosed in the 2004 FEIS and was not challenged in litigation or a subject of judicial review.

Comment #56: Fruitgrowers harvest in Beaver Creek where parking lot expansion is proposed not considered. (319)

Timber Harvest Plans in Beaver Creek watershed included 1,422 acres of clearcut, shelterwood and other logging prescriptions. This is the same watershed where the FS is planning to allow impacts from the parking lot expansion. (DS-796, page 3)

Response:
The expansion of the parking lot under the decision of 2004 does not occur in the Beaver Creek watershed, it occurs in the Upper Cottonwood Creek watershed. In the cumulative effect analysis as documented in the 2004 FEIS and specifically in FEIS Appendix C, private timberlands within all affected watersheds were assumed to be primarily in an early seral vegetative stage. The assumption was that these lands would be intensively managed for timber products. For the cumulative effects analysis (*ERA Methodology*), this was part of the current condition assumptions and was not part of foreseeable actions.

This comment is considered "out of scope" because this situation was analyzed and was disclosed in the 2004 FEIS and was not challenged in litigation or a subject of judicial review. Also see Response to Comment #64.

Comment #57: No compliance with NWFP survey and manage requirements (lichens, bryophytes & fungi). (320)

Survey and manage; the DSEIS covers certain species but is silent on lichens, bryophytes and fungi. Were these surveys performed? (DS-796, page 4)

Response:
Northwest Forest Plan Survey and Manage (S&M) vascular plants, bryophytes, lichens, and fungi are addressed in the 2004 FEIS Affected Environment chapter on pages III-109 and 110, and in the Environmental Consequences chapter on pages IV-131 through 133. Pre-disturbance surveys are only required for S&M category A and C species. No category A or C vascular plants have any reasonable likelihood of occurring in the Ski Permit Area; either their habitat is lacking, or the project area is outside their expected range. Therefore pre-disturbance surveys for S&M category A and C species were not required.

However, surveys were conducted between 1994 and 1998 for other Northwest Forest Plan bryophytes, lichens, and fungi, some of which became S&M species in 2001. As a result of this survey work, one S&M bryophyte and three S&M fungi were located within the Ski Permit Area. Additional survey work was then done to assess the local abundance, local habitat requirements, and to determine the extent of the known occurrences of these category B and D organisms, in case mitigation on their behalf became necessary.

Comment #58: No exemption exists for clearcutting for a ski area (NFP ROD at C-31 and C-32). (321)

The existing ROD authorizes ground disturbance in designated Riparian Reserves. These reserves are properly functioning (FEIS III-80 to 84). No exemption exists to build a ski area (NWFP ROD at C-31 and C-32). (DS-796, page 6)

Response:
The reference to the Northwest Forest Plan standards and guidelines at C-31 and C-32 is not correct; these are applicable to Timber Management. Ski area expansion falls under the standards and guidelines for Recreation Management, page C-34. Compliance with the recreation standards and guidelines was discussed in the 2004 FEIS at Page IV-102. This comment is considered "out of scope" because this topic was already considered, the claims are not accurate, and this topic was not specifically challenged in litigation or a subject of judicial review.

NEW INFORMATION/CHANGED CONDITION TOPICS

This section provides a response to comments that were considered to be within the scope of the DSEIS and were comprised of topics that claimed certain topics could or should be assessed for sufficiency, relevancy and significance as new information or changed conditions since the 2004 FEIS and ROD. These topics include those that were not included or specifically analyzed in The "New Information Review" of July 2, 2007 as well as the "New Information Review" of September 22, 2009 (DSEIS Appendix A). It may also include topics addressed in DSEIS Appendix A where new information or circumstances may exist since the latest new information assessment in September of 2009.

<u>Comment #59:</u> Consider NEPA guidance on effects of climate change and greenhouse gas emissions CEQ 2010; also Dept. of Interior and other new science and direction. (400)

The DSEIS does not address the rapidly developing science regarding the effects of climate change despite there being exacting standards published by the Dept. of Interior and in FS direction entitled Climate Change Considerations in Project Level NEPA Analysis. The DSEIS fails to disclose how many tons of carbon will be emitted. Consider the study that was submitted by the National Center for Conservation Science and Policy, as it has the most scaled-down analysis of climate impacts in the Rogue Basin. (DS-467, page 2; DS-784, page 1; DS-790, page 10; DS-793, page 3; DS-796, page 5; DS-784, page 1; DS-798, page 8)

Response:
As discussed in Response to Comment #45 and as discussed in DSEIS Appendix A, New Information Review, September 22, 2009; The National Center for Conservation Science and Policy provided a paper published in the Journal of Hydrometeorology in October 2006 titled "Mapping "At Risk" snow in the Pacific Northwest by Anne W. Nolin and Christopher Daly.

Forest Service direction regarding the effects of climate change and greenhouse gas emissions has been considered since the 2004 FEIS and ROD were published (see DSEIS Appendix A, New Information Review, September 22, 2009).

Other agency direction from the Department of Interior and Environmental Protection Agency has been published since New Information Review, September 22, 2009. Another site specific study *Technical Memorandum No. 6 Effects Of Climate Change On Ashland Creek, Oregon* was prepared for the City of Ashland by Alan F. Hamlet and Pablo Carrasco of the Dept. of Civil and Environmental Engineering, University of Washington 8/9/2010. These new studies and/or sources of other new information will be assessed for sufficiency, relevancy and significance as new information or changed conditions since the 2004 FEIS and ROD or where new information or circumstances may exist since the latest assessment in September of 2009. The results of this assessment will be documented in the Final SEIS as an addition to Appendix A.

<u>Comment #60:</u> Windstorm effects from windstorm events since 2004 on Engelmann spruce stand have not been analyzed. (401)

Following the 2004 FEIS, a significant disturbance took place within the Engelmann spruce stand. A heavy windstorm blew down a large number of trees. This impact combined with ski area expansions could affect long-term viability of this 18.2 acre stand. (DS-502, page 3; DS-772, page 1)

Response:
In December 2002 a large number of spruce were either blown down or fell from heavy snow loading. This was discussed and accounted for in the 2004 ROD at page 27. The 2004 FEIS (page IV-115) stated the following (for Alternative 2):

> "Because the area proposed for removal under this alternative would be quite small (even assuming loss to windthrow) compared to all the occupied acres in the Watershed, and because all age classes are well represented throughout the SUP area grove and the rest of the watershed, this alternative is expected to have no effect on the long-term viability of Engelmann spruce in the Ashland Watershed."

On January 3 and 4 2008, a powerful winter storm brought high winds and precipitation to SW Oregon. Several trees came down within the spruce grove (including Shasta red fir) and throughout the Ashland Watershed.

Events associated with the Engelmann spruce stand will be further assessed for sufficiency, relevancy and significance as new information or changed conditions since the 2004 FEIS and ROD or where new information or circumstances may exist since the latest assessment in September of 2009. This assessment will be documented in the Final SEIS as an addition to Appendix A.

<u>Comment #61:</u> Climate change may affect fire regime that may threaten MASA facilities via wildfire. (402

DSEIS analysis leaves unanswered serious questions regarding potential change to precipitation frequency intensity, effects to length and quality of ski seasons affecting the purpose and need for actions, as well as reasonably foreseeable changes in fire regime that may threaten expanded MASA facilities with destruction by wildfire (Bachelet et al, 2007; Parry et al. 2007, Running 2006; Westerling et al. 2006). (DS-790, page 11)

Response:
Effects regarding climate change are discussed in Response to Comment #11, #37, #38, #39, #40, #46 and #59. Predicted changes to fire regime, review of the listed papers and threat to expanded facilities from wildfire will be assessed for sufficiency, relevancy and significance as new information or changed conditions since the 2004 FEIS and ROD or where new information or circumstances may exist since the latest assessment in September of 2009. This assessment will be documented in the Final SEIS as an addition to Appendix A.

<u>Comment #62:</u> Fuel management effects from AFR not considered based on Elliot and others 2010. (403)

The Forest Service cares not to look at cumulative watershed effects that may result from MASA expansion together with the AFR Project. Elliot and others (2010) present significant new information regarding effects of fuel management activities that was not considered in the AFR record and is potentially significant regarding cumulative effects of MASA Expansion to peak flows, soil erosion, mass wasting, sediment delivery and water quality. (DS-790, page 11; DS-798, page 5)

Response:
Effects regarding AFR and cumulative effects are discussed in Response to Comment #12, #19, and #45. New information from Elliot et al. regarding effects of fuel management activities and cumulative effects will be assessed for sufficiency, relevancy and significance as new information or changed conditions since the 2004 FEIS and ROD or where new information or circumstances may exist since the latest assessment in September of 2009. This assessment will be documented in the Final SEIS as an addition to Appendix A.

Comment #63: General downward ski area visitation trend not recognized. (404)

The Forest Service should also analyze the general downward or flat trend in ski area visitations across the West. Poor visitation at Mt. Ashland is created by a declining, dying industry, shorter ski years due to climate change and the inherent high cost of skiing coupled with the down economy. (DS-793, page 5)

Response:
In 2009/10 the U.S. ski industry recorded 59.7 million skier visits for the second best season ever. In spite of continued pressures from a weak economy and without the catalyst of an exceptional snow year, skier visits this season increased by 4.2 percent to an estimated 59.7 million visits, only 1.2 percent below the all time record of 60.5 million visits achieved in 2007/08. All regions exceed ten-season visitation averages (2000/01 – 2009/10), including the Pacific Northwest (up 5.7 percent) (source Kottke: National End of Season Survey 2009/10, April 2010).

2009/2010 skier visits in Oregon were up 8.78% from the previous year. The three-year skier visit average for the State (2007-2009) was 1,935,150 and the ten-year average was 1,685,868 visits. The industry does not appear to be flat or dying.

The downward trend at Mt. Ashland over the last two years can be attributed to at least two factors, a weak economy and a reduced operating season. In the 2008/09 season the ski area went to a 6-day operating week (as opposed to 7 days) and to 2-nights/week of night skiing (as opposed to 3 nights/week). In the 2009/10 season the ski area operated 5 days/week.

The content of this comment will be assessed for sufficiency, relevancy and significance as new information or changed conditions since the 2004 FEIS and ROD or where new information or circumstances may exist since the latest assessment in September of 2009. This assessment will be documented in the Final SEIS as an addition to Appendix A.

Comment #64: Cumulative effects; significant acreage in Oregon and California harvested via THPs. (405)

Several Timber Harvest Plans (THPs) have allowed significant acreages of private land to be clearcut adjacent to the ski area in both Oregon and California since the ROD was signed. (DS-796, page 4)

Response:
In the cumulative effect Analysis as documented in the 2004 FEIS and specifically in FEIS Appendix C, private timberlands within all affected watersheds were assumed to be primarily in an early seral vegetative stage. The assumption was that these lands would be intensively managed for timber products. For the cumulative effects analysis (*ERA Methodology*) this was part of the current condition assumptions and was not part of foreseeable actions.

The content of this comment (i.e., significant acreage in new Timber Harvest Plans) will be assessed for sufficiency, relevancy and significance as new information or changed conditions since the 2004 FEIS and ROD or where new information or circumstances may exist since the latest assessment in September of 2009. This assessment will be documented in the Final SEIS as an addition to Appendix A.

Comment #65: Spotted owl; new information regarding disease and invasive species. (406)

Range-wide, impacts to the owls from logging and fires, invasive species and other threats continue to impact owl populations. The original EIS for this project did not take into consideration the work on the spotted owl recovery plan, new demographic data indicating steep declines, the importance of the Klamath province to owl recovery or the impacts of disease and invasive species on the owl. (DS-796, page 4)

Response:
There are no changed conditions with respect to new information suggested above in relation to northern spotted owls. While the Special Use Permit Area is located within a spotted owl Critical Habitat Unit (CHU), ski area expansion activities would have no effect on breeding or reproduction to spotted owls as there is no nesting habitat in the ski permit area. This area has been used in the past for winter roosting but no spotted owls are known to nest at the elevations associated with the ski permit area. The primary nesting habitat within this CHU and LSR are at lower elevations.

The Spotted Owl Recovery Plan, new demographic data indicating steep declines, the importance of the Klamath province to owl recovery and the impacts of disease and invasive species will be assessed for sufficiency, relevancy and significance as new information or changed conditions since the 2004 FEIS and ROD or where new information or circumstances may exist since the latest assessment in September of 2009. This assessment will be documented in the Final SEIS as an addition to Appendix A.

RELATED TO IMPLEMENTATION

This section provides response to comments that were determined to be related to implementation of ski area expansion (and not necessarily the environmental analysis contained in the DSEIS). While considered to be outside the scope of this Supplemental NEPA process (as the decision to expand is under court ordered injunction), to provide transparency, examples of these types of comments and agency perspective and/or response is provided.

Comment #66: NOI for supplement did not disclose permits required under CWA for implementation. (500)

The Forest Service published its Notice of Intent to prepare the DSEIS on March 11, 2010 (75 Fed. Reg. 11511). The notice fails to disclose permits required by the Clean Water Act to implement MASA expansion. (DS-2, page 3)

Response:
The Notice of Intent to prepare the DSEIS is Supplemental NEPA. The disclosure of required permits was contained in the 2004 FEIS and is not a requirement of a Supplement. As stated in the Appeals Court Opinion at 13073 and DSEIS page I-7:

"The Forest Service included in the FEIS a discussion of whether the proposed expansion would violate federal and state laws, and explicitly noted that state and local agencies would have regulatory responsibilities for many activities and actions in the expansion project. Although the FEIS does not specifically address Oregon's unique regulatory program for wetlands, the FEIS is clear that state approval is a condition of the project."

Comment #67: City of Ashland requests close coordination during implementation. (501)

In an effort to support TMDL compliance and protection of the City's water supply, the City requests that the Forest Service continue close coordination with the City if the MASA Expansion project proceeds. (DS-435, page 1)

Response:
This comment is related to implementation if the project were to proceed. The Forest Service will join the City of Ashland to support TMDL compliance and protection of the City's water supply, and would offer continued close coordination with the City if the MASA expansion project proceeds.

Comment #68: City of Ashland recommends coordination regarding monitoring effort. (502)

Additionally, the City recommends close coordination between the Forest Service and the City regarding monitoring efforts associated with MASA expansion as associated with the Reeder Reservoir Sediment TMDL. (DS-435; Page 1)

Response:
The Forest Service would closely coordinate with the City of Ashland regarding monitoring efforts associated with MASA expansion as associated with the Reeder Reservoir Sediment TMDL. Monitoring has been ongoing and will continue if expansion proceeds.

Comment #69: The City of Ashland seeks clarification on 2004 ROD bonding. (503, 504, 505, 506)

The City of Ashland seeks clarification on statements made in the 2004 ROD pertaining to bonding: what is meant by proportional? How is increased amount determined? What is total new dollar bond amount? When will MAA be required to post the new full bond amount? (DS-435, page 2)

Response:
The response to this comment is clarification of the 2004 ROD regarding implementation, not to the DSEIS. The "proportional" increased bonding amount would likely be based on increased acres of expanded facilities (e.g., runs, lifts, facilities, etc.). The bonding amount would likely be based on the restoration costs associated with these expanded facilities. The timing associated with the increased bonding would occur as certain phases of expansion are completed (not necessarily all at one time); as such, it is not possible at this time to predict the new total bonding amount or how often it would be changed under the terms of the Special Use Permit.

Comment #70: EPA recommends a detailed adaptive management framework. (507)

To ensure that aquatic ecosystems and the City of Ashland's municipal water supply are adequately protected, the Environmental Protection Agency recommends that the Forest develop and disclose a detailed adaptive management framework. (DS-824, page 2)

Response:
The 2004 ROD contained and required an extensive Monitoring Plan, attached to the ROD as Attachment C. Adaptive Management was a key element of the design and methodology described in this plan.

As described in the 2004 ROD and page ROD-6:

> "The objectives of the Monitoring Plan are to monitor the implementation of authorized actions, the use of Mitigation Measures, and the effectiveness of required mitigation. The plan includes monitoring at the Project Scale (where actions occur), at the Site Scale (an area slightly larger than the SUP), and at the Watershed Scale Analysis Areas (if changes are detected at the Site Scale).
>
> If ongoing monitoring indicates that laws, regulations, standards and guidelines or critical project objectives are not being met, the project will be modified. Knowledge and experience gained, and lessons learned from monitoring and evaluation will also be incorporated into subsequent development activities and future planning efforts (Adaptive Management)."

LIST OF RESPONDENTS

Government Agencies

City of Ashland - Public Works Director
Environmental Protection Agency-Region 10

Environmental Organizations

Rogue Group Sierra Club
Center for Biological Diversity
Oregon Wild
Klamath-Siskiyou Wildlands Center
Native Plant Society of Oregon–Siskiyou Chapter
Applegate Wilderness Council

Interest Groups/Businesses
Mt. Ashland Association
Pacific Northwest Ski Areas Association
Northwest Ski Club Council

Individual/Family

The listing of the approximately 894 individuals and/or families that provided comment would occupy a number of pages in this FSEIS Appendix and is not included here for that reason. The complete listing is part of the Project Record and is available on request. Note that a majority of the individual comments were generated via an electronic site established to facilitate an electronic response (that contained a pre-determined viewpoint), and therefore were essentially identical.

CITY OF
ASHLAND

DS 435
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May 6, 2010

Steve Johnson
Ashland Ranger Station
U.S. Forest Service
645 Washington Street
Ashland, OR 97520

REC'D MAY 10 2010

RE: COMMENTS ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT, MT. ASHLAND SKI AREA EXPANSION

To Mr. Steve Johnson:

Thank you for the opportunity to comment on the Draft Supplemental Environmental Impact Statement (DSEIS) for the Mt. Ashland Ski Area (MASA) Expansion Project. Our comments focus on how the MASA Expansion Project could potentially affect the City's water supply and ability to comply with the Reeder Reservoir Sediment Total Maximum Daily Load (TMDL) established in 2007.

The Court of Appeals found that the Forest Service failed to properly evaluate the impact of the proposed expansion on the Pacific Fisher; in violation of both the National Environmental Policy Act (NEPA) and the National Forest Management Act (NFMA) and that it violated the NFMA by failing to appropriately designate Riparian Reserves and Restricted Watershed terrain. The Forest Service prepared the DSEIS in response to these violations. With respect to the DSEIS, the City is primarily concerned with Riparian Reserve and Restricted Watershed terrain designations as these most relate to the City water supply.

The City has concerns about the potential for the proposed MASA Expansion Project to adversely affect the City's water supply at Reeder Reservoir, particularly the City's ability to meet our obligations of the sediment TMDL. As you are aware, the sediment TMDL is particularly strict regarding any increases in sediment load to the system. The TMDL specifies a loading capacity "set to natural background or an erosion rate of 3.62 cubic yards per day total for the watershed. No significant increased delivery of sediment to Reeder Reservoir over that which would occur naturally is allowed."

In an effort to support TMDL compliance and protection of the City's water supply, the City requests that the Forest Service continue close coordination with the City if the MASA Expansion Project proceeds from the planning phases to the more detailed engineering design, construction, and post-construction monitoring phases. Additionally, the City recommends close coordination between the Forest Service and the City regarding monitoring efforts associated with the MASA Expansion Project and monitoring efforts associated with the Reeder Reservoir Sediment TMDL.

PUBLIC WORKS
20 E. Main Street
Ashland, Oregon 97520
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Tel: 541-488-5587
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TTY: 800-735-2900

In an effort to foster good communications pending implementation, the City recommends the following actions:

- Establish a coordination committee consisting of the Forest Service, the Mt. Ashland Association (MAA), and the City to discuss project implementation on an on-going as needed basis (e.g. monthly during pre- and post-construction periods, and weekly during construction).
- The City would like to have the opportunity to review and comment on project design plans, including but not limited to the following: storm water system design, grading, clearing, and revegetation plans, erosion control plans and 1200-C permit application, and watershed restoration project plans within the Reeder Reservoir Watershed.
- The City would like to have the opportunity to visit project areas as desired during and post-construction.

The City is also seeking clarification of statements made in the 2004 ROD pertaining to the need for the MAA to post bond money to cover the cost of ski area restoration in the case of bankruptcy and subsequent decision to abandon the ski area. Specifically, the City seeks clarification of the following:

- The ROD states that, "the bond or assets available amount under the SUP will be proportionally adjusted to account for the increase in developed area...." What is meant by proportional? Or, how is the amount determined?
- The ROD states that, "...and the subsequently increased need for funding for reclamation (above the current amount [i.e. $200,000 based on April 1992 Decision Notice]) in the event of ski area closure." How is the increased amount determined (e.g. $200,000 factoring for inflation, based on assessment of actual current day costs, etc.)?
- What is the total new dollar amount required to be bonded?
- When will MAA be required to post the new full bond amount? The City requests that the new full bond amount be posted prior to or at the time of the Forest Service authorizing the MASA expansion project.

In summary, the City is pleased to see the proper designation of riparian and watershed management units per the DSEIS. However, the City continues to have concerns regarding assurances that we will be involved through project implementation and that the City of Ashland is protected from unnecessary liability resulting from the project. This City's interest is in compliance with the Reeder Reservoir Sediment TMDL; if the project is approved, proper implementation and close coordination will be critical.

Thank you again for the opportunity to provide comment. If you need further clarification, please contact me at (541) 488-5587 or via email at faughtm@ashland.or.us.

Sincerely,

Michael R. Faught

Michael R. Faught
Public Works Director

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

May 10, 2010

Scott Conroy, Forest Supervisor:
C/O Steven R Johnson, Project Lead
Ashland Ranger Station
645 Washington St.
Ashland, Oregon 97520-1402

Re: U.S. Environmental Protection Agency (EPA) comments for the Rogue River-Siskiyou National Forest (Forest) Mt. Ashland Ski Area Expansion (Expansion) Draft Supplemental Environmental Impact Statement (DSEIS). EPA Project Number: 99-078-AFS.

Dear Mr. Conroy and Mr. Johnson:

This review was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Under our policies and procedures, we evaluate the environmental impact of the proposed action and the adequacy of the impact statement. We have assigned an EC-1 (Environmental Concerns – Adequate) rating to the DSEIS. A copy of the EPA rating system is enclosed.

We understand that the primary driver to develop this DSEIS was the need to analyze and correct specific violations identified by the Ninth Circuit Court of Appeals. We believe that the document succeeds in that regard. We also understand that this supplemental process is designed to allow the latest and most complete information and analysis to include the 2004 final EIS (FEIS) concurrent and integrated with the 2009 supplemental information and analysis (DSEIS, Abstract). Our enclosed comments update our October 25, 2004 letter on the FEIS and represent our perspective on the concurrent and integrated FEIS and DSEIS.

In EPA's October 25, 2004 letter we stated that we continued to prefer Alternative 3 because it would, "...reduce the potential for adverse effects to resources of concern." The DSEIS has not eliminated or reduced our concern about potential adverse effects. For example, we believe that expanding the Mt. Ashland Ski Area would result in conversion of mature and old growth forests (FEIS, IV-120) and disturbance and loss of wildlife habitat (including that of the Pacific Fisher (DSEIS, II-2-26)).

Our primary environmental concern with the project is the potential for accelerated detrimental sediment production to Ashland Creek. We believe that, without adequate implementation of Watershed Restoration Projects, Design Constraints, Best Management Practices (BMPs), and Mitigation Measures, ski area expansion activities could result in sediment production higher than the natural background rates. According to the FEIS, increases in sediment delivery from proposed actions to Ashland Creek over baseline rates is estimated to be 5.3 cubic yards in the first year, 1.2 cubic yards in the second year and .62 yards in the third year (IV-28). We note that these estimates are based on three important assumptions:

1) All disturbances are assumed to occur in the same year; however, under actual construction scheduling this would be unlikely to happen;
2) All first year values assume that there are no Mitigation Measures in place, when in fact, most Mitigation Measures would be implemented before, during or immediately after construction, and
3) Second and third year values assume lower vegetation cover than would be described for soil cover under "thresholds", established under the Monitoring Plan (see Section G, 9, Chapter II). (FEIS, IV – 23)

The FEIS's sediment production estimates and assumptions show that, without appropriate mitigation and monitoring, the proposed action would result in potentially significant adverse impacts to aquatic ecosystems and the City of Ashland's municipal water supply.

Recommendation

To ensure that aquatic ecosystems and the City of Ashland's municipal water supply are adequately protected we recommend that the Forest develop and disclose a detailed adaptive management framework.

While EPA does not believe that either the 2004 Record of Decision's (ROD) "Process for Change During Implementation" or ROD Attachment C's "Effectiveness Evaluation" section adequately addresses adaptive management for sediment, Attachment C's description of monitoring for "Sediment Transport" appears to be an effective monitoring method for gathering information on a sediment related performance metric. For Sediment Transport monitoring to be effectively used, we believe that monitoring results should be linked with clear and specific decision thresholds and management responses. For a useful example see "Table I.I-1 The IFP implementation framework".[1] While the content in this table is different from what is needed for the Mt. Ashland Ski Area Expansion, the columns are an effective method of expressing key adaptive management framework elements. These key elements include: (i) specific objective (e.g., maintain sediment production at natural background rates), (ii) performance metrics, (iii) Triggers (If…), (iv) Management Response (Then…).

Thank you for this opportunity to comment and if you have any questions or concerns please contact Erik Peterson at, (206) 553-6382 or by electronic mail at peterson.erik@epa.gov.

Sincerely,

Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

[1] http://www.idl.idaho.gov/eis/idaho_forestry_program_doc/SecI_I_AdaptiveManagement_011209.pdf.

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U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

APPENDIX C

Ninth Circuit Court Opinion

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FOR PUBLICATION

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

OREGON NATURAL RESOURCES COUNCIL FUND; SIERRA CLUB, a California nonprofit corporation; HEADWATERS, an Oregon nonprofit corporation, *Plaintiffs-Appellants,* and ERIC NAVICKAS, *Plaintiff,* v. LINDA GOODMAN, Regional Forester, Pacific Northwest Region, U.S. Forest Service; UNITED STATES FOREST SERVICE, a federal agency, *Defendants-Appellees,* MOUNT ASHLAND ASSOCIATION, dba Ski Ashland, *Defendant-intervenor-Appellee.*	No. 07-35110 D.C. No. CV-05-03004-PA OPINION

Appeal from the United States District Court
for the District of Oregon
Owen M. Panner, Senior District Judge, Presiding

Argued and Submitted
July 11, 2007—Portland, Oregon

Filed September 24, 2007

Before: Stephen Reinhardt, Cynthia Holcomb Hall, and Milan D. Smith, Jr., Circuit Judges.

Opinion by Judge Milan D. Smith, Jr.

COUNSEL

Marianne Dugan, Eugene, Oregon, for the plaintiffs-appellants.

Robert J. Lundman, United States Department of Justice, Washington, D.C., for the defendants-appellees.

Robert A. Maynard, Perkins Coie LLP, Boise, Idaho, for the defendant-intervenor-appellee.

OPINION

MILAN D. SMITH, JR., Circuit Judge:

Appellants Oregon Natural Resources Council, the Sierra Club and Headwaters (collectively, ONRC) challenge the United States Forest Service's (Forest Service) approval of the proposed expansion of the Mount Ashland Ski Area (MASA), located in Oregon's Siskiyou Mountains within the Rogue River and Klamath National Forests. The district court granted summary judgment in favor of the Forest Service, finding it had not violated the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 *et seq.*, or the National Forest Management Act (NFMA), 16 U.S.C. § 1600 *et seq.*, in authorizing the MASA expansion. We hold that the Forest Service failed to properly evaluate the impact of the proposed MASA expansion on the Pacific fisher, in violation of both the NEPA and the NFMA, and that it violated the NFMA by failing to appropriately designate Riparian Reserves and Restricted Watershed terrain, as required by the Rogue River

National Forest Land and Resource Management Plan (Rogue River LRMP) and the Northwest Forest Plan (NWFP). Accordingly, we reverse the district court's grant of summary judgment in favor of the Forest Service and remand to the district court for issuance of the injunction specified in this opinion.

FACTUAL BACKGROUND AND PROCEDURAL HISTORY

MASA is a ski resort located approximately seven air miles south of the City of Ashland, Oregon. The Mount Ashland Association (MAA) operates MASA under a special use permit issued to the City of Ashland by the Forest Service. The City of Ashland, in turn, leases the ski area to the MAA.

For over twenty years, MAA and the Forest Service have explored the possibility of expanding MASA so as to accommodate beginner and intermediate skiers and snowboarders, as well as tubing and other facility upgrades, in an effort to ensure the ski area's long-term economic viability. In 1991, the Forest Service released a Final Environmental Impact Statement and Record of Decision approving the general expansion of the ski area, but not addressing the specifics of any plan. In 1998, MAA submitted a detailed, proposed expansion plan to the Forest Service. The Forest Service subsequently solicited public comment concerning the proposed project, and in 2000 and 2003 released draft Environmental Impact Statements (EIS). During the comment periods, the Environmental Protection Agency and members of the public expressed concerns about the proposed project's possible effects on erosion and sedimentation, bio-diversity, watershed resources and water quality. Concern was also voiced about the proposed expansion's possible impact on the Pacific fisher, a small carnivore related to the mink, otter and marten that inhabits certain old-growth forests, and other wildlife species.

In August 2004, the Forest Service released a Final Environmental Impact Statement (FEIS) in which it analyzed six expansion alternatives. Alternative 2 and Alternative 6 are the only two expansion alternatives relevant to this appeal. Alternative 2 contemplates the MAA constructing two new chairlifts and two new surface lifts, clear-cutting seventy-one acres for new ski runs, and clearing four additional acres for lift corridors and staging areas, primarily within the western half of the special use permit area. The proposed ski run development would require the removal of approximately sixty-eight acres of trees, which would generate 1,822 board feet of commercial grade timber. Additionally under Alternative 2, watershed restoration projects would be implemented, including structural storm water control and non-structural controls, such as the controlled placement of woody material. Alternative 6, which is a variant of Alternative 2, envisions limiting the environmental consequences of expansion in the Middle Fork area by requiring MAA to use a lightweight, low ground pressure machine to clear ski runs and lift runs. Alternative 6 would permit MAA to construct two chairlifts and two surface lifts and to clear approximately sixty-five acres of new ski run terrain.

In September 2004, the Forest Service issued the Record of Decision (ROD) for the MASA expansion, selecting Alternative 2 with some modifications adopted from Alternative 6. It concluded that Alternative 2 would help ensure MASA's long-term economic viability, with acceptable physical, biological and human environmental consequences. The Forest Service received twenty-eight notices of appeal to the ROD. Among these was an appeal from Eugene Wier, a wildlife biologist who had been employed by the Forest Service, detailing his concern regarding the expansion's impact on the Pacific fisher. In December 2004, the Forest Service denied all administrative appeals to the ROD.

In January 2005, ONRC filed suit against the Forest Service and Regional Forester Linda Goodman seeking declara-

tory and injunctive relief on the grounds that the MASA expansion project violated both the NEPA and the NFMA. Specifically, ONRC contends that the Forest Service failed: (1) to ensure the viability of the Pacific fisher, a sensitive species; (2) to adequately consider and disclose the direct and cumulative impacts on the Pacific fisher; (3) to analyze whether the expansion will comply with wetlands laws; (4) to adhere to Rogue River LRMP and NWFP standards and guidelines for protecting watersheds and riparian areas; (5) to disclose a potentially high rate of error in the model that it used to estimate sediment impacts on the municipal watershed; and (6) to adequately disclose cumulative water quality impact by utilizing a computer model without disclosing its flaws, rather than cataloging and analyzing specific projects.

On February 9, 2007, after considering cross-motions for summary judgment, the district court entered summary judgment against ONRC. The court found that the Forest Service's disclosure of potential erosion and water quality impacts in the FEIS complied with the NEPA, and that the Forest Service did not violate the NEPA or the NFMA by failing to discuss compliance with applicable laws governing wetlands in the FEIS. It also found the Forest Service's failure to classify Land Hazard Zone 2 terrain as Riparian Reserve was harmless and concluded that the proposed expansion satisfied the principal Rogue River LRMP and NWFP requirements for land designated Restricted Watershed and Riparian Reserve. Lastly, the district court held that ONRC's allegations regarding the Pacific fisher "mostly rely on extra-record materials that I have stricken, and events that post-date final approval of the ROD." ONRC filed a timely notice of appeal from the district court's judgment. We granted a stay of the district court's judgment for the duration of this appeal.

JURISDICTION AND STANDARD OF REVIEW

We have jurisdiction pursuant to 28 U.S.C. § 1291, and review the district court's grant of summary judgment de

novo. *Lands Council v. Powell*, 395 F.3d 1019, 1026 (9th Cir. 2005) (citing *Covington v. Jefferson County*, 358 F.3d 626, 641 n.22 (9th Cir. 2004)). "Agency decisions that allegedly violate [the] NEPA and [the] NFMA are reviewed under the Administrative Procedure Act ('APA'), and may be set aside only if they are 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.' " *Envtl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 451 F.3d 1005, 1008-09 (9th Cir. 2006) (quoting 5 U.S.C. § 706(2)(A)). Although our review under this standard is deferential, the agency must nonetheless "articulate a rational connection between the facts found and the conclusions made." *Or. Natural Res. Council v. Lowe*, 109 F.3d 521, 526 (9th Cir. 1997) (citing *United States v. La.-Pac. Corp.*, 967 F.2d 1372, 1376 (9th Cir. 1992)). Moreover, if an agency "fails to consider an important aspect of a problem . . . [or] offers an explanation for the decision that is contrary to the evidence," its action is "arbitrary and capricious." *Lands Council*, 395 F.3d at 1026 (citing *Motor Vehicle Mfs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)).

We review a district court's decision to exclude extra-record evidence for abuse of discretion. *Nw. Envtl. Advocates v. Nat'l Marine Fisheries Serv.*, 460 F.3d 1125, 1133 (9th Cir. 2006).

DISCUSSION

A. Statutory Background

1. *National Environmental Policy Act*

The NEPA mandates that covered governmental entities take a "hard look" at the environmental consequences of certain proposed actions. *Lands Council*, 395 F.3d at 1027. The NEPA requires federal agencies to prepare an EIS for "major Federal actions significantly affecting" the environment. 42 U.S.C. § 4332(2)(C). An EIS is a thorough analysis of the potential environmental impacts that "provide[s] full and fair

discussion of significant environmental impacts and . . . inform[s] decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1; *see also Lands Council v. McNair*, 494 F.3d 771, 777 (9th Cir. 2007).

2. *National Forest Management Act*

The NFMA imposes constraints on the Forest Service's management of national forests. *See* 16 U.S.C. §§ 1600-87; *see also Ecology Ctr., Inc. v. Austin*, 430 F.3d 1057, 1062 (9th Cir. 2005). Procedurally, it requires the Forest Service to develop a land and resource management plan, also referred to as a "forest plan," for each forest it manages. 16 U.S.C. § 1604(a). The NFMA also requires that a forest plan "provide for diversity of plant and animal communities," *id.* § 1604(g)(3)(B), and that "[f]ish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area," 36 C.F.R. § 219.19 (2000); *see also Envtl. Prot. Info. Ctr.*, 451 F.3d at 1017. Any action taken by the Forest Service in a managed forest must comply with the NFMA and must also be consistent with the governing forest plan. *See Ecology Ctr.*, 430 F.3d at 1062.

B. The Pacific Fisher

1. *NFMA Claim*

[1] The Forest Service designated the Pacific fisher a "sensitive species" due to substantial population declines and the possibility that the fisher could be listed as an "endangered species" pursuant to the Endangered Species Act. *See* Endangered and Threatened Wildlife and Plants; 12-month Finding for a Petition to List the West Coast Distinct Population Segment of the Fisher, 69 Fed. Reg. 18770, 18770 (April 8, 2004) (to be codified at 50 C.F.R. pt 17) (finding that the Pacific

fisher warrants protection as an endangered species under the Endangered Species Act of 1973). Under the Rogue River LRMP, species classified as "sensitive" must be managed by the Forest Service to ensure that they do not become threatened or endangered due to management activities. The Rogue River LRMP requires that where sensitive species occur in lands categorized as "Developed Recreation," "the Biological Evaluation process . . . will be used during project planning to display the effects of proposed activities . . . [and] [w]here such species are present, field evaluation data will be used to determine the effects and recommend measures to ensure that species viability is not jeopardized." The Biological Evaluation is a five-step process which requires the Forest Service to conduct: "a) [a] [p]re-field review of existing information; b) [f]ield reconnaissance of the project area; c) [d]etermination of whether local populations listed and PETS species will be affected by a project; d) [a]nalysis of significance of project effects on local and total populations of listed and PETS species; e) [w]hen step four cannot be completed due to lack of information, a biological or botanical investigation is conducted to gather the information needed to complete step four." ONRC contends that the Forest Service violated the NFMA by failing to abide by the Rogue River LRMP's requirement that it conduct a compliant Biological Evaluation to determine the impact of the proposed MASA expansion on the Pacific fisher. We agree and conclude that the Forest Service's evaluation of the Pacific fisher in the MASA expansion area does not comply with the requirements of the Rogue River LRMP and, therefore, violates the NFMA.

[2] In 1999, Forest Service biologists prepared a Biological Evaluation for the MASA expansion, which concluded that there was no suitable fisher habitat within the proposed project area and that no impact on fisher or fisher habitat was expected. However, in 2001 and 2002, Eugene Wier, a Forest Service field biologist, identified Pacific fisher within the project area. Wier noted that the Pacific fisher's presence on Mount Ashland represented the furthest east and the highest

elevation at which Pacific fisher had been found within the Siskiyou Mountains. Despite Wier's observations, the Forest Service did not update or amend its 1999 Biological Evaluation. The Forest Service addressed Wier's discovery of the Pacific fisher within the expansion area in the 2004 FEIS by concluding that the project posed no threat to the Pacific fisher because the expansion will impact less than one percent of the similarly forested land within three miles. This conclusion is based on an analysis of habitat in the proximity of the project area rather than documented local and total fisher populations.

[3] We find that in this instance the Forest Service's use of habitat as a proxy for population violated the NFMA. We have recently explained that species viability may be met by estimating and preserving habitat "*only* where *both* the Forest Service's knowledge of what quality and quantity of habitat is necessary to support the species *and* the Forest Service's *method for measuring the existing amount of that habitat are reasonably reliable and accurate*." *Earth Island Inst. v. U.S. Forest Serv.*, 442 F.3d 1147, 1175-76 (9th Cir. 2006) [hereinafter *Earth Island II*] (quoting *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1250 (9th Cir. 2005)) (emphasis added).

In *Earth Island II*, we examined whether the Forest Service appropriately relied on habitat monitoring for determining populations trends of the black-backed woodpecker. *Id*. at 1175. Although the Forest Service's final environmental impact statement "discuss[ed] various studies of black-backed woodpeckers that confirm[ed] their preference for burned forest habitat" and presented tables listing areas in the project area "assumed to provide high and moderate capability habitat," we concluded that "[t]here is no indication that the USFS consulted current or accurate field studies to arrive at these numbers, and there is no identification of the methodology used in determining what constitutes suitable habitat." *Id*.

[4] We find the Forest Service's analysis of the quantity and quality of the fisher habitat similarly devoid of supporting or explanatory data. In its 2004 FEIS, the Forest Service stated that "[o]f the land within three miles of the S[pecial] U[se] P[ermit] area, 10,200 acres are in a condition class similar to the forested site where the fisher was photographed. The 68 acres of forested area that would be removed if Alternative 2 . . . is implemented, amount to .7% percent of the available acres [of] habitat within three miles."[1] But other than commenting that it was similar to the environment in which the fisher was actually found, the Forest Service offered little explanation of its methodology for classifying the 10,200 acres in question as suitable fisher habitat.

Furthermore, the 2004 FEIS explicitly states that "ecological relationships between fisher and habitat are largely unknown" and "[t]he use of habitat per seasonality and topography is currently unknown in the S[pecial] U[se] P[ermit] area." Additionally, statements by two Forest Service biologists, Eugene Wier and William Zilinski, reveal that the Forest Service had insufficient data and knowledge regarding (1) the population of the Pacific fisher, and (2) the quantity and quality of habitat preferred by the Pacific fisher to justify using habitat as a proxy for population. Specifically, Wier observed that the Forest Service "know[s] nothing about how many individuals there are (within the Ashland Watershed or in the greater population), where they nest, how large their home ranges are, and what constitutes the core habitat within the greater Ashland Watershed upon which these individuals depend for future survival." Zilinski stated that the documented fisher's purpose in the expansion area was unknown: "was it just foraging, investigating denning sites, or exploring for new territory?"

[1]"The FEIS also noted that overall, '[t]he Mt. Ashland LSR [Late-Succession Reserve] has nearly 15,000 acres of high quality late-successional habitat.' "

[5] Thus, given the dearth of information about the local fisher population generally and the Forest Service's failure to explain adequately how it identified suitable fisher habitat, we hold that the Forest Service's habitat analysis was insufficient to satisfy the demands of the Rogue River LRMP Biological Evaluation process, and is in violation of the NFMA.[2]

2. NEPA Claims

ONRC also argues that the Forest Service violated the NEPA when it failed (1) to disclose the potential impact of displacing the fisher and damaging habitat in the corridor linking the Klamath-Siskiyou region and the Southern Cascades, and (2) to discuss the effect future projects in the MASA expansion area would have on the Pacific fisher. We agree with ONRC.

[6] In *Marble Mountain Audubon Society v. Rice*, 914 F.2d 179 (9th Cir. 1990), we held that the Forest Service's failure to discuss the importance of maintaining a biological corridor in the Klamath National Forest violated the NEPA. *Id.* at 182. We explained that "[a]lthough the FEIS acknowledges that the Grider [Creek] drainage is a biological corridor, it does not contain significant discussion of the corridor issue." *Id.* Here, we are presented with a similar problem. In this case, the Forest Service acknowledged that there is a biological cor-

[2]Although we hold that the district court erred in finding the Forest Service complied with the Rogue River LRMP Biological Evaluation process, we conclude that it did not abuse its discretion in striking Eugene Wier's declaration because his concerns and criticisms of the MASA expansion with respect to the Pacific fisher were already presented in his administrative appeal of the ROD. Wier's declaration is not necessary (1) to determine whether the Forest Service considered all relevant factors and explained its decisions; or (2) to explain technical terms or complex subject matter and, therefore, does not fall within the exceptions to the rule limiting "[j]udicial review of an agency decision . . . to the administrative record in existence at the time of the decision." *Sw. Ctr. for Biological Diversity v. U.S. Forest Serv.*, 100 F.3d 1443, 1450 (9th Cir. 1996).

ridor linking the Klamath-Siskiyou region and the Southern Cascades, and concluded that the expansion would have an inconsequential effect on the fisher. The Forest Service failed to meaningfully substantiate this finding.

[7] The Forest Service attempts to distinguish *Marble Mountain* on the basis that any impact on the biological corridor would be minimal because MASA's expansion would impact less than thirty-seven acres of the biological corridor, whereas in *Marble Mountain* more than 3,000 acres of the biological corridor were at risk. We are not persuaded. While the number of acres at risk here is certainly less than that in *Marble Mountain*, the Forest Service has nonetheless failed to disclose the methodology it employed to determine that the expansion's impact on the fisher would be inconsequential. Merely disclosing the existence of a biological corridor is inadequate. *Id*. Where the Forest Service concludes that a project will not jeopardize a wildlife corridor, it must support that conclusion with at least some study or analysis of how the reduced corridor will affect the species at issue. *Id*.

Turning to ONRC's second NEPA claim, federal law requires that an EIS must analyze "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." 40 C.F.R. § 1508.7; *see also* 40 C.F.R. § 1508.25. A necessary component of NEPA's "hard look" is "a sufficiently detailed catalogue of past, present, and future projects, and [ ] adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment." *Lands Council*, 395 F.3d at 1027-28.

[8] The Forest Service's 2004 FEIS violates the NEPA because it fails to adequately discuss the impact on the Pacific fisher of two future projects: (1) the construction of nine miles of new logging roads within three miles of the project area, which will require the cutting of approximately 4,250 acres on

the south side of Mount Ashland and (2) a habitat restoration and fuel hazard reduction treatments, which include controlled fires. The FEIS simply states that "[n]o adverse cumulative effects are anticipated. The only future project[s] anticipated near the S[pecial] U[se] P[ermit] area are the Ashland Watershed Protection Project, and Ashland Forest Resiliency, which is [sic] not likely to affect fisher (minimal associated human use/disturbance)."

The Forest Service argues that it did not have to detail these projects' impact on the fisher because the ski area expansion is modest. We reject this justification. We have repeatedly explained that generalized, conclusory assertions from agency experts are not sufficient; the agency must provide the underlying data supporting the assertion in language intelligible to the public. *See Ocean Advocates v. U.S. Army Corps of Eng'rs*, 402 F.3d 846, 864 (9th Cir. 2005); *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 996 (9th Cir. 2004). "[W]hile the conclusions of agency experts are surely entitled to deference, NEPA documents are inadequate if they contain only narratives of expert opinions." *Klamath-Siskiyou Wildlands Ctr.*, 387 F.3d at 996. More specifically, the NEPA explicitly requires a cumulative impact analysis. A particular action may seem unimportant in isolation, but that small action may have dire consequences when combined with other actions. As we observed in *Klamath-Siskiyou Wildlands Center*, "[s]ometimes the total impact from a set of actions may be greater than the sum of the parts. For example, the addition of a small amount of sediment to a creek may have only a limited impact on salmon survival, or perhaps no impact at all. But the addition of a small amount here, a small amount there, and still more at another point could add up to something with a much greater impact, until there comes a point where even a marginal increase will mean that *no* salmon survive." *Id.* at 994 (emphasis in original).

We cannot excuse the Forest Service from the NEPA requirement to include an adequate cumulative impact analy-

sis in the 2004 FEIS. Two future projects, the Ashland Forest Resiliency Project (a logging project), and the Ashland Watershed Protection Project (a habitat restoration and fuel reduction project), are scheduled to occur in the vicinity of the proposed MASA expansion. Though the Forest Service generally addressed the impact of these projects elsewhere in the FEIS, it failed to discuss in detail their impact upon the fisher as part of the cumulative impact analysis required by NEPA. *See Earth Island Inst. v. U.S. Forest Serv.*, 351 F.3d 1291, 1306-07 (9th Cir. 2003) (holding that a cumulative impact analysis violated NEPA when a FEIS did not assess the role of foreseeable future projects on remaining suitable spotted owl habitat in a nearby home range core area within close proximity to the project's area).

C. Riparian Reserves and Restricted Watershed Terrain

[9] We next turn to ONRC's claim that the Forest Service violated the NFMA by failing to appropriately designate "Riparian Reserves" and "Restricted Watershed" terrain as required by the Rogue River LRMP and the NWFP. The rules governing the Forest Service's designation and management of Riparian Reserves and watersheds are complex and overlapping. The principal source of these rules is the NWFP itself, and, derivatively, the Aquatic Conservation Strategy (ACS) adopted pursuant to the NWFP. Under the ACS, Riparian Reserves are essentially buffer zones along streams, lakes, wetlands, and mudslide-risk areas, and "watersheds" are aquatic habitats or other hydrologically important areas. *See Pac. Coast Fed'n of Fishermen's Ass'ns, Inc. v. Nat'l Marine Fisheries Serv.*, 265 F.3d 1028, 1031-32 (9th Cir. 2001). Recognizing that riparian terrain "offer[s] core areas of high quality stream habitat," and that watersheds "are crucial to at-risk fish species and stocks and provide high quality water," the ACS standards and guidelines "prohibit or regulate activities in Riparian Reserves that retard or prevent attainment of the Aquatic Conservation Strategy objectives."

The Forest Service must, however, comply with more than just the NWFP's ACS. When the NWFP was enacted, it did not completely displace existing forest management plans. In addition to setting out its own standards and guidelines, the NWFP also provides that the standards and guidelines of the pre-existing individual forest management plans—including the Rogue River LRMP— remain effective "where they are more restrictive or provide greater benefits to late-successional forest related species." Accordingly, the Forest Service must also comply with the Rogue River LRMP's more restrictive standards and guidelines for lands designated Restricted Riparian, Management Strategy 26 (MS 26) and for lands designated Restricted Watershed, Management Strategy 22 (MS 22). These standards and guidelines include the protection of all terrain within 100 feet horizontal distance of perennial streams, wetlands and associated riparian vegetation (Restricted Riparian MS 26) and all acres "designated as suitable for Municipal Supply Watershed" (Restricted Riparian MS 22). These guidelines further provide that "[w]hen conflicts exist between watershed management and other resources, the conflict will be resolved in the favor of the watershed resource."

Designation of land as Riparian Reserve has significant consequences for the management of that land. Specifically, the Rogue River LRMP mandates that management activities in Riparian Reserves should not exceed:

a) 20% mineral soil exposed on soils classed as very slight, slight, or low or moderate erosion hazard soils;

b) 10% exposure on high or severe erosion hazard soils;

c) 7% exposure on very high or very severe erosion hazard soils.

Pursuant to the NWFP, ACS Standard and Guideline WR-3 further prohibits the Forest Service from "us[ing] mitigation or planned restoration as a substitute for preventing habitat degradation" within Riparian Reserves, and explains that "[p]riority must be given to protecting existing high quality habitat" rather than compensating "for management actions that degrade existing habitat" through mitigation and restoration.

Designation of land as Restricted Watershed terrain also has significant consequences. The Rogue River LRMP includes specific soil disturbance standards and guidelines for areas designated as Restricted Watershed terrain and requires that management activities on Restricted Watershed MS 22 lands not exceed: "a) [f]orty percent mineral soil exposed on soil classed as very slight, slight, low or moderate erosion hazard soils; b) [t]hirty percent exposure on high or severe erosion hazard soils; c) [f]ifteen percent exposure on very high or very severe erosion hazard soils."

1. Riparian Reserves

The NWFP assigns the Riparian Reserve designation to streams, ponds, lakes, and wetlands, including a buffer around these waterways. Pursuant to the ACS, (and thus the NWFP), lands that are "potentially unstable" must be designated and managed as Riparian Reserve. Using a "Landslide Hazard Zone" technique to assess geologic stability in the 2004 FEIS, the Forest Service divided project terrain into four hazard zones, wherein Landslide Hazard Zone 1 (LHZ 1) encompassed the highest risk terrain, and Landslide Hazard Zone 4 (LHZ 4) encompassed the lowest risk terrain. It designated LHZ 1 land as Riparian Reserve, but exempted LHZ 2 land from this designation.

ONRC contends that (1) the Forest Service's failure to designate the LHZ 2 land as Riparian Reserve violated the NFMA because its finding that the land was not "potentially

unstable" is contradicted by record evidence, and (2) this failure to make an appropriate designation resulted in further violations of the Rogue River LRMP, the NWFP (and ACS), and the NFMA, because a proper designation as Riparian Reserve would compel specific management practices to ensure that the terrain is appropriately protected. We agree. Evidence in the record clearly shows that debris flow landslides persistently originate from LHZ 2 lands. The 2004 FEIS found that LHZ 2 "is the second highest risk terrain" and concluded that the risk of landslides in LHZ 2 is "moderate to high" and the "sediment delivery potential" is "high." Therefore, the Forest Service has failed to demonstrated that LHZ 2 areas are not "potentially unstable."

[10] The district court sought to avoid this conclusion by reasoning that "[o]ne cannot make an omelet without breaking a few eggs. The other action alternatives evaluated in the 2004 FEIS would impact fewer acres of land classified LHZ 1 or LHZ 2. However, the Forest Service decided that the preferred alternative will better meet the purpose and need of the expansion project." We disagree. "It is well-settled that the Forest Service's failure to comply with the provisions of a Forest Plan is a violation of NFMA." *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 961 (9th Cir. 2005). The Rogue River LRMP contains Riparian Reserve requirements and the ACS explicitly requires that "[w]atershed analysis and appropriate NEPA compliance is required to change Riparian Reserve Boundaries in all watersheds," but the Forest Service failed to comply with those requirements. By failing to designate the LHZ 2 terrain as Riparian Reserve, the Forest Service violated the NWFP, the Rogue River LRMP, and the NFMA. Whether the acreage at issue is relatively large or small is irrelevant to this inquiry—relevant law contains no *de minimis* exceptions.

2. Restricted Watershed Terrain

When the 1991 MASA Master Plan was approved, approximately thirty-five acres of land designated as Restricted

Watershed MS 22 was included in the Special Use Permit area. In a 1998 letter discussing a MAA proposal to expand MASA, the Forest Service stated that an amendment was required to reclassify Restricted Watershed MA 22 land included in the Special Use Permit area as Developed Recreation Management Strategy 4 (MS 4) and indicated that "[t]his will be accomplished with Forest Plan Amendment 8." A statement acknowledging the need "to adjust the management allocation boundary from the 1990 Rogue River Forest Land and Resource Management Plan" was thereafter published in the Federal Register. Notices Dept. of Agriculture, Forest Service, Mount Ashland Ski Area Expansion, Rogue River National Forest, Jackson County, Oregon, 64 Fed. Reg. 55228, 55229 (Oct. 12, 1999). In 2000, the Forest Service confirmed the existence of Restricted Watershed MS 22 land within the expansion area and the need for an amendment to the 2000 draft EIS, when it stated that "[t]his adjustment changes (reduces) approximately 35 acres of Restricted Watershed (as mapped in LRMP Alternative K), and reallocates to Developed Recreation, accounting for the 1991 expanded ski permit area boundary. The Developed Recreation allocation associated with this area will increase from 870 to 905 acres." The 2003 draft EIS also maintained that "[a]llocations associated with the 1990 [Rogue River National Forest] LRMP and the Mt. Ashland Ski Area primarily involved Developed Recreation [MS 4], and Restricted Watershed [MS 22]." However, in the 2004 FEIS, the Forest Service asserted that the 1994 NWFP "amended" existing Rogue River LRMP designations to "Administratively Withdrawn (Special Management)" and states that "this allocation is complimentary to the Developed Recreation R[ogue] R[iver] LRMP allocation." We find no explanation in the record that would resolve the conflict between this statement and the Forest Service's post-1994 statements concerning its intention to reallocate by means of "Forest Plan Amendment 8."

[11] The district court correctly determined that part of the ski area retains the Restricted Watershed MS 22 designation,

but nevertheless found that "the Forest Service necessarily intended" to depart from the Rogue River LRMP "when it conceptually approved the expansion in 1991, and approved the site-specific proposal in 2004." ONRC asserts that the district court erred in its holding because the NFMA clearly prohibits a departure from the forest management plan without a plan amendment. We concur. Because there is no amendment to the Rogue River LRMP in the record permitting the contemplated change to the Watershed, the Forest Service violated the NFMA by failing to ensure that the expansion will comply with the Rogue River LRMP standards and guidelines for Restricted Watershed MS 22 terrain.

3. New Developed Recreation Site

ONRC also contends that the Forest Service violated the Rogue River LRMP and the NFMA by authorizing development facilities that will affect currently undeveloped riparian habitat in the Middle Fork. ONRC argues that the Rogue River LRMP explicitly prohibits "new developed recreation sites" on Riparian Reserves. Emphasizing that the ski area construction began in 1963, the Forest Service asserts that the project is not a "new" recreation site but the expansion of an existing site, and that the Riparian Reserve restriction does not apply. We agree with the Forest Service.

[12] In addition to being fully supported by the Riparian Reserves language of the Rogue River LRMP, this conclusion is also fully consistent with treatment of this issue in the Restricted Watershed terrain portion of the Rogue River LRMP. In the standards and guidelines for Restricted Watershed MS 22, the Rogue River LRMP provides that "[n]ew developed recreation sites will not be constructed. Expansion of existing recreation sites will be analyzed in project environmental analysis." While the second sentence does not appear in the standard and guidelines for Riparian Reserve MS 26, the two treatments are consistent and there is no reason to treat them differently. We therefore hold that the term

"new" is intended to have a uniform meaning throughout the Rogue River LRMP and that the prohibition therein of new developed recreation sites in Riparian Reserves does not apply to the MASA expansion.

D. Remaining Claims

[13] Lastly, we hold that the district court did not err in ruling for the Forest Service on all of the remaining claims raised by ONRC in its motion for summary judgment.

We hold that the Forest Service did not violate the NEPA requirement that the 2004 FEIS discuss or analyze potential violations of all federal, state and local laws, which include Oregon state wetland laws and regulations. The Forest Service included in the FEIS a discussion of whether the proposed expansion would violate federal and state laws, and explicitly noted that state and local agencies would have regulatory responsibilities for many activities and actions in the expansion project. Although the FEIS does not specifically address Oregon's unique regulatory program for wetlands, the FEIS is clear that state approval is a condition of the project. Thus, it would be "fly speck[ing]" to find a NEPA violation on these grounds, and we decline to do so. *See Ecology Ctr.*, 430 F.3d at 1077.

Second, we find that the Forest Service's FEIS adequately disclosed the shortcomings in the Water Erosion Prediction Project (WEPP) models used to estimate sediment impacts on the municipal watershed and, therefore, complied with NEPA. The NEPA does not require the reviewing court to "decide whether an [EIS] is based on the best scientific methodology available," *Or. Envtl. Council v. Kunzman*, 817 F.2d 484, 496 (9th Cir. 1987) (quoting *Friends of Endangered Species v. Jantzen*, 760 F.2d 976, 986 (9th Cir. 1985)) (alteration in original); rather the question is whether the FEIS adequately disclosed the model's potential weakness. We agree with the district court that it did. In Appendix H to the FEIS, the Forest

Service outlined several limitations of the WEPP model: its failure to account for the higher erosion rates that typically occur during the first two years after disturbance; the fact that its components are reasonably effective on the agricultural rangelands for which the WEPP model was designed, but that it has limitations when applied to forest lands; and the fact that no watershed template is currently available. Thus, because the NEPA requires adequate disclosure, not the best scientific methodology available, we hold that the Forest Service made adequate disclosures concerning the WEPP model's shortcomings.

[14] Finally, the Forest Service relied upon another computer model, the Equivalent Roadless Area (ERA) model, to address cumulative watershed effects. ONRC asserts that the Forest Service violated the NEPA by using the ERA model to assess the cumulative impacts of the proposed project when taken together with past projects in the affected area. The ERA model simulates the current condition of the terrain in the watershed which reflects the impact of past projects, and the FEIS describes the ERA methodology and the results of the analysis in detail. Because we do not question the methodology, but "defer[ ] instead to the agency's expertise in developing the model," an analysis that "consider[s] cumulative watershed effects and provide[s] a significant amount of quantified and detailed information" satisfies the NEPA. *Envtl. Prot. Info. Ctr.*, 451 F.3d at 1014 (citation omitted). Accordingly, we find that the Forest Service did not violate the NEPA by using the ERA model to analyze the cumulative watershed impact of the MASA expansion.

E. Injunctive Relief

We have noted in other contexts that, "where the question of injunctive relief raises intensely factual issues, the scope of the injunction should be determined in the first instance by the district court." *Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 738 (9th Cir. 2001) (internal quotation marks

and citation omitted). But where, as here, "there are no such intensely factual issues and the scope of the injunction to which [the plaintiff] is entitled is quite plain," we may "decide the injunction question on this appeal." *Id.* at 739. "To determine whether injunctive relief is appropriate, 'even in the context of environmental litigation,' we apply 'the traditional balance of harms analysis.' " *Id.* at 737 (quoting *Forest Conservation Council v. U.S. Forest Serv.*, 66 F.3d 1489, 1496 (9th Cir. 1995)). In this case, we conclude that ONRC has shown the potential for irreparable harm to the Pacific fisher should the project continue. The MASA expansion would result in eliminating habitat that may be vital to the preservation of the fisher population in the project area. Until the Forest Service conducts a proper Biological Evaluation establishing the size of the local fisher population and its relationship to its habitat, there remains a "sufficient possibility of environmental harm" to justify injunctive relief. *Id.* at 738.[3]

Similarly, until the Riparian Reserve and Restricted Watershed lands are properly classified and subjected to the additional scrutiny required by these classifications, the possibility of environmental harm to the ecological health of the region's waterways remains. *See id.* at 738 n.18 ("[B]ecause NEPA can do no more than require the agency to produce and consider a proper EIS, the harm that NEPA intends to prevent is imposed when a decision to which NEPA obligations attach is made without the informed environmental consideration that NEPA requires.") (citing *Sierra Club v. Marsh*, 872 F.2d 497, 500 (1st Cir. 1989)).

[15] MAA argues that these violations are insignificant and are outweighed by the risk of financial harm should the project be enjoined further. We disagree and find that in this case, the risk of permanent ecological harm outweighs the temporary economic harm that MAA may suffer pending further

[3]At oral argument, counsel for ONRC suggested that one year of additional study would likely be sufficient.

study. We note in particular that this is not a case where an injunction would halt ongoing economic activity but would simply delay the expansion of an existing facility. *See Lands Council*, 494 F.3d at 780 (noting that this court has "held time and again that the public interest in preserving nature and avoiding irreparable injury outweighs economic concerns") (citations omitted). We also conclude that in this case, the public's interest in preserving the environment favors injunctive relief. *See Earth Island II*, 442 F.3d at 1177.

CONCLUSION

We reverse the order of the district court granting summary judgment in favor of the Forest Service. We remand the case to the district court and instruct it to promptly enjoin the MASA expansion project contemplated in the 2004 FEIS until the Forest Service has corrected the NFMA and NEPA violations we find in this opinion.

REVERSED AND REMANDED WITH INSTRUCTIONS.