

SENSITIVE SPECIES PLAN

**Addressing USDA Forest Service Sensitive Species
and
USDI Bureau of Land Management Special Status Species**

**North Umpqua Hydroelectric Project
FERC No. 1927**

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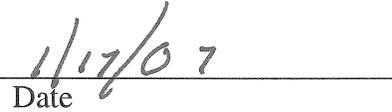
January 2007

Sensitive Species Plan:

Approved by:



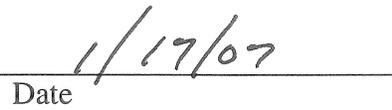
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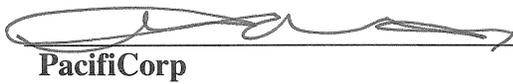
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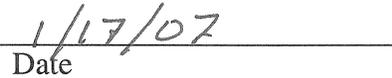
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Date



PacifiCorp



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ACRONYMS AND ABBREVIATIONS

- AMP Aesthetics Management Plan
- BE Biological Evaluation
- BLM U.S. Department of Interior, Bureau of Land Management
- C Candidate for Listing
- CVS Current Vegetation Survey
- ECP Erosion Control Plan
- EFH Essential Fish Habitat
- EMS Environmental Management System
- ESA Endangered Species Act
- FERC Federal Energy Regulatory Commission
- FPA Federal Power Act
- FS U.S. Department of Agriculture, Forest Service
- FSM Forest Service Manual
- FWS U.S. Department of the Interior, Fish and Wildlife Service
- FSP Fire Suppression Plan
- GIS Geographic information system
- ISMS Interagency Species Management System
- HPMP Historic Properties Management Plan
- KSDB Known Site Data Base
- Licensee PacifiCorp Energy
- LE Listed as Endangered
- LT Listed as Threatened
- MOU Memorandum of Understanding
- MSA Magnuson-Stevens Fishery Conservation Act
- NMFS National Oceanic and Atmospheric Administration, National Marine Fisheries Service
- NEPA National Environmental Policy Act
- O&M Operation and maintenance
- ODEQ Oregon Department of Environmental Quality
- ODFW Oregon Department of Fish and Wildlife
- OWRD Oregon Water Resources Department
- PE Proposed as Endangered
- PM&E Protection, mitigation, and enhancement (measure)
- Plan Sensitive Species Plan
- Project North Umpqua Hydroelectric Project
- PT Proposed as Threatened
- RCC Resource Coordination Committee
- RCP Resource Coordination Plan
- RMP Resource Management Plan
- RRMP Recreation Resource Management Plan
- SA Settlement Agreement

- SC Critical Sensitive Species
- SoC Species of Concern
- SP Peripheral or Naturally Rare
- SU Undetermined Status
- SV Vulnerable Sensitive Species
- TMP Transportation Management Plan
- UNF Umpqua National Forest
- USDA U.S Department of Agriculture
- USDI U.S. Department of the Interior
- VMP Vegetation Management Plan

1.0 INTRODUCTION

PacifiCorp Energy (PacifiCorp) is the licensee and operator of the North Umpqua Hydroelectric Project (Project), which is regulated by the Federal Energy Regulatory Commission (FERC) as Project No. 1927. On November 18, 2003, the FERC issued PacifiCorp a new 35-year operating license for the Project (FERC 2003a). The FERC License Order (License) was finalized on October 18, 2005, and adopted Sensitive and Special Status Species conservation requirements specified in supporting documents:

- Section 4(e) Terms and Conditions (License; November 18, 2003)
- Biological Opinion (Reference No. 1-15-2002-F-1002; December 13, 2002)
- Biological Opinion (Log No. F/NWR/2002/00509; December 13, 2002)
- North Umpqua Hydroelectric Project Settlement Agreement (SA) (June 13, 2001)

Terms and Conditions were incorporated into the License under the Federal Power Act (FPA) Section 4(e) to ensure adequate protection of federal lands occupied by the Project. The U.S. Department of Agriculture – Forest Service (FS) (License Appendix B) and U.S. Department of Interior – Bureau of Land Management (BLM) (License Appendix C) filed three Terms and Conditions addressing Sensitive and Special Status species.

Titled “USDA Forest Service Sensitive Species” (page 92 of the License), Condition No. 15 specifically requires that PacifiCorp develop and implement a Sensitive Species Plan (Plan) in consultation with the FS to coordinate the conservation and management of Sensitive Species identified on the Regional Forester’s Sensitive Species List. The FS also filed Condition No. 6 titled “Activities on National Forest System Lands” (page 88 of the License). Condition No. 6 specifies that PacifiCorp conduct Sensitive Species surveys prior to ground- or habitat-disturbing activities on National Forest System lands. The BLM filed Condition No. 9 titled “Special Status Species” (page 96 of the License). Although not calling for a plan, Condition No. 9 requires that PacifiCorp include management procedures for Special Status Species when planning and conducting actions on BLM-administered lands.

The FS and BLM also consider species protected under the federal Endangered Species Act (ESA) when addressing Sensitive and Special Status species. The bald eagle (*Haliaeetus leucocephalus*) and northern spotted owl (*Strix occidentalis caurina*) are ESA-listed species associated with the Project. The U.S. Department of Interior – Fish and Wildlife Service (FWS) issued a biological opinion (December 13, 2002; Reference No. 1-15-2002-F-1002), which documented formal consultation conducted pursuant to Section 7 of the ESA in conjunction with the License. The National Oceanic and Atmospheric Administration – National Marine Fisheries Service (NMFS) also issued a biological opinion for the Project (December 13, 2002; Log No. F/NWR/2002/00509) addressing the then ESA-listed Oregon Coast coho salmon (*Oncorhynchus kisutch*) and Essential Fish Habitat (EFH) under the Magnuson-Steven Fishery Conservation and Management Act (MSA). The biological opinions establish PacifiCorp’s obligations for protecting the bald eagle, spotted owl, and EFH.

The SA (June 13, 2001) establishes the majority of natural resource protection, mitigation, and enhancement (PM&E) measures required by the License. In addition to PacifiCorp, both state and federal agencies were signatories to the SA:

- U.S. Department of Agriculture – Forest Service (FS)
- U.S. Department of Interior – Bureau of Land Management (BLM)
- U.S. Department of Interior – Fish and Wildlife Service (FWS)
- National Oceanic and Atmospheric Administration – National Marine Fisheries Service (NMFS)
- Oregon Department of Environmental Quality (ODEQ)
- Oregon Department of Fish and Wildlife (ODFW)
- Oregon Water Resources Department (OWRD).

Two SA sections directly pertain to Sensitive and Special Status species conservation: Section 13.3 and Section 21.5. SA Section 13.3 requires that helicopter surveys of the Project comply with FS plans for protecting peregrine falcon (*Falco peregrinus anatum*) and bald eagle nests. SA Section 21.5 directs PacifiCorp to develop site-specific construction plans including evaluations of potential effects to Sensitive Species when implementing PM&Es. Specifically, Sensitive Species surveys are to be conducted within 400 m of ground or habitat disturbing actions resulting from a PM&E. In addition, SA Section 21.1 indirectly addresses Sensitive and Special Status species by providing mechanisms to integrate the Plan with numerous other License-required management plans.

License-directed Sensitive and Special Status species conservation is interrelated among several supporting License documents: FS and BLM 4(e) Terms and Conditions, FWS and NMFS biological opinions, and the SA. Consequently, PacifiCorp developed the Plan to comprehensively address each relevant License requirement and guide the overall conservation of Sensitive and Special Status species associated with the Project. The Plan was developed in consultation with and approved by the FS and BLM.

1.1 GOALS AND OBJECTIVES

The Plan's overarching goal is to comply with the License, which includes FS Sensitive Species and BLM Special Status Species policies. The Plan specifically addresses eight elements of the License:

- FS Condition No. 6 – Activities on National Forest System Lands
- FS Condition No. 15 – Sensitive Species
- BLM Condition No. 9 – Special Status Species
- FWS Biological Opinion – Incidental Take Statement
- NMFS Biological Opinion – MSA and EFH
- SA Section 13.3 – Helicopter Surveys
- SA Section 21.1 – Resource Coordination Committee
- SA Section 21.5 – Site-specific Plans and Construction Schedules

During the term of the new License, PacifiCorp will plan and implement an array of operation and maintenance (O&M) activities and construction projects (i.e., actions) with the potential to affect Sensitive and Special Status species. Consequently, the Plan's primary objective is to establish a process by which PacifiCorp will consider Sensitive and Special Status species when planning actions that include habitat- or ground-disturbance on federal lands associated with the Project and License. To efficiently achieve this objective, PacifiCorp will adopt applicable FS and BLM policies, procedures, and guidelines for assessing potential effects of proposed actions on Sensitive and Special Status species.

The following lists specific objectives of the Plan:

- Specify License requirements relevant to Sensitive and Special Status species
- Define FS and BLM policies, standards, and management direction for Sensitive and Special Status species conservation
- Develop a list of Sensitive and Special Status species that may be present in the vicinity of the Project
- Categorize PacifiCorp actions requiring Sensitive and Special Status species evaluations
- Establish a framework for conducting and documenting Sensitive and Special Status species evaluations (e.g., Biological Evaluations)
- Establish FS and BLM coordination and approval procedures for proposed PacifiCorp actions
- Define integration of the Plan with the SA's Resource Coordination Plan (RCP) (PacifiCorp Energy and EDAW 2006) and Resource Coordination Committee (RCC)
- Establish mechanisms to annually update species lists and make periodic Plan revisions as needed to maintain consistency with current management directions

1.2 PLAN STRUCTURE

The Plan is structured into eight sections:

- Section 1.0 describes Plan goals and objectives, structure, and terms and definitions.
- Section 2.0 provides relevant License requirements, and summarized FS and BLM policies. Current lists of Sensitive and Special Status species associated with the Project are referenced.
- Section 3.0 defines categories of Project actions (i.e., construction, maintenance, and emergency).
- Section 4.0 establishes a framework to evaluate and document potential effects of PacifiCorp's ground- and habitat-disturbing actions on Sensitive and Special Status species. This section includes procedures for coordinating FS and BLM evaluations and approvals for a proposed action.
- Section 5.0 describes integration of the Plan with RCP processes.
- Section 6.0 addresses Plan revisions and updates.
- Section 7.0 summarizes agency consultation that occurred during Plan development.
- Section 8.0 presents references cited.

1.3 DEFINITIONS

The following provides definitions of selected terms used in this Plan:

- Approval – Confirmation or concurrence with plans, design, projects, and schedules prior to implementation.
- Authority – The legal right to approve or modify an action or PM&E; this is based on statute, regulations, or legal agreements.
- Biological Evaluation – A documented FS review of proposed actions in sufficient detail to determine how an action or proposed action may affect any threatened, endangered, proposed, or sensitive species.
- Biological Opinion – A document which includes 1) the opinion of the FWS or NMFS as to whether or not a Federal action is likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of designated critical habitat; 2) a summary of information on which the opinion is based; and 3) a detailed discussion of the effects of the action on listed species or designated critical habitat.
- Candidate for Listing – Taxa for which the FWS or NMFS has sufficient information to support a proposal to list under the ESA, or which is a candidate for listing by the Oregon Department of Agriculture or ODFW under the Oregon ESA of 1987.
- Construction – The erection, building, installation, or assembly of a new fixed asset.
- Consultation – Formal or informal discussions for the purposes of developing and/or reviewing proposed projects and implementation plans. Consultation involves providing another Party an opportunity for review and input regarding a proposed plan or project. The objective of consultation is to obtain input and reach a joint understanding of requirements for the proposed project or plan. The results of consultation are generally documented in reports or letters. Informal consultation generally pertains to the results of meetings, exchange of e-mail, or other informal communication between Parties. Formal consultation involves procedures that are covered by agency regulations, such as consultation with the FWS under the ESA, and tribal consultation.
- Critical – A subcategory of the Oregon Sensitive Species list, critical sensitive species are those for which listing as threatened or endangered would be appropriate if immediate conservation actions were not taken. Some peripheral species which are at risk throughout their range and some disjunct populations (those that are geographically isolated from other populations) are also considered critical.
- Critical Habitat – Specific areas within the geographical area occupied by an ESA-listed species, at the time it is listed in accordance with the provisions of Section 4 of the ESA, on which are found those physical or biological features (constituent elements) essential to the conservation of the species and which may require special management considerations or protection. Critical Habitat can also include specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the ESA, upon determination by the Secretary of the Interior that such areas are essential for the conservation of the species.

- Design Approval – Approval by one or more Parties of a final design for site-specific plans (site plans) developed by PacifiCorp to implement PM&Es defined in the SA or License Order, as referenced in SA Section 21.5 and Exhibit E of the RCP. Design approval is necessary before initiating any ground disturbance.
- Essential Fish Habitat (EFH) – Areas designated as containing habitat essential to the long-term survival and health of our nation’s fisheries to ensure healthy fisheries now and in the future. EFH includes those habitats that support life stages (e.g., breeding, spawning, nursery, feeding, and protection) of each managed species and can consist of both the water column and the underlying surface (e.g. seafloor) of a particular area. Certain properties of the water column such as temperature, nutrients, or salinity are essential to various species.
- Funding – Money that is available and has been committed by an organization to accomplish an activity, project, or program. Funding represents monies currently available for expenditure for the designated work, compared to a budget that may only represent a plan or projection for use of future anticipated funding. A commitment of money may take several forms, including a contract, approved collection agreement, payment of a bill for collection, appropriation of funds by Congress and allocated by higher levels of an agency, or a formal grant agreement.
- Implementation – Accomplishment of on-the-ground or on-site construction, restoration, reconstruction, maintenance, or operational activities. Implementation may involve actual ground or habitat disturbance.
- License – The new License issued by the FERC to operate and maintain the North Umpqua Hydroelectric Project, FERC Project No. 1927.
- Listed as Endangered – Taxa listed by the FWS or NMFS as Endangered under the ESA, or by the Oregon Department of Agriculture or ODFW under the Oregon ESA of 1987.
- Listed as Threatened – Taxa listed by the FWS or NMFS as Threatened under the ESA, or by the Oregon Department of Agriculture or ODFW under the Oregon ESA of 1987.
- Magnuson-Stevens Fishery Conservation Act – This Act governs the conservation and management of ocean fishing. It establishes exclusive U.S. management authority over all fishing within the exclusive economic zone, all anadromous fish throughout their migratory range except when in a foreign nation's waters and all fish on the Continental Shelf. Foreign fishing within these areas is prohibited unless conducted pursuant to a governing international fishery agreement and permit, and only if the foreign nation extends reciprocity to U.S. fishing vessels. The Act also establishes eight Regional Fishery Management Councils responsible for the preparation of fishery management plans to achieve the optimum yield from U.S. fisheries in their regions. Congress amended the Act extensively when it passed the Sustainable Fisheries Act in 1996.
- Maintenance – The act of keeping fixed assets in working condition. It includes preventive maintenance, normal repairs, replacement of parts and structural components, and other activities needed to preserve a fixed asset so it continues to provide acceptable service and achieves its expected life. Maintenance excludes activities to expand the capacity of an asset or otherwise upgrading it to serve needs

different from, or significantly greater than, those originally intended. Maintenance includes work needed to adhere to laws, regulations, codes, and other legal direction as long as the original intent or purpose of the fixed asset is not changed.

- May – This word is not normally synonymous with “should,” and does not normally express certainty as “will” or “shall” does. It is used to indicate a certain measure of likelihood or possibility, and is used to express a desire, contingency, purpose, or result, to be allowed or permitted to do something.
- Must – This word, like the word “shall,” is of mandatory effect.
- Peripheral or Naturally Rare – A subcategory of the Oregon Sensitive Species list, peripheral species are on the edge of their range. Naturally rare species are those with historically low population numbers in Oregon due to naturally limiting factors. The management objective is to maintain existing populations within their current range.
- Project – The North Umpqua Hydroelectric Project, FERC Project No. 1927, including all lands associated therewith as described in the new License.
- Proposed as Endangered – Taxa listed by the FWS or NMFS to be listed as Endangered under the ESA, or by the Oregon Department of Agriculture or ODFW under the Oregon ESA of 1987.
- Proposed as Threatened – Taxa listed by the FWS or NMFS to be listed as Threatened under the ESA, or by the Oregon Department of Agriculture or ODFW under the Oregon ESA of 1987.
- Reconstruction (Rehabilitation) – Replacement of an existing facility involving the reconstruction, reinstallation, or reassembly of a fixed asset.
- Regional Forester’s Sensitive Species List – Includes 1) federally proposed and listed species, 2) proposed and designated critical habitat, 3) federal candidate species, and 4) sensitive species for which population viability is a concern.
- Resource Coordination Committee (RCC) – The RCC was created by Section 21 of the SA, and derives its authority from the SA and the License Order that affirms the SA. The RCC is comprised of the signatory Parties to the SA and makes collective decisions while implementing the SA. The structure and process of the RCC are intended to be value-added to its member organizations by providing a forum to address time-sensitive matters, early warning of problems, and coordination of member organization actions, schedules, and decisions to save time and expense. The RCC shall not infringe on the authority of jurisdictional agencies.
- Restoration – Work necessary, as a result of major damage, to restore fixed assets to a designated standard and serviceability. Also, work necessary to restore the functionality and quality of a natural resource.
- Resource Coordination Plan (RCP) – The “Umbrella Plan” that organizes PM&Es and their tasks to be implemented and defines the processes used to implement them. The primary purpose of the RCP is to help coordinate and facilitate implementation of PM&Es identified in the SA and in the License Order. The RCP also coordinates all of the individual resource-specific management plans identified in the SA (including Amendments 1 and 2) and License Order, as well as individual PM&Es not specifically covered within a particular resource-specific management plan.
- Sensitive Species – Those plant and animal species identified by a FS regional forester for which population viability is a concern as evidenced by: significant

current or predicted downward trends in population numbers/density or significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution. BLM Sensitive Species is defined under "Special Status Species."

- Shall – As used in the SA and the Plan, this word is imperative and mandatory. "Shall" is a word of command, and one which has always or which must be given a compulsory meaning; as denoting obligation. It has a peremptory meaning, and it is generally imperative or mandatory. It has the invariable significance of excluding the idea of discretion, and has the significance of operating to impose a duty which may be enforced, particularly if public policy is in favor of this meaning, or when addressed to public officials, or where a public interest is involved, or where the public or persons have rights which ought to be exercised or enforced, unless a contrary intent appears.
- Should – Ordinarily implying duty or obligation; although usually no more than an obligation of propriety or expediency, or a moral obligation, thereby distinguishing it from "ought." It is not normally synonymous with "may," and although often interchangeable with the word "would;" it does not ordinarily express certainty as "will" and "shall" do.
- Site Plan Approval – Approval by one or more Parties of conceptual or detailed site plans developed by PacifiCorp Energy to implement PM&Es defined in the SA or License Order in SA Section 21.5 and Exhibit E of the RCP. Site plans will be approved prior to initiating any ground disturbance.
- Site-Specific Plan (Site Plan) – Plans developed by PacifiCorp Energy in accordance with SA Section 21.5 to implement PM&Es that involve ground disturbance. Also see design plans (conceptual, detailed, and final) and construction documents, all of which are related terms.
- Special Status Species – BLM Special Status Species are composed of 5 categories:
 - Proposed species – species that have been officially proposed for listing as threatened or endangered by the Secretary of the Interior
 - Listed species – species officially listed as threatened or endangered by the Secretary of the Interior under the provisions of the ESA
 - Candidate species – species designated as candidates for listing as threatened or endangered by the FWS and/or NMFS
 - State listed species – species listed by a State in a category implying but not limited to potential endangerment or extinction
 - Bureau Sensitive species – species designated by a State Director, usually in cooperation with the State agency responsible for managing the species and State Natural Heritage programs, that
 - a) could become endangered in or extirpated from a State, or within a significant portion of its distribution;
 - b) are under status review by the FWS and/or NMFS;
 - c) are undergoing significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution;
 - d) are undergoing significant current or predicted downward trends in population or density such that federal listed, proposed, candidate, or State listed status may become necessary;

- e) typically have small and widely dispersed populations; f) inhabit ecological refugia or other specialized or unique habitats; or
 - f) are State listed but which may be better conserved through application of BLM sensitive species status.
- Species of Concern – Taxa for which the FWS is reviewing for consideration as candidates for listing under the ESA.
 - Standard – A statement of required, mandatory, or specifically prohibitive practice regarding land management, safety, or other procedures.
 - Undetermined Status – A subcategory of the Oregon Sensitive Species list, undetermined species are those for which status is unclear. They may be susceptible to population declines that may result in a listing as endangered, threatened, critical, or vulnerable in the future, but additional research is needed before a decision can be made regarding their status.
 - Vulnerable – A subcategory of the Oregon Sensitive Species list, vulnerable sensitive species are not in imminent danger of being listed as threatened or endangered, but could become “sensitive-critical,” “threatened,” or “endangered,” with changes in population, habitat, or threats.
 - Will – This word expresses certainty and is used in a mandatory sense, unlike “should” or “may” that express a degree of permission, but not certainty. This word is used most often in the Plan, as compared to shall, should, must, and may.

2.0 LICENSE REQUIREMENTS AND AGENCY POLICY

2.1 FERC LICENSE

PacifiCorp is responsible for complying with the License including coordination with the FS and BLM, which administer lands occupied by the Project. The FERC is responsible for administering the License and enforcing compliance with License requirements. License requirements for Sensitive and Special Status species conservation are contained in the FS and BLM Terms and Conditions, FWS and NMFS biological opinions, and SA. The following sections describe each License requirement pertaining to the Plan.

2.1.1 Terms and Conditions

For a hydroelectric project in a federal reservation, Section 4(e) of the FPA requires the FERC to include in license orders all terms and conditions that the managing agency deems necessary for the reservation’s adequate protection and utilization. The Project occupies federal reservations administered by the FS and BLM, which resulted in three Terms and Conditions related to the Plan:

- FS Condition No. 6 — Activities on National Forest System Lands
- FS Condition No. 15 — Sensitive Species
- BLM Condition No. 9 — Special Status Species

The Terms and Conditions (License Appendices B and C) are reproduced in the following subsections:

Condition No. 6 – Activities on National Forest System Lands

Prior to initiating any ground or habitat-disturbing activities on National Forest System lands required for implementation of any protection, mitigation and enhancement measure (“PM&E Measure”) in the Settlement Agreement,...

Upon license issuance, the Licensee shall, in consultation with the USDA Forest Service, NMFS, USFWS, ODFW, and ODEQ, develop site-specific plans for construction activities under the license that shall result in ground or habitat disturbance, whether within or outside of water bodies. Such plans shall be prepared in accordance with the Implementation Schedule in the Settlement Agreement for such activities and shall include a construction schedule providing for in-river and riparian construction during non-critical periods for affected resources. The Licensee will submit completed plans to the USDA Forest Service (in addition to any agencies that may be required to approve such plans under other provisions of the Settlement Agreement) for review and approval prior to initiating any construction activities and before filing the construction schedule with FERC...The Licensee shall conduct Sensitive Species and Survey and Manage Species protocol surveys for rare, endemic species (1) within 200 feet of the 34 new wildlife crossings provided for in Section 11.2 of the Settlement Agreement; or (2) within 400 feet of any other ground- or habitat-disturbing activity that may occur as a result of the PM&E Measures. The species to be surveyed for, the need for survey, and survey protocols shall be derived from then current USDA Forest Service regulations, manuals, policies, and handbooks. The Licensee shall include measures to prevent erosion in all site-specific plans.

Condition No. 15 – USDA Forest Service Sensitive Species

Within one year of license issuance, PacifiCorp Energy shall develop a Sensitive Species plan, in consultation with and approved by the Forest Service, and file the Plan with the Commission. This Plan shall describe how the licensee shall coordinate with the Forest Service for the conservation and management of Sensitive Species that are identified on the Regional Forester’s Sensitive Species List, as amended. The Plan shall require licensee, in consultation with the Forest Service, to:

- a. Identify criteria and approval elements for biological evaluations necessary to meet Forest Service standards and management direction in evaluating the effects of proposed actions on Sensitive Species.*
- b. Develop and maintain a list of Sensitive Species that may be present in the Project area.*
- c. Complete biological evaluations of the potential effects of proposed actions on Sensitive Species.*

- d. *Conduct surveys for Sensitive Species in connection with proposed actions.*
- e. *Update the Plan as the Regional Forester's Sensitive Species List changes or new information indicates that changes to the Plan are warranted.*

BLM Condition No. 9 – Special Status Species

In planning and conducting proposed actions, PacifiCorp Energy shall include management procedures for BLM Sensitive Species consistent with the management direction provided in the most current BLM Roseburg District Resource Management Plan (RMP). Management procedures shall be adaptive and consistent with current management direction throughout the term of the license. Current management direction in the BLM Roseburg District RMP requires:

- *Review of all proposed actions to determine whether or not special status species occupy or use the affected area or if the habitat for such species is affected.*
- *Conducting field surveys according to protocols and established procedures. This includes surveying during the proper season, unless surveys are deemed unnecessary through watershed analysis, project planning, and environmental assessment. Field surveys may not be conducted in all cases depending on the number and timing of previous surveys conducted, whether previous surveys looked for all species that would be included in a new survey, and the likelihood of potential habitat. The intensity of field surveys will also vary depending on the same factors.*
- *Modification, relocation, or abandonment of a proposed action to avoid contributing to the need to list under the ESA, all federal candidate, state listed species, and Bureau sensitive species or their habitats.*
- *Coordination and cooperation with the State of Oregon to conserve state listed species.*
- *Protection of assessment species where possible so as not to increase their status. Assessment species are to be included in all field inventory and clearance work and all new locations are to be documented. They are to be considered in all environmental analyses where impacts will be clearly identified.*
- *Where it is biologically appropriate and consistent with species recovery plans, buffering special status plant species by 100 to 300 feet from all surface disturbance and harvest of timber.*
- *Coordination with other agencies and groups in management of species across landscapes. Coordination will be accomplished through conservation plans or similar agreements which identify actions to conserve single or multiple species and/or habitats.*
- *Where plans exist for species no longer on the special status species list, continuation with the prescribed conservation actions if determined to be necessary to avoid re-listing or future consideration for listing. In the case of interagency plans or agreements, this determination will be mutually decided. Such plans may be modified as needed based on adequacy of existing range wide conditions and conservation management.*

The licensee shall coordinate with the BLM Roseburg District at least once a year to obtain the most current list of Special Status species. Surveys and environmental analyses shall be conducted by qualified personnel knowledgeable in the taxonomy and ecology of Roseburg District Special Status species. All sites located during field surveys shall be documented in accordance with Roseburg District standards. Copies of all documentation will be forwarded to the BLM Roseburg District, attention Roseburg District Botanist or Roseburg District Wildlife Biologist, as appropriate.

2.1.2 Biological Opinions

The NMFS (December 13, 2002; Log No. F/NWR/2002/00509) and FWS (December 13, 2002; Reference No. 1-15-2002-F-1002) each issued a biological opinion that evaluated Project effects to ESA-listed species and EFH occurring within the FERC Project Boundary. The License subsequently adopted the biological opinions, which established PacifiCorp's obligations to protect ESA-listed species and EFH during the License term. Consequently, PacifiCorp will conduct actions in compliance with terms and conditions established in the biological opinions.

Both the FS and BLM routinely consider ESA-listed species and EFH when conducting Sensitive and Special Status species evaluations. The BLM broadly defines Special Status Species to include ESA-listed species, whereas the FS typically does not consider ESA-listed species or EFH when selecting Sensitive Species (see Section 2.2 of the Plan). However, the FS Regional Forester's Sensitive Species List can include the following in addition to Sensitive Species: 1) ESA-listed and proposed species, 2) proposed and designated critical habitat, and 3) federal candidate species (Region 6 memorandum from Regional Forester, July 21, 2004).

The NMFS biological opinion provided an incidental take statement for the Oregon Coast coho salmon and EFH conservation measures for the coho and chinook (*Oncorhynchus tshawytscha*) salmon. Although the coho salmon was subsequently removed from the ESA list, EFH conservation measures are still required under the NMFS biological opinion and correspond to the terms and conditions specified in the incidental take statement:

- Instream Flows, Flow Fluctuations, Riparian Vegetation, Erosion and Sediment Control
- Construction Activities In or Near Watercourses
- Fish Passage
- Fluvial Geomorphic Processes, Spawning Habitat, Aquatic Connectivity, Tributary Enhancement, and Other Mitigation Measures
- Monitoring

The FWS biological opinion mandates spotted owl and bald eagle protection and includes an incidental take statement specifying the amount or extent of take, reasonable and prudent measures, and terms and conditions. The incidental take statement originally included the Columbian white-tailed deer (*Odocoileus virginianus leucurus*), which was later removed

from the ESA list. The incidental take statement established take limits from PacifiCorp actions during the License term:

- Ten acres of spotted owl Nesting/Roosting/Foraging habitat due to power line right-of-way maintenance
- Two-hundred acres of spotted owl Nesting/Roosting/Foraging habitat due to noise disturbance
- One bald eagle mortality due to electrocution

The FWS determined that the specified level of take is not likely to result in jeopardy to the bald eagle or spotted owl. Nonetheless, the following reasonable and prudent measures are required to minimize take:

- Prevent disturbances to pairs and their progeny during the nesting season
 - spotted owl (March 1 to July 15)
 - bald eagle (January 1 to August 31)
- Protect nest groves of active spotted owl pairs and active bald eagle nests

The following terms and conditions of the incidental take statement are required to implement the reasonable and prudent measures:

- Manage and minimize disturbance-causing activities within 0.25 miles of unsurveyed suitable Nesting/Roosting/Foraging spotted owl habitat between March 15 and July 15
- File an annual monitoring report with the FWS by January 31 each year for all actions that are likely to adversely affect ESA-listed species
- Report all newly discovered bald eagle nests and roost sites and conduct a risk assessment to identify necessary power pole modifications in the immediate vicinity

In 2006, the FWS reviewed the efficacy of the 0.25-mile spotted owl disturbance threshold. Except for blasting and aircraft, the review determined that the disturbance threshold could be adjusted to 60 meters. Accordingly, the FWS communicated to FERC (letter dated June 28, 2005) that the 60-meter distance threshold should hence forth be used in lieu of the 0.25-mile threshold.

2.1.3 Settlement Agreement Section 13.3

SA Section 13.3 (Helicopter Surveys) provides protection measures for documented peregrine falcon and bald eagle nests that occur near Project transmission lines. PacifiCorp routinely uses helicopters to inspect power line structural integrity and vegetation clearances. SA Section 13.3 specifies that helicopter inspections comply with conditions of the Rattlesnake Rock Peregrine Falcon and Toketee Lake Bald Eagle nest site plans.

The SA specifically addresses the peregrine falcon nest at Rattlesnake Rock, which the FS considers a combined site with Eagle Rock (November 20, 2006, personal communication;

Theresa Stone, FS Wildlife Biologist). Since the SA signing in 2001, an additional peregrine nest site has been documented at Pig Iron Mountain. The FS is presently drafting management plans for the Rattlesnake Rock/Eagle Rock and Pig Iron Mountain nest sites.

The draft plans establish seasonal activity restriction periods and nest site protection zones to safeguard breeding peregrine falcons and their nests from human-caused disturbance. The Umpqua National Forest (UNF) instituted January 1 through July 31 as the breeding-season restriction period. Three protection zones are specified around a nest site: primary (0.5-mile radius), secondary (1.5-mile radius), and tertiary (3-mile radius). PacifiCorp's helicopter inspections should not occur within the primary or secondary protection zones during January 1 through July 31. However, small- to medium-sized aircraft are permitted within the tertiary zone during the breeding-season restriction period.

The Toketee Bald Eagle Nest Site Plan (October 31, 2000) specifies that low-level aircraft operations should be avoided above the timber stand containing the current nest tree during the major bald eagle reproductive period (January 1 through August 30). The plan recommends, within the immediate vicinity of the Toketee bald eagle nest, that PacifiCorp should inspect power lines only from the ground during January 1 to August 31, and conduct maintenance between September 1 and December 31.

2.1.4 Settlement Agreement Section 21.1

SA Section 21.1 (Resource Coordination Committee) directed development of the RCP, which guides PacifiCorp's License implementation and compliance and agency coordination. The RCP addresses actions specified in the License and SA, but typically excludes routine O&M actions for the Project. The RCC oversees the RCP and coordinates License-required plans, PM&E measures, and supporting tasks such as Sensitive Species evaluations.

In particular, the RCP integrates the numerous resource-specific management plans required by the License and SA (Table 1). The Plan is required for License implementation and thus requires RCP coordination. Resource-specific plans typically provide strategies for implementing PM&Es that will require O&M or monitoring over the License term. However, resource-specific plans are not collectively or directly integrated. Hence, the RCC, through the RCP, will oversee coordination of the Plan with other resource-specific plans and PM&E measures.

Applying the RCP project review and approval process, the RCC will ensure that PacifiCorp is notified when Sensitive and Special Status species evaluations are required prior to implementing a License action. Notification should occur as early as possible and preferably during Phase II (i.e., Annual RCC Meeting) of the six-phase RCP project the review and approval process. Early notification is necessary to ensure ample time to complete Sensitive and Special Status species evaluations without compromising PM&E schedules. Sensitive and Special Status species evaluations will then be documented during Phase III (i.e., Work Plan Development) and Phase IV (i.e., Site Plan Development and Approval). Section 5.0 of the Plan describes the RCP coordination process.

Once notified by the RCC, PacifiCorp will coordinate directly with the FS and BLM to complete required evaluations and obtain necessary approvals. Completed Sensitive and Special Status species evaluations will be made available to the RCC upon request. PacifiCorp will coordinate directly with the FS and BLM for Sensitive and Special Status species evaluations required for routine Project O&M actions not addressed by the RCP.

2.1.5 Settlement Agreement Section 21.5

SA Section 21.5 (Site-specific Plans and Construction Schedules) requires that PacifiCorp conduct Sensitive Species surveys for rare, endemic species within 400 feet of any ground- or habitat-disturbing action that might occur from implementing PM&E requirements stipulated in the SA. The list of species and survey protocols will be derived from current FS regulations, manuals, policies, and handbooks. The Plan will guide PacifiCorp compliance with this SA requirement.

2.2 FOREST SERVICE POLICY

Within specifications of FS Conditions No. 6 and No. 15, FS policies establish PacifiCorp's obligations for Sensitive Species conservation on the UNF. Chapter 2670 (September 23, 2005) of Forest Service Manual (FSM) 2600 provides direction for managing Sensitive Species. Section 2670.32 of FSM 2600 establishes FS policy for Sensitive Species:

1. *Assist states in achieving their goals for conservation of endemic species.*
2. *Review programs and activities as part of the National Environmental Policy Act of 1969 process through biological evaluation, to determine their potential effect on sensitive species.*
3. *Avoid or minimize impacts to species whose viability has been identified as a concern.*
4. *Analyze, if impacts cannot be avoided, the significance of potential adverse effects on the population or its habitat within the area of concern and on the species as a whole. (The line officer, with project approval authority, makes the decision to allow or disallow impact, but the decision must not result in loss of species viability or create significant trends downward toward federal listing.)*
5. *Establish management objectives in cooperation with the states when projects on National Forest System lands may have a significant effect on sensitive species population numbers or distributions. Establish objectives for federal candidate species, in cooperation with the FWS or NOAA Fisheries and the states.*

FSM Section 2670.22 states objectives for Sensitive Species:

1. *Develop and implement management practices to ensure that species do not become threatened or endangered because of Forest Service actions.*
2. *Maintain viable populations of all native and desired nonnative wildlife, fish, and plant species in habitats distributed throughout their geographic range on National Forest System lands.*

3. *Develop and implement management objectives for populations and/or habitat of sensitive species.*

FSM Section 2670.5 defines Sensitive Species:

Those plant and animal species identified by a regional forester for which population viability is a concern as evidenced by:

- a. *Significant current or predicted downward trends in population numbers or density.*
- b. *Significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.*

Regional Foresters are responsible for identifying sensitive species (FSM Section 2672.11) and ensuring legal and policy compliance (FSM Section 2670.44). FSM Section 2672.11 instructs Regional Foresters to consider several sources for designating Sensitive Species within a region:

- Federal candidate species for ESA listing
- State-listed species as endangered, threatened, rare, endemic, unique, or vanishing
- Other species as appropriate to avert federal or state listing as a result of FS management activities

The Project occurs within the FS Region 6, where 90 species (including both Sensitive and ESA-listed species) on the Regional Forester's Sensitive Species List are known or suspected as of December 2006 to occur on the Diamond Lake and North Umpqua ranger districts of the UNF (Table 2):

- Vascular plants = 35
- Fungi = 11
- Lichens = 11
- Bryophytes = 5
- Mollusk = 3
- Amphibians = 3
- Reptiles = 2
- Birds = 7
- Mammals = 7
- Fish = 6

The Regional Forester's Sensitive Species List is periodically subject to revision. To maintain a current Sensitive Species list, PacifiCorp and the FS will coordinate annually per Section 6.1 of the Plan.

FSM Section 2672 directs planning for Sensitive Species management and recovery; Sensitive Species must receive special management to ensure viability and preclude population declines that could result in federal listing under the ESA. Furthermore, no

impacts to Sensitive Species are permissible without population, habitat, and viability analyses of adverse effects (FSM Section 2672.1). The biological evaluation (BE) is the process by which the FS reviews, analyzes, and documents potential effects of an action on Sensitive Species (FSM Section 2672.4). The BE process is defined in FSM Section 2670.5:

A documented Forest Service review of Forest Service programs or activities in sufficient detail to determine how an action or proposed action may affect any threatened, endangered, proposed, or sensitive species.

A BE is required for possible effects to Sensitive Species from FS planned, funded, executed, or permitted programs and activities (i.e., actions). The FS conducts a BE when analyzing environmental effects of an action proposed on National Forest lands according to National Environmental Protection Act (NEPA) regulations. The FS NEPA process routinely initiates the BE process.

Although the Project occupies the UNF, the FERC is the lead federal action agency issuing the License and responsible for complying with NEPA regulations. The FS reaffirmed the FERC role as lead federal action agency in a Memorandum of Understanding (MOU; June 23, 2004) between the FS and PacifiCorp. The MOU clarified that the FERC will determine if the previously completed NEPA analysis (FERC 2003b) conducted for License issuance is sufficient for a proposed PacifiCorp action. Consequently, PacifiCorp BEs will normally be conducted for actions already addressed by the FERC License and corresponding NEPA analysis. Although envisioned to be rare, PacifiCorp will also conduct BEs for future FERC-required NEPA analyses.

Appendix A contains FS standards (FSM 2672.42), procedures (FSM 2672.43), and a flowchart guiding BE development. FSM 2672.41 establishes the following objectives of the BE process:

- 1. To ensure that Forest Service actions do not contribute to loss of viability of any native or desired non-native plant or contribute to animal species or trends toward Federal listing of any species.*
- 2. To comply with the requirements of the Endangered Species Act that actions of Federal agencies not jeopardize or adversely modify critical habitat of Federally listed species.*
- 3. To provide a process and standard by which to ensure that threatened, endangered, proposed, and sensitive species receive full consideration in the decision making process.*

A FS BE typically considers ESA-listed species and species proposed for ESA listing in addition to Sensitive Species. However, the FS 4(e) Terms and Conditions in the License only require that PacifiCorp conduct BEs for Sensitive Species on the Regional Forester's Sensitive Species List that might be present in the Project area. Because biological opinions for the Project address ESA-listed and MSA-designated species (see Section 2.1.5), PacifiCorp will conduct BEs according to FS standards (FSM 2672.42) and procedures (FSM 2672.43) with focus only on the Sensitive Species category of the Regional Forester's

Sensitive Species List. Rather than effects analyses, BE documentation of ESA-listed species will be limited to summary statements referencing an action's consistency with requirements specified in the FWS and NMFS biological opinions.

2.3 BUREAU OF LAND MANAGEMENT POLICY

Within specifications of BLM Condition No. 9, BLM policies establish PacifiCorp's obligations for Special Status Species conservation on federal lands administered by the Roseburg BLM District. BLM Manual 6840 (January 1, 2001) provides policies and guidance for the conservation of Special Status plants and animals. Appendix B reproduces the BLM Special Status Species policy (BLM Manual Section 6840.06), and Section 6840.02 of the BLM Manual states two objectives of the policy:

- A. *To conserve listed species and the ecosystems on which they depend.*
- B. *To ensure that actions requiring authorization or approval by the Bureau of Land Management (BLM or Bureau) are consistent with the conservation needs of special status species and do not contribute to the need to list any special status species, either under provisions of the ESA or other provisions of this policy.*

BLM Manual 6840 comprehensively defines the Special Status Species designation, which is composed of 5 categories:

- (1) *proposed species - species that have been officially proposed for listing as threatened or endangered by the Secretary of the Interior. A proposed rule has been published in the Federal Register.*
- (2) *listed species - species officially listed as threatened or endangered by the Secretary of the Interior under the provisions of the ESA. A final rule for the listing has been published in the Federal Register.*
 - (A) *endangered species - any species which is in danger of extinction throughout all or a significant portion of its range.*
 - (B) *threatened species - any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.*
- (3) *candidate species - species designated as candidates for listing as threatened or endangered by the FWS and/or NMFS. A list has been published in the Federal Register.*
- (4) *State listed species - species listed by a State in a category implying but not limited to potential endangerment or extinction. Listing is either by legislation or regulation.*
- (5) *Bureau Sensitive species are those designated by a State Director, usually in cooperation with the State agency responsible for managing the species and State Natural Heritage programs, as sensitive. They are those species that:*
 - (1) *could become endangered in or extirpated from a State, or within a significant portion of its distribution;*
 - (2) *are under status review by the FWS and/or NMFS;*
 - (3) *are undergoing significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution;*

- (4) are undergoing significant current or predicted downward trends in population or density such that federal listed, proposed, candidate, or State listed status may become necessary;*
- (5) typically have small and widely dispersed populations;*
- (6) inhabit ecological refugia or other specialized or unique habitats; or*
- (7) are State listed but which may be better conserved through application of BLM sensitive species status.*

On November 5, 1990, the Oregon and Washington BLM added two categories of Special Status Species: Bureau Assessment and Bureau Tracking (Instruction Memorandum No. OR-91-57). Bureau Assessment species are plants and vertebrates that are not presently eligible for official federal or state ESA status, but are of concern in Oregon or Washington and might at a minimum need protection or mitigation during BLM actions. Bureau Assessment species are considered a category of Special Status Species separate from the BLM Sensitive category. However, protection, mitigation, and monitoring are optional for the Assessment category, and clearances are subject to available personnel and funding.

The Bureau Tracking category contains species that need additional information to determine status within the state, or no longer require active management. Bureau Tracking Species will not be considered as Special Status Species until being designated as Bureau Assessment, federal candidate, or federal or state ESA listed. Management is optional for Bureau Tracking Species, but BLM staff members are encouraged to record sightings to aid future status determinations.

The BLM is responsible for inventorying public lands and resources to evaluate the status of plants and animals (FLPMA, 43 USC 1701 Sec.201 (a)). The BLM establishes hierarchical levels of responsibility (BLM Manual Section 6840.04) for implementation of and legal compliance with Special Status Species policies. Responsibilities delegate from the national to field office level:

- BLM Director
- Assistant Director for Renewable Resources and Planning
- Fish, Wildlife and Forests Group Manager
- Threatened and Endangered Species Senior Specialist
- State Director
- Field Office Manager

In addition to policies provided in Manual 6840, the BLM manages Special Status Species according to the Roseburg District's Resource Management Plan (1994; RMP). The Roseburg District currently designates 238 Special Status Species (including BLM Assessment and Tracking species) as of March 14, 2005 (Tables 3 and 4):

- Vascular plants = 64
- Fungi = 59
- Lichens = 30

- Bryophytes = 18
- Invertebrates = 15
- Amphibians = 7
- Reptiles = 4
- Birds = 19
- Mammals = 18
- Fish = 4

BLM approval is required for actions causing surface disturbance on BLM administered-lands. To obtain approval, the RMP (pg 41-42) requires that a proposed action be reviewed to assess if Special Status Species or their habitat might be affected. Moreover, the BLM must consult (formal, informal, conference, or technical assistance, as appropriate) with the FWS or NMFS if an action might affect ESA-listed species, ESA-proposed species, candidate species, critical habitat, or EFH. Coordination with the state of Oregon might also be required if state-listed species could be affected.

An action review requires that a BLM-authorized person assess if Special Status Species or suitable habitat occurs within the action area. The assessment typically includes field surveys according to appropriate protocols and established procedures. In some instances, field surveys might not be required if a previous survey addressed the appropriate species and was conducted within a reasonable timeframe, or no suitable habitat is present. An action can be approved as proposed if no Special Status Species or their habitats are detected. However, a proposed action should be modified, relocated, or abandoned if a Special Status Species is present and impacts are likely.

3.0 PACIFICORP FACILITIES AND ACTIONS

3.1 FACILITIES

During the 35-year License term, a large variety of actions will be required to maintain and upgrade existing Project facilities, implement resource-specific management plans, and construct new facilities, especially for License-required PM&Es. Project facilities are generally divided into four categories:

- Generation (e.g., power plants, penstocks, canals, and dams)
- Infrastructure (e.g., administrative sites and roads)
- Transmission and Distribution (e.g., power lines and substations)
- PM&E (e.g., wildlife crossings, fish ladders, habitat manipulations, etc.)

The majority of Project facilities occur on UNF lands. Likewise, the majority of construction-related PM&S and facility maintenance, including implementation of resource-specific management plans, will occur on UNF lands. Portions of the Project's transmission and distribution system also occur on BLM lands. No construction-related PM&Es are currently proposed, but power line maintenance actions will regularly occur on these BLM lands.

3.2 ACTIONS

PacifiCorp activities and associated Project facilities were assessed to discern actions that might affect Sensitive and Special Status species during the License term. Project staff and License and SA requirements were also queried to develop a list of actions likely to occur (Appendix C). PacifiCorp will typically conduct four categories of actions that could affect Sensitive or Special Status species:

- Construction (e.g., tailrace barrier, Fish Creek fish screen)
- Routine maintenance (e.g., canal brushing, hazard tree removal)
- Special maintenance (e.g., fuel reduction, canal relining)
- Emergency maintenance (e.g., culvert replacement, flume repair)

3.2.1 Construction

Numerous PM&E measures will require construction (see Section 1.3). In contrast to O&M, construction projects are typically non-routine but discrete spatially and temporally. Individual construction projects can commonly last many months. Although of varying magnitude, construction will tend to have the greatest likelihood of causing ground and habitat disturbance, including above ambient noise levels. The following lists examples of License-required construction actions:

Generation and PM&E

- Soda Springs tailrace barrier
- Soda Springs fish ladder
- Fish Creek canal shutoff and drainage system
- Fish Creek fish screen
- Clearwater River reconnection
- White Mule Creek riparian restoration
- Stump Lake Wetland enhancement
- Lemolo 2 tailrace reroute
- Road decommissioning
- Toketee boat launch reconstruction
- Wildlife crossings
- Instream flow facilities and controls

3.2.2 Routine Maintenance

Routine maintenance is ongoing and required to ensure facility integrity and proper functioning (see Section 1.3). Routine maintenance is limited in scope, predictable, and will often occur at regularly scheduled time intervals. Routine tasks are typically conducted over several days to a few weeks, by relatively small numbers of personnel, and with minimal equipment. Routine maintenance can involve small to moderate amounts of repeated ground or habitat disturbance. The following are examples of routinely scheduled maintenance actions:

Transmission and Distribution Lines

- Aerial inspections
- Ground inspections
- Switchyard inspections
- Pole testing and treatment
- Insulator replacement
- Cross arm replacement
- Anchor wire replacement
- Vegetation management
- Noxious weed control
- Hazard tree removal

Generation and Infrastructure

- Waterway inspections
- Road grading and surfacing
- Culvert repair
- Road and bridge maintenance
- Snow removal
- Noxious weed control
- Vegetation management
- Hazard tree removal
- Gauge repair or replacement
- Canal brushing

3.2.3 Special Maintenance

Special maintenance has elements of both routine maintenance and a construction project. That is, special maintenance addresses the integrity and functioning of existing facilities, but is relatively large-scale and infrequent. Larger crews and specialized and heavy equipment can be required. Special maintenance needs can be unpredictable, and an action's duration can often last weeks to months. The following are examples of special maintenance actions:

Transmission and Distribution Lines

- Pole replacement
- Conductor upgrade
- Road reconstruction
- Bridge reconstruction
- Culvert upgrade
- Gate upgrade
- Road grading

Generation and Infrastructure

- Canal gunnite
- Exterior penstock maintenance
- Sediment disposal
- Road reconstruction
- Bridge reconstruction
- Underground utility maintenance
- Control cable clearing

3.2.4 Emergency Maintenance

Routine and special maintenance is designed to avoid, to the greatest extent possible, emergency maintenance (defined as situations that could threaten life, property, or resources). The following unforeseen types of emergency conditions might occur:

Transmission and Distribution Lines

- Structure failure
- Transformer fire
- Wildfire
- Tree fall

Generation and Infrastructure

- Waterway failure
- Hazardous material spill
- Road or culvert failure
- Erosion event

3.3 ACTION EFFECT RATINGS

PacifiCorp actions with the potential to affect Sensitive and Special status species will require pre-disturbance evaluations and prior agency approval. Project actions will have

variable probabilities of affecting Sensitive and Special Status species depending on timing, location, scale, and disturbance levels. Actions causing ground- or habitat-disturbance and above-ambient noise levels have greatest direct potential to affect Sensitive and Special Status species. Visual disturbance from construction activities can also be of concern for breeding birds. Other more routine actions with little/isolated or no ground or habitat disturbance are unlikely to cause significant adverse effects.

Appendix C lists currently identified actions and an estimated rating of each action's potential to affect Sensitive or Special Status species. Estimated ratings are considered preliminary and will be refined in consultation with the FS and BLM during implementation of the Plan. Section 4.0 of the Plan describes procedures to evaluate potential affects of an action. The estimated "potential to affect" ratings adhered to the following definitions:

- No Potential to Affect: No ground or vegetation disturbance, in-water work, or atypical types/use-levels of machinery.
- Low Potential to Affect: Routine ground or vegetation disturbance, or types/use-levels of machinery in previously disturbed areas (e.g., routine maintenance for canal and road brushing, culvert cleaning, and road grading)
- Medium Potential to Affect: Non-routine ground or vegetation disturbance, or types/use-levels of machinery in previously disturbed areas (e.g., special maintenance for canal gunnite, road reconstruction, and vegetative fuel reduction)
- High Potential to Affect: Non-routine ground or vegetation disturbance, in-water work, or types/use-levels of machinery (including blasting) in areas not previously or recently disturbed (e.g., construction of Fish Creek fish screen, road decommissioning, and Lemolo wetland construction)

4.0 SENSITIVE AND SPECIAL STATUS SPECIES EVALUATIONS

4.1 NATIONAL FOREST SYSTEM LANDS

Throughout the License term, the FS will require a BE for all PacifiCorp actions causing ground or habitat disturbance on UNF lands associated with the Project and License. PacifiCorp BEs will address Sensitive Species according to the License and FS policy, which is summarized in Section 2.2 and Appendix A. Protection of ESA-listed species and EFH are addressed in the biological opinions for the License and will not be analyzed in PacifiCorp Sensitive Species BEs. In addition to FS policy, the License provides guidance for Sensitive Species evaluations related ground- or habitat-disturbing actions resulting from implementation of the SA (FS Condition No. 6, SA Section 21.5).

PacifiCorp will conduct a programmatic Sensitive Species BE for actions causing no ground or habitat disturbance (e.g., "No" rating, Appendix C) and routine actions causing minor repeated ground or habitat disturbance often throughout large areas of the Project Boundary (e.g., "Low" rating, Appendix C). The programmatic BE will be produced in consultation with the FS during 2007-2008. PacifiCorp will conduct actions addressed in the completed and approved programmatic BE without additional FS coordination.

An individual Sensitive Species BE will be required for each non-routine action not addressed in the programmatic BE (e.g., a “Medium” or “High” rating, Appendix C). An individual BE will address action- and site-specific effects to Sensitive Species. PacifiCorp will request an initial FS review of each proposed non-routine ground or habitat disturbing action. An initial review is intended to solicit FS guidance for PacifiCorp’s preparation of an upcoming BE. Ideally, PacifiCorp will request an initial review 6-12 months prior to an action’s scheduled start.

A review should specifically address each major grouping of Sensitive Species: aquatic, botanical, and wildlife. To facilitate a review, PacifiCorp will provide the FS with pertinent action-specific information: action description, location maps, design drawings, and schedule. Correspondingly, the FS review should provide PacifiCorp with relevant information establishing BE expectations:

- Documentation requirements
 - Documentation standards
 - Data reporting procedures
 - Report style and format
- Action-specific concerns
 - Potential adverse effects
 - Anticipated action modifications
- Site-specific information
 - Anticipated Sensitive Species and habitat present
 - Available data
 - Previous BEs at or near the action site
- Species-specific requirements
 - Evaluation methods
 - Survey needs and timing
- FS Consultation requirements
 - BE oversight and review process
 - Contact and review personnel

Following the initial review, the FS will notify PacifiCorp in writing (e.g., letter or email) with BE expectations/requirements. PacifiCorp may not proceed with a proposed action until all BE requirements are met and approved by the FS. A BE will follow FS Sensitive Species standards and procedures specified in FSM Sections 2672.42/2672.43 and Appendix A. BEs for License-required wildlife crossings (see SA Section 11.2) and other ground- or habitat-disturbing PM&Es will respectively address an area within 200 feet and 400 feet of the action (see FS Condition No. 6). PacifiCorp will be responsible for completing BEs as directed by the FS, and may elect from several options for conducting a BE:

- Retain FS services
- Contract services of a consultant
- Conduct with qualified PacifiCorp staff
- Combine sources for services

To ensure that standards are maintained, the FS will provide BE methodology, including any necessary field survey and documentation protocols. An example botany BE template is provided in Appendix D. PacifiCorp BEs will follow the 3-step FS process displayed in Appendix A (FSM Section 2672.43):

- Step 1 – Pre-field review of available information
- Step 2 – Field reconnaissance
- Step 3 – Conflict determination

A prefield review will determine if Sensitive Species or habitat are known to occur at the action site. Information will be queried as available from the following sources:

- Known Site Database (KSDB)
- Interagency Species Management System (ISMS)
- Current Vegetation Survey (CVS)
- Botany program survey records
- GIS landscape data
 - Topography
 - Aerial photography
 - Vegetation cover types
 - Stand exams
- Species-habitat models (GAP)

A field reconnaissance could be required based on the pre-field review. Findings of the pre-field review will be documented and the action will proceed if evidence indicates that no Sensitive Species or habitat occur at the site. However, a field reconnaissance will be conducted if a Sensitive Species or its habitat might reasonably occur. The field reconnaissance will utilize FS approved survey methodologies and habitat assessments for the Sensitive Species potentially present at the site. If the reconnaissance reveals that no Sensitive Species or potentially occupied habitats are present, the action will proceed following documentation of both the pre-field review and field reconnaissance steps.

If a sensitive species or suitable habitat is found during the field-reconnaissance, the FS and PacifiCorp will initiate conflict determination (i.e., Step 3, Appendix A). The FS will assess the significance of expected effects/impacts. Modifications to the proposed action will be explored to avoid conflicts and species impacts, and recommendations and final findings will be documented in the BE. The FS will review each completed BE, evaluate recommendations, and direct PacifiCorp according to the findings:

- Action approved as proposed
- Action approved with modification
- Monitoring required
 - Pre-action
 - Post-action

An action will be modified as necessary to minimize impacts to Sensitive Species such that the scope of PacifiCorp's License obligations and SA commitments are neither compromised nor expanded. If a FS recommended modification appears to exceed the intent of the License or SA, pre-action monitoring could be required to determine if or how a proposed action may proceed in the future within limits of PacifiCorp's License obligations. Pre-action monitoring might also be needed if significant uncertainty exists about estimated adverse effects to Sensitive Species or recommended modifications for an action. In addition, post-action monitoring could be required to verify if modifications effectively minimized potential adverse effects or identify if an action caused unanticipated effects.

Excluding actions covered by a programmatic BE, PacifiCorp will not implement a proposed action until the FS provides written approval (e.g., Notice-to-Proceed) indicating that Sensitive Species have been adequately addressed. A Notice-to-Proceed could include terms or conditions of the approval (e.g., action modifications or monitoring) that are required to conserve a Sensitive Species or habitat present at a site. To provide additional resource protection, Sensitive Species data will not be available for general public dissemination, and PacifiCorp will refer data requests to the FS.

4.2 BUREAU OF LAND MANAGEMENT—ADMINISTERED LANDS

BLM Condition No. 9 in the License requires that a PacifiCorp-proposed action on BLM-administered lands associated with and Project and License be evaluated to determine if Special Status Species or their habitats occupy the affected area. PacifiCorp will adhere to Special Status Species policy and procedures when evaluating potential effects of an action proposed on BLM lands. BLM policy is summarized in Section 2.3 and Appendix B of the Plan.

A programmatic approach for evaluating effects to Special Status Species will be proposed for routine PacifiCorp actions that cause minor (i.e., "No" or "Low" rating, Appendix C) surface disturbance on BLM lands. The programmatic evaluation would be produced in consultation with the BLM during 2007-2008 and address the remaining License term. PacifiCorp would conduct actions addressed in the completed programmatic evaluation without additional BLM coordination.

Prior to implementing a "Medium" or "High" rated action, PacifiCorp will first request an initial BLM review to determine if the proposed action might affect Special Status Species or their habitat. A BLM initial review will address Special Status aquatic, botanical, and wildlife species, and identify if a proposed action will require a field clearance. Requests for a BLM review should occur 6-12 months before an action's scheduled start. Modifications to highly sensitive habitats (e.g., old growth forest) might require a two-year prior request to allow adequate survey time. To facilitate the review, PacifiCorp will provide pertinent information about the proposed action (e.g., objectives, location maps, construction drawings, and schedule).

Following an initial review, the BLM will notify PacifiCorp in writing (e.g., letter or email) if a proposed action will require a field clearance (e.g., surveys and management

considerations). If no field clearance is required, the BLM will notify PacifiCorp in writing that the proposed action may proceed without additional Special Status Species considerations. PacifiCorp will be responsible for completing clearances as directed by the BLM, and may elect from several evaluation and clearance options:

- Retain BLM services
- Contract services of a consultant
- Conduct with qualified PacifiCorp staff
- Combine sources for services

To ensure that standards are maintained, the BLM will provide clearance methods, including survey and documentation protocols. Excluding actions addressed by a programmatic evaluation, PacifiCorp will not proceed with a proposed action until clearance requirements have been met and approved by the BLM.

4.3 EMERGENCY PROCEDURES

Emergency maintenance involving ground and habitat disturbance will likely be required during the License term. By definition, emergency maintenance is urgent and must be implemented quickly to avoid or mediate threats to life, property, and resources. Section 3.1 provides examples of emergency maintenance. PacifiCorp will notify the appropriate federal land management agency concurrently when responding to the emergency. Effects to Sensitive and Special Status species will be assessed and documented in coordination with the FS and BLM as soon as possible following the emergency. Required responses to emergencies are defined in PacifiCorp plans and procedures:

- Emergency Action Plan
- PacifiCorp Environmental Management System (EMS) procedures
- Spill Prevention Countermeasure and Control Plan
- SA Section 14.3 to 14.3.3 regarding timely responses to erosive events
- Flow Monitoring Plan
- Erosion Control Plan

5.0 RCP INTEGRATION

The Plan will be integrated with the RCP review and approval process for PacifiCorp actions required by the License. Appropriate RCC parties, as specified in the SA, will specifically coordinate agency review and approval of License actions listed in the RCP (i.e., RCP Exhibit E) and site-specific construction plans (i.e., site plans) per SA Section 21.5. Conversely, PacifiCorp will address actions not specified in the RCP (e.g., routine and special O&M activities) directly with the federal land management agency (i.e., FS or BLM) administering lands on which the action will occur.

Depicted in RCP Figure 5.2-1, the review and approval process for a License-required action is subdivided into six sequential phases:

- Phase I – Preplanning
- Phase II – Annual RCC Meeting
- Phase III – Work Plan Development
- Phase IV – Site Plan and Design Approval
- Phase V – Construction
- Phase VI – Post-Construction

Potential adverse effects to Sensitive and Special Status species will first be considered during Phase II – Annual RCC Meeting. Upcoming License actions will be discussed during the Annual RCC Meeting. Relative to Sensitive and Special Status species, discussions should identify actions requiring ground or habitat disturbance. Ideally, the FS and BLM will notify PacifiCorp during the annual meeting if an upcoming action will require a Sensitive or Special Status species evaluation. Irrespective, notification should occur as early as possible in the six-phase process to allow adequate time to complete Sensitive and Special Status species evaluations without delaying License implementation schedules.

After identifying the need for a Sensitive or Special Status species evaluation, the complexity of the proposed action will be evaluated (See RCP Exhibit E). Depending on complexity, review and approval of the proposed actions will progress through Phase III and Phase IV as appropriate. A low complexity action might progress directly to Phase IV without a work plan or formal site plan. However, work plans and site plans will typically be developed for actions requiring ground-disturbing construction with medium to high complexity. The FS and BLM will participate in work plan development and direct requirements for Sensitive or Special Status species evaluations. A Sensitive or Special Status species requirement will typically be documented on the project work plan and notification forms (see RCP Exhibit G and H).

Regardless of complexity, Sensitive and Special Status species evaluations will be included as a component of an action's environmental permitting and clearance process to be completed during Phase IV. Construction or other ground-disturbing actions cannot commence until necessary Sensitive and Special Status species assessments have been completed and approved according to Section 4.0 of the Plan.

6.0 ANNUAL UPDATES AND REVISIONS

6.1 ANNUAL LIST UPDATES

PacifiCorp will coordinate annually between January and February with the FS and BLM to obtain the most recently updated lists of Sensitive and Special Status species. At that time, PacifiCorp will also request data updates, preferably in GIS or other electronic format, of Sensitive and Special Status species locations, habitat, and areas surveyed. These data will assist with reviewing potential effects of a proposed future PacifiCorp action.

6.2 PLAN REVISIONS

As management needs and regulations change during the course of the License, this Plan may require amendment. PacifiCorp will regularly review the Plan in consultation with the FS and BLM every 10 years beginning in 2016. Nevertheless, the FS, BLM, and PacifiCorp may recommend unscheduled revisions to the Plan at any time. Recommended revisions should be submitted in writing to each signatory of the Plan. Revisions shall not be incorporated into the Plan until the FS, BLM, and PacifiCorp have agreed upon the revision content.

7.0 CONSULTATION SUMMARY

7.1 Forest Service

To develop the Plan, PacifiCorp consulted with FS staff from the Diamond Lake and North Umpqua ranger districts. Consultation included a meeting, general information exchanges, and review of the draft plan. The consultation meeting occurred at the Diamond Lake Ranger District office on August 3, 2006, and focused on defining the Sensitive Species evaluation process, BE requirements, Plan structure, and current Sensitive Species lists. The following personnel attended the meeting:

- Jeff Bohler (Diamond Lake Ranger District Wildlife Program)
- Frank Edelmann (PacifiCorp Terrestrial Program)
- Craig Odegard (Diamond Lake and North Umpqua ranger district Botany Program)
- Craig Street (Diamond Lake Ranger District Fisheries Program)

During June through November 2006, the FS provided PacifiCorp with information and recommendations about UNF Sensitive Species and the BE process. In particular, FS personnel answered questions and provided updated Sensitive Species lists, example BEs, and FS Manual 2600. The following FS personnel provided information and assistance:

- Jeff Bohler (Diamond Lake Ranger District Wildlife Program)
- Sherri Chambers (North Umpqua Ranger District Wildlife Program)
- Ray Davis (UNF Wildlife Program)
- Jeff Dose (UNF Fisheries Program)
- Richard Helliwell (UNF Botany Program)
- Craig Odegard (Diamond Lake and North Umpqua ranger district Botany Program)
- Theresa Stone (UNF Wildlife Program)
- Craig Street (Diamond Lake Ranger District Fisheries Program)

The FS provided comments during an informal and a subsequent formal review of the draft Plan. Sherri Chambers (Wildlife Biologist, North Umpqua Ranger District) received a preliminary draft of the Plan On September 18, 2006, and provided an updated Sensitive Species list for the North Umpqua Ranger District on September 21, 2006.

PacifiCorp distributed the Plan to the FS (Pam Sichting, Hydro Coordinator) on October 3, 2006, for an official 30-day review and comment period. The FS provided formal comments on November 7, 2006, which are listed in Appendix E along with PacifiCorp responses. Significant comments generally focused on four issues:

- Protection measures for the spotted owl and peregrine falcon
- Definitions of PacifiCorp actions requiring programmatic and individual BEs
- Estimates of potential effects to Sensitive Species from PacifiCorp actions
- Magnuson-Stevens Fishery Conservation and Management Act and Essential Fish Habitat evaluations

During November 2006, PacifiCorp and the FS discussed and clarified comments received on November 7, 2006. PacifiCorp revised the draft Plan accordingly and submitted it to the FS on December 6, 2006, for additional review and comment. FS comments, edits, and corrections received on November 7, 2006, were largely addressed as requested and incorporated into the December 6, 2006, draft Plan (Appendix E). In particular, Sections 2.1.2 and 2.1.3 were added to the Plan to address FS comments about protecting peregrine falcons and spotted owls. Section 2.1.3 describes PacifiCorp's requirements under Section 13.3 of the SA to protect the Toketee bald eagle nest and peregrine falcon nests associated with the Project. The FS additionally provided draft management plans for these nests via email on November 14 and 17, 2006. The nest management plans' protection measures were described in Section 2.1.3 of the Plan.

Section 2.1.2 of the Plan was added to describe PacifiCorp obligations under the FWS and NMFS biological opinions to protect ESA-listed species (i.e., the spotted owl and bald eagle) and EFH associated with the Project. The FWS biological opinion specifically mandates protection measures within the incidental take statement, which focuses on preventing disturbance during reproductive periods and protecting nest trees. The NMFS biological opinion mandates EFH conservation measures. For Section 2.2 of the plan, the FS and PacifiCorp agreed that BEs will provide analyses of only Sensitive Species on the Regional Forester's Sensitive Species List, whereas simple summary statements referencing consistency with biological opinion requirements will be provided for ESA-listed species.

Sections 3.2 and 4.1 of the Plan were also significantly adjusted to reflect FS direction that BEs be conducted for all PacifiCorp actions causing ground disturbance. Specifically, PacifiCorp adopted the FS recommendation to conduct a programmatic BE for routine actions with little or no ground disturbance and individual BEs for more significant actions such as construction. As part of this recommendation, the FS adjusted estimated potential effects to Sensitive Species from PacifiCorp actions listed in Appendix C.

Although adopting most FS recommendations, PacifiCorp chose not to incorporate EFH evaluations into the Plan or its BE process for Sensitive Species. FERC addressed MSA and EFH requirements in the Project's License through the NMFS biological opinion and corresponding conservation measures. The MSA is not directly linked to FS Sensitive Species, and EFH evaluations are not required by the FS 4(e) Terms and Conditions in the

License. Furthermore, FS Manual 2600, Chapter 2670 (Threatened, Endangered, and Sensitive Plants and Animals) does not direct MSA compliance as part of the BE process.

On December 15, 2006, the FS submitted comments on the December 6, 2006, draft plan (Appendix E). FS comments primarily requested and recommended clarification for Plan processes and terminology. Clarifications were incorporated into the Plan according to descriptions provided in Appendix E.

7.2 Bureau of Land Management

Although not required by the License, PacifiCorp consulted with the BLM during development of the Plan. The BLM provided updated Special Status Species lists and commented on draft versions of the Plan. From May through November 2006, the BLM's Roseburg District staff provided Special Status Species lists and clarified definitions of species categories. The following BLM personnel from the Roseburg District provided information and assistance:

- Susan Carter (Botany Program)
- Chip Clough (Fisheries Program)
- Dan Couch (Hydro Coordinator)
- Elizabeth Gayner (Wildlife Program)
- Julie Knurowski (Botany Program)

The BLM also informally and formally reviewed drafts of the Plan. On September 10, 2006, PacifiCorp provided a preliminary draft of the Plan to the BLM and requested an informal review. Susan Carter (Botany Program), Elizabeth Gayner (Wildlife Program), and Chip Clough (Fisheries Program) provided informal comments on September 26, 2006, and October 5, 2006. The September 26, 2006, informal comments were incorporated into the revised draft Plan, which was then distributed to the BLM (Dan Couch, Hydro Coordinator) on October 3, 2006, for an official 30-day review and comment period.

The BLM provided formal comments on November 6, 2006 (Appendix E). Comments focused on 1) clarifying the Special Status Species list, 2) referencing the FWS biological opinion issued for the Project, and 3) defining potential affects of hazard tree removal (Appendix E). PacifiCorp adopted each October 5, 2006, and November 6, 2006, recommended revision with only one adjustment. The BLM recommended that potential effects of hazard tree removal specified in Appendix C be distinguished between trees > and < 20-inch dbh (diameter at breast height). After a phone conversation, the BLM and PacifiCorp agreed to adjust the 20-in dbh recommendation to 12-inch dbh to maintain consistency with the FWS biological opinion (Appendix E).

PacifiCorp revised the draft Plan and submitted it to the BLM on December 6, 2006, for additional review and comment. PacifiCorp requested that additional comments be provided by December 18, 2006. No additional comments were received.

8.0 REFERENCES

- Bureau of Land Management (BLM). 2003. (Website). Available at URL = http://www.blm.gov/or/plans/surveyandmanage/Annual_Species_Review/2004/IM_OR-2004-034.pdf.
- Bureau of Land Management (BLM). 2001. BLM Manual 6480 – Special Status Species Management: Release 6-121.
- Federal Energy Regulatory Commission (FERC). 2003a. FERC License Order for the North Umpqua Hydroelectric Project. (FERC Project No. 1927). Washington, DC.
- Federal Energy Regulatory Commission (FERC). 2003b. Final Environmental Impact Statement: North Umpqua Hydroelectric Project. (FERC 1927). Office of Energy Projects FERC/FEIS – 0147F. Washington, DC.
- National Marine Fisheries Service. 2002. Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Action Consultation: North Umpqua Hydroelectric Project No. 1927. NMFS Log No. F/NWR/2002/00509 (December 12, 2002). Seattle, Washington.
- Oregon Natural Heritage Information Center (ONHIC). 2004. Rare, Threatened and Endangered Species of Oregon. Oregon Natural Heritage Information Center, Oregon State University, Portland, Oregon. 105 pp.
- PacifiCorp. 2004a. Aesthetics Management Plan (AMP). North Umpqua Hydroelectric Project (FERC Project No. 1927). Prepared by EDAW, Inc. Seattle, WA.
- PacifiCorp. 2004b. Erosion Control Plan (ECP). North Umpqua Hydroelectric Project (FERC Project No. 1927). Prepared by Washington Infrastructure.
- PacifiCorp. 2004c. Vegetation Management Plan (VMP). North Umpqua Hydroelectric Project (FERC Project No. 1927). Prepared by EDAW, Inc. Seattle, WA.
- PacifiCorp. 2004d. Recreation Resource Management Plan. North Umpqua Hydroelectric Project (FERC Project No. 1927). Prepared by EDAW, Inc. Seattle, WA.
- PacifiCorp. 2004e. Transportation Management Plan. North Umpqua Hydroelectric Project (FERC Project No. 1927). Prepared by EDAW, Inc. Seattle, WA.
- PacifiCorp. 2005. Fire Suppression Plan. (FERC Project No. 1927). Prepared by Barnes & Associates. Roseburg, OR.
- PacifiCorp Energy and EDAW. 2006. Resource Coordination Plan (RCP). (FERC Project No. 1927). Prepared by EDAW, Inc. Seattle, WA.

PacifiCorp Energy. 2006. Historic Properties Management Plan (HPMP) - Final. Prepared for PacifiCorp by EDAW, Seattle, Washington. July 2006.

U.S. Fish and Wildlife Service. 2002. Final Biological Opinion for the North Umpqua Hydroelectric Project. Reference No. 1-15-2002-F1002 (December 13, 2002). Roseburg, Oregon.

U.S. Forest Service. 2005. FSM 2600 – Wildlife, fish, and sensitive plant habitat management, Chapter 2670 – Threatened, Endangered, and Sensitive Plants and Animals, Amendment No.: 2600-2005-1, Effective Date: September 23, 2005. Forest Service Manual national headquarters, Washington, DC.

TABLES

Table 1. Resource-specific management plans for the North Umpqua Hydroelectric Project.

Management Plan	License Requirement
<ul style="list-style-type: none"> • Aesthetics Management Plan (AMP) (PacifiCorp 2004a) • Erosion Control Plan (ECP) (PacifiCorp 2004b) • Recreation Resource Management Plan (RRMP) (PacifiCorp 2004c) • Vegetation Management Plan (VMP) (PacifiCorp 2004d) • Transportation Management Plan (TMP) (PacifiCorp 2004e) • Fire Suppression Plan (FSP) (PacifiCorp 2005) • Historic Properties Management Plan (HPMP) (PacifiCorp Energy 2006) • Flow Monitoring Plan • Soda Springs – Downstream Fish Passage O&M Plan, Downstream Fish Passage Long-Term Monitoring Plan, Upstream Passage Evaluation Plan, Bypass Reach Alluvial Restoration Project Implementation and Monitoring Plan • Slide Creek – Habitat Implementation and Enhancement Plans, Monitoring Plan, Monitoring Plan During Emergency Shutdowns • Fish Creek - Downstream Fish Passage Facility O&M Plan, Upstream Fish Passage and O&M Plans • Lemolo No. 2 – Upstream Fish Passage O&M Plan, Upstream Passage Evaluation Plan • North Umpqua River Habitat Implementation and Monitoring Plans • Gravel Augmentation Implementation Plans • Operations Plan for Passage of Woody Debris • Lemolo Reservoir Management Plan • Wildlife Crossing and Monitoring Plan • Shut-off and Drainage System and O&M Plan • Long-Term Monitoring & Predator Control Plan • Solid Waste and Wastewater Plan • Spill Prevention and Control Plan and Hazardous Material Management Plan • Sensitive Species Plan, Survey and Manage Species Plan • Site-Specific Plans, Construction Plans, Erosion Site Plans (various projects) 	<ul style="list-style-type: none"> Settlement Agreement Section 16.1 Settlement Agreement Section 14.1 Settlement Agreement Section 17.1 Settlement Agreement Section 12.1 Settlement Agreement Section 15.1 FS Term and Condition No. 12 Settlement Agreement Section 18.1 Settlement Agreement Section 5.5 Settlement Agreement Section 4.1 Settlement Agreement Section 8.2 Settlement Agreement Section 4.3 Settlement Agreement Section 4.3 Settlement Agreement Section 8.2, 8.3 Settlement Agreement Section 7.2 Settlement Agreement Section 7.3 Settlement Agreement Section 9.3 Settlement Agreement Section 11.3 Settlement Agreement Section 14.2 Settlement Agreement Section 19.2 FS Term and Condition No. 13 FS Term and Condition No. 14 FS Term and Condition No. 15, 17 Settlement Agreement Section 21.5

Table 2. Sensitive and ESA-listed species documented or suspected to occur on the Umpqua National Forest¹.

Scientific Name	Common Name	Federal/State Status ²	UNF/District Detection ³
Vascular Plants			
<i>Arabis suffrutescens</i> var. <i>horizontalis</i>	Horizontal woody rock-cress	SoC/C	No/NA
<i>Arnica viscosae</i>	Mount Shasta arnica	--/--	Yes/DL, TI
<i>Asplenium septentrionale</i>	Grass fern	--/--	Yes/NU
<i>Botrychium lanceolatum</i>	Lance-leaved grape-fern	--/--	No
<i>Botrychium minganense</i>	Mingan moonwort	--/--	No
<i>Botrychium pumicola</i>	Crater lake grape-fern	--/LT	No
<i>Calamagrostis breweri</i>	Brewer's reedgrass	--/--	No
<i>Calochortus umpquaensis</i>	Umpqua mariposa lilly	SoC/LE	Yes/TI
<i>Carex crawfordii</i>	Crawford's sedge	--/--	No
<i>Carex serratodens</i>	Twotooth sedge	--/--	Yes/TI
<i>Cimicifuga elata</i>	Tall bugbane	--/C	Yes/TI
<i>Collomia mazama</i>	Mount Mazama collomia	--/--	Yes/TI
<i>Cypripedium fasciculatum</i>	Clustered lady's-slipper	SoC/C	Yes/NU
<i>Eucephalus vialis</i> syn. = <i>Aster vialis</i>	Way-side aster	SoC/LT	No
<i>Frasera umpquaensis</i>	Umpqua fraseria	--/C	Yes/TI
<i>Fritillaria glauca</i>	Siskiyou fritillaria	--/--	Yes/NU, TI
<i>Gentiana newberryi</i> var. <i>newberryi</i>	Newberry's gentian	--/--	No
<i>Hazardia whitneyi</i> var. <i>discoidea</i>	Whitney's hazardia	--/--	Yes/DL, TI
<i>Iliamna latibracteata</i>	California globe-mallow	--/--	Yes/NU, TI
<i>Isopyrum stipitatum</i>	Dwarf isopyrum	--/--	No
<i>Kalmiopsis fragrans</i>	North Umpqua kalmiopsis	SoC/--	Yes/DL, NU, TI
<i>Lewisia columbiana</i> var. <i>columbiana</i>	Columbia lewisia	--/--	Yes/NU, TI
<i>Lewisia leana</i>	Quill-leaved lewisia	--/--	No
<i>Lupinus sulphureus</i> Dougl. ssp. <i>kincaidii</i>	Kincaid's sulfur lupine	LT/LT	Yes/TI
<i>Montia howellii</i>	Howell's montia	--/C	No
<i>Ophioglossum pusillum</i>	Adder's tongue	--/--	Yes/DL
<i>Pellaea andromedifolia</i>	Coffee fern	--/--	No
<i>Perideridia erythrorhiza</i>	Red root yampah	SoC/C	No
<i>Plagiobothrys hirtus</i> (Greene) Johnst.	Rough popcornflower	LE/LE	No
<i>Polystichum californicum</i>	California swordfern	--/--	Yes/CG, DL, NU
<i>Romanzoffia thompsonii</i>	Thompson's mistmaiden	--/--	Yes/CG, DL, NU, TI
<i>Scheuchzeria palustris</i> L. var. <i>americana</i> Fern	Rannoch-rush	--/--	Yes/DL
<i>Scirpus subterminalis</i>	Swaying bulrush	--/--	Yes/DL
<i>Wolffia borealis</i>	Northern water-meal	--/--	No
<i>Wolffia columbiana</i>	Columbian water-meal	--/--	No
Fungi			
<i>Boletus pulcherrimus</i>	Satan's Bolete	--/--	Yes/NU
<i>Cortinarius barlowensis</i> (syn. <i>Cortinarius azureus</i>)	Mushroom	--/--	Yes/Uncertain
<i>Cudonia monticola</i>	Earthtongue	--/--	Yes/CG, DL, NU
<i>Gomphus bonarii</i>	Mushroom	--/--	Yes/DL
<i>Gomphus kaufmanii</i>	Mushroom	--/--	Yes/DL, NU
<i>Gyromitra californica</i>	Mushroom	--/--	Yes/DL

Table 2. Sensitive and ESA-listed species documented or suspected to occur on the Umpqua National Forest¹.

Scientific Name	Common Name	Federal/State Status ²	UNF/District Detection ³
<i>Leucogaster citrinus</i>	Truffle	--/--	Yes/Uncertain
<i>Mycena monticola</i>	Mushroom	--/--	Yes/DL
<i>Ramaria amyloidea</i>	Coral fungi	--/--	Yes/DL, NU
<i>Ramaria aurantiisiccescens</i>	Coral fungi	--/--	Yes/DL
<i>Ramaria largentii</i>	Coral fungi	--/--	Yes/DL, NU
Lichen			
<i>Chaenotheca subroscida</i>	Pin lichen	--/--	Yes/TI
<i>Dermatocarpon luridum</i>	Brook lichen	--/--	Yes/DL, NU
<i>Leptogium burnetiae</i> var. <i>hirsutum</i>	Jellyskin lichen	--/--	No
<i>Leptogium cyanescens</i>	Blue jellyskin lichen	--/--	Yes/DL
<i>Nephroma occultum</i>	Cryptic kidney lichen	--/--	Yes/CG, DL, NU
<i>Pannaria rubiginosa</i>	Brown-eyed shingle lichen	--/--	No
<i>Peltigera neckeri</i>	Black saddle lichen	--/--	Yes/DL
<i>Peltigera pacifica</i>	Fringed pelt lichen	--/--	Yes/CG, DL, NU
<i>Pseudocyphellaria rainierensis</i>	Specklebelly lichen	--/--	Yes/CG, NU
<i>Ramalina pollinaria</i>	Chalky ramalina	--/--	No
<i>Usnea longissima</i>	Methuselah's beard lichen	--/--	Yes/CG
Bryophyte			
<i>Encalypta brevicola</i> var. <i>crumiana</i>	Moss	--/--	No
<i>Rhizomnium nudum</i>	Moss	--/--	Yes/DL, NU
<i>Schistostega pennata</i>	Green goblin moss	--/--	Yes/DL
<i>Scouleria marginata</i>	Moss	--/--	Yes/NU
<i>Tetraphis geniculata</i>	Ben-awn moss	--/--	No
Mollusk			
<i>Helminthoglypta hertleini</i>	Oregon shoulderband	--/--	Yes
<i>Monadenia chaceana</i>	Chase sideband	--/--	Yes
<i>Pristiloma arcticum crateris</i>	Craterlake tightcoil	--/--	Yes
Amphibian			
<i>Rana boylei</i>	Foothill yellow-legged frog	SoC/SV	Yes
<i>Rana pretiosa</i>	Oregon spotted frog	C/SC	No
<i>Rhyacotriton variegatus</i>	Southern torrent salamander	SoC/SV	Yes
Reptile			
<i>Clemmys marmorata marmorata</i>	Northwestern pond turtle	SoC/SC	Yes
<i>Lampropeltus getulus</i>	Common kingsnake	--/--	Yes
Birds			
<i>Bucephala albeola</i>	Bufflehead	--/SV	Yes
<i>Coturnicops noveboracensis</i>	Yellow rail	SoC/SV	No
<i>Cypseloides niger</i>	Black swift	--/SP	Yes
<i>Falco peregrinus anatum</i>	American peregrine falcon	--/LE	Yes
<i>Haliaeetus leucocephalus</i>	Bald eagle	LT/LT	Yes
<i>Histrionicus histrionicus</i>	Harlequin duck	SoC/SV	Yes
<i>Strix occidentalis caurina</i>	Northern spotted owl	LT/LT	Yes
Mammals			
<i>Antrozous pallidus pacificus</i>	Pacific pallid bat	SoC/SV	No
<i>Gulo gulo luteus</i>	Wolverine	SoC/LT	Yes
<i>Martes pennanti</i>	Pacific fisher	C/SC	Yes
<i>Myotis thysanodes vespertinus</i>	Pacific fringed myotis	SoC/SV	Yes
<i>Sorex pacificus cascadenis</i>	Pacific shrew	--/--	Yes

Table 2. Sensitive and ESA-listed species documented or suspected to occur on the Umpqua National Forest¹.

Scientific Name	Common Name	Federal/State Status ²	UNF/District Detection ³
Fish			
<i>Oncorhynchus clarki clarki</i>	Oregon coast cutthroat trout	SoC/SV	Yes
<i>Oncorhynchus kisutch</i>	Coho salmon	C/SC	Yes
<i>Oncorhynchus mykiss irideus</i>	Oregon coast steelhead trout	C/SV	Yes
<i>Oncorhynchus tshawytscha</i>	Oregon coast Chinook salmon	--/--	Yes
<i>Oregonichthys kalawatseti</i>	Oregon Umpqua chub	SoC/SV	No
<i>Rhinichthys evermanii</i>	Umpqua dace	--/--	No

¹ Species list was obtained from the Umpqua National Forest (November 2006; Jeff Bohler, Sherri Chambers, Ray Davis, Craig Odegard, and Craig Street).

² Federal/State Status: LE=Listed as Endangered, LT=Listed as Threatened, PE=Proposed as Endangered, PT= Proposed as Threatened, C=Candidate for listing, SC=Critical Sensitive Species, SOC=Species of Concern, SV=Vulnerable Sensitive Species, SP=Peripheral or Naturally Rare, SU=Undetermined Status (Species status obtained from the Oregon Natural Heritage Information Center

(<http://oregonstate.edu/ornhic/index.html>), 2004 updated list).

³ District Detection: CG=Cottage Grove Ranger District, DL=Diamond Lake Ranger District, NU=North Umpqua Ranger District, TI=Tiller Ranger District.

Table 3. Special Status plant species (including Tracking Species) documented or suspected to occur on the Roseburg District of the Bureau of Land Management¹.

Scientific Name	Status	Roseburg District Occurrence
Vascular Plants		
<i>Adiantum jordanii</i>	BLM Assessment	Documented
<i>Arabis koehleri</i> var. <i>koehleri</i>	BLM Sensitive	Documented
<i>Asplenium septentrionale</i>	BLM Assessment	Suspected
<i>Bensoniella oregana</i>	BLM Sensitive	Documented
<i>Calochortus coxii</i>	BLM Sensitive	Documented
<i>Calochortus umpquaensis</i>	BLM Sensitive	Documented
<i>Carex brevicaulis</i>	BLM Assessment	Suspected
<i>Carex comosa</i>	BLM Assessment	Suspected
<i>Carex gynodynamis</i>	BLM Assessment	Documented
<i>Carex serratodens</i>	BLM Assessment	Documented
<i>Cicendia quadrangularis</i>	BLM Assessment	Documented
<i>Cimicifuga elata</i>	BLM Sensitive	Documented
<i>Eschscholzia caespitosa</i>	BLM Assessment	Suspected
<i>Eucephalis vialis</i>	BLM Sensitive	Documented
<i>Festuca elmeri</i>	BLM Assessment	Suspected
<i>Frasera umpquaensis</i>	BLM Sensitive	Suspected
<i>Horkelia congesta</i> ssp. <i>congesta</i>	BLM Sensitive	Documented
<i>Horkelia tridentata</i> ssp. <i>tridentata</i>	BLM Assessment	Suspected
<i>Iliamna latibracteata</i>	BLM Assessment	Suspected
<i>Kalmiopsis fragrans</i>	BLM Sensitive	Suspected
<i>Lathyrus holochlorus</i>	BLM Sensitive	Suspected
<i>Limnanthes gracilis</i> var. <i>gracilis</i>	BLM Sensitive	Documented
<i>Lupinus sulphureus</i> ssp. <i>kincaidii</i>	Federal Threatened	Documented
<i>Pellaea andromedaefolia</i>	BLM Assessment	Documented
<i>Perideridia erythrorhiza</i>	BLM Sensitive	Documented
<i>Plagiobothrys hirtus</i>	Federal Endangered	Documented
<i>Polystichum californicum</i>	BLM Assessment	Documented
<i>Romanzoffia thompsonii</i>	BLM Sensitive	Documented
<i>Scirpus subterminalis</i>	BLM Assessment	Suspected
<i>Sisyrinchium hitchcockii</i>	BLM Sensitive	Documented
<i>Utricularia gibba</i>	BLM Assessment	Suspected
<i>Utricularia minor</i>	BLM Assessment	Suspected
<i>Wolffia borealis</i>	BLM Assessment	Documented
<i>Wolffia columbiana</i>	BLM Assessment	Suspected
<i>Ammannia robusta</i>	BLM Tracking	Suspected
<i>Astragalus umbraticus</i>	BLM Tracking	Documented
<i>Botrychium minganense</i>	BLM Tracking	Suspected
<i>Camissonia ovata</i>	BLM Tracking	Suspected
<i>Carex barbarae</i>	BLM Tracking	Documented
<i>Carex leptalea</i> sp. <i>leptalea</i>	BLM Tracking	Suspected
<i>Cypripedium californicum</i>	BLM Tracking	Documented
<i>Cypripedium montanum</i>	BLM Tracking	Documented
<i>Dichelostemma ida-maia</i>	BLM Tracking	Documented
<i>Enemion stipitatum</i>	BLM Tracking	Documented
<i>Epilobium luteum</i>	BLM Tracking	Suspected
<i>Epilobium palustre</i>	BLM Tracking	Suspected
<i>Erigeron cascadenis</i>	BLM Tracking	Suspected
<i>Euonymus occidentalis</i>	BLM Tracking	Documented

Table 3. Special Status plant species (including Tracking Species) documented or suspected to occur on the Roseburg District of the Bureau of Land Management¹.

Scientific Name	Status	Roseburg District Occurrence
<i>Hazardia whitneyi</i> var. <i>discoidea</i>	BLM Tracking	Suspected
<i>Helianthella californica</i> var. <i>nevadensis</i>	BLM Tracking	Suspected
<i>Lewisia cotyledon</i> var. <i>howellii</i>	BLM Tracking	Documented
<i>Linanthus bakeri</i>	BLM Tracking	Suspected
<i>Lycopodium annotinum</i>	BLM Tracking	Suspected
<i>Mimulus douglasii</i>	BLM Tracking	Documented
<i>Mimulus kelloggii</i>	BLM Tracking	Documented
<i>Minuartia californica</i>	BLM Tracking	Suspected
<i>Montia howellii</i>	BLM Tracking	Documented
<i>Navarretia tagetina</i>	BLM Tracking	Suspected
<i>Phacelia verna</i>	BLM Tracking	Documented
<i>Sedum laxum</i> ssp. <i>heckneri</i>	BLM Tracking	Suspected
<i>Sedum spathulifolium</i> ssp. <i>purdyi</i>	BLM Tracking	Documented
<i>Sidalcea cusickii</i>	BLM Tracking	Documented
<i>Vaccinium oxycoccos</i>	BLM Tracking	Suspected
<i>Verbena hastata</i>	BLM Tracking	Suspected
Bryophytes		
<i>Chiloscyphus gemmiparus</i>	BLM Sensitive	Suspected
<i>Crumia latifolia</i>	BLM Assessment	Documented
<i>Diplophyllum plicatum</i>	BLM Assessment	Suspected
<i>Funaria Muhlenbergii</i>	BLM Assessment	Documented
<i>Pseudoleskeella serpentinensis</i>	BLM Assessment	Documented
<i>Schistostega pennata</i>	BLM Assessment	Suspected
<i>Tayloria serrata</i>	BLM Assessment	Documented
<i>Tetraphis geniculata</i>	BLM Assessment	Suspected
<i>Tetraplodon mnioides</i>	BLM Assessment	Suspected
<i>Trematodon boasi</i>	BLM Sensitive	Suspected
<i>Tripterocladium leucocladulum</i>	BLM Assessment	Suspected
<i>Cephaloziella spinigera</i>	BLM Tracking	Suspected
<i>Fabronia pussila</i>	BLM Tracking	Documented
<i>Fissidens grandifrons</i>	BLM Tracking	Suspected
<i>Fissidens pauperculus</i>	BLM Tracking	Documented
<i>Grimmia anomala</i>	BLM Tracking	Suspected
<i>Scouleria marginata</i>	BLM Tracking	Suspected
<i>Tortula mucronifolia</i>	BLM Tracking	Suspected
Lichens		
<i>Bryoria subcana</i>	BLM Assessment	Suspected
<i>Calicium adspersum</i>	BLM Assessment	Suspected
<i>Lobaria linita</i>	BLM Assessment	Suspected
<i>Pannaria rubiginosa</i>	BLM Assessment	Suspected
<i>Pilophorus nigricaulis</i>	BLM Assessment	Suspected
<i>Stereocaulon spathuliferum</i>	BLM Assessment	Suspected
<i>Sulcaria badia</i>	BLM Assessment	Documented
<i>Buellia oidalea</i>	BLM Tracking	Suspected
<i>Calicium abietinum</i>	BLM Tracking	Documented
<i>Cetrelia cetrarioides</i>	BLM Tracking	Suspected
<i>Chaenotheca ferruginea</i>	BLM Tracking	Documented
<i>Chaenotheca furfuracea</i>	BLM Tracking	Documented
<i>Chaenothecopsis pusilla</i>	BLM Tracking	Documented
<i>Dermatocarpon luridum</i>	BLM Tracking	Documented

Table 3. Special Status plant species (including Tracking Species) documented or suspected to occur on the Roseburg District of the Bureau of Land Management¹.

Scientific Name	Status	Roseburg District Occurrence
<i>Hypogymnia duplicata</i>	BLM Tracking	Suspected
<i>Lecanora pringlei</i>	BLM Tracking	Suspected
<i>Lecidea dolodes</i>	BLM Tracking	Suspected
<i>Leptogium cyanescens</i>	BLM Tracking	Documented
<i>Leptogium rivale</i>	BLM Tracking	Documented
<i>Leptogium teretiusculum</i>	BLM Tracking	Documented
<i>Nephroma occultum</i>	BLM Tracking	Documented
<i>Parmelina quercina</i>	BLM Tracking	Suspected
<i>Peltula euploca</i>	BLM Tracking	Suspected
<i>Platismatia lacunosa</i>	BLM Tracking	Documented
<i>Pseudocyphellaria perpetua</i>	BLM Tracking	Suspected
<i>Pseudocyphellaria rainierensis</i>	BLM Tracking	Documented
<i>Pseudocyphellaria sp. 1</i>	BLM Tracking	Suspected
<i>Usnea hesperina</i>	BLM Tracking	Suspected
<i>Usnea longissima</i>	BLM Tracking	Documented
<i>Vezdaea stipitata</i>	BLM Tracking	Documented
Fungi		
<i>Arcangeliella camphorata</i>	BLM Sensitive	Suspected
<i>Bridgeoporus nobilissimus</i>	BLM Sensitive	Suspected
<i>Dermocybe humboldtensis</i>	BLM Sensitive	Documented
<i>Phaeocollybia californica</i>	BLM Sensitive	Documented
<i>Phaeocollybia gregaria</i>	BLM Sensitive	Suspected
<i>Phaeocollybia olivacea</i>	BLM Sensitive	Documented
<i>Phaeocollybia oregonensis</i>	BLM Sensitive	Suspected
<i>Ramaria spinulosa var. diminutiva</i>	BLM Sensitive	Documented
<i>Rhizopogon chamalelontinus</i>	BLM Sensitive	Suspected
<i>Rhizopogon exiguus</i>	BLM Sensitive	Suspected
<i>Albatrellus ellisii</i>	BLM Tracking	Documented
<i>Cazia flexiascus</i>	BLM Tracking	Suspected
<i>Choiromyces alveolatus</i>	BLM Tracking	Suspected
<i>Clavariadelphus sachalinensis</i>	BLM Tracking	Suspected
<i>Clavariadelphus subfastigiatus</i>	BLM Tracking	Documented
<i>Cudonia monticola</i>	BLM Tracking	Documented
<i>Endogone oregonensis</i>	BLM Tracking	Documented
<i>Glomus pubescens</i>	BLM Tracking	Suspected
<i>Gomphus bonarii</i>	BLM Tracking	Documented
<i>Gomphus kauffmanii</i>	BLM Tracking	Documented
<i>Gymnomyces monosporus</i>	BLM Tracking	Documented
<i>Gyromitra californica</i>	BLM Tracking	Suspected
<i>Helvella crassitunicata</i>	BLM Tracking	Suspected
<i>Helvella elastica</i>	BLM Tracking	Documented
<i>Helvella maculate</i>	BLM Tracking	Suspected
<i>Hygrophorus albicarneus</i>	BLM Tracking	Suspected
<i>Leucogaster citrinus</i>	BLM Tracking	Documented
<i>Mycena quinaultensis</i>	BLM Tracking	Suspected
<i>Nolanea verna var. isodiametrica</i>	BLM Tracking	Suspected
<i>Otidea smithii</i>	BLM Tracking	Documented
<i>Phaeocollybia attenuata</i>	BLM Tracking	Documented
<i>Phaeocollybia dissiliens</i>	BLM Tracking	Suspected
<i>Phaeocollybia piceae</i>	BLM Tracking	Suspected

Table 3. Special Status plant species (including Tracking Species) documented or suspected to occur on the Roseburg District of the Bureau of Land Management¹.

Scientific Name	Status	Roseburg District Occurrence
<i>Phaeocollybia pseudofestiva</i>	BLM Tracking	Suspected
<i>Phaeocollybia scatesiae</i>	BLM Tracking	Suspected
<i>Phaeocollybia sipei</i>	BLM Tracking	Suspected
<i>Phaeocollybia spadicea</i>	BLM Tracking	Documented
<i>Plectania milleri</i>	BLM Tracking	Suspected
<i>Psathyrella quercicola</i>	BLM Tracking	Suspected
<i>Ramaria abietina</i>	BLM Tracking	Documented
<i>Ramaria amyloidea</i>	BLM Tracking	Suspected
<i>Ramaria aurantiisiccescens</i>	BLM Tracking	Suspected
<i>Ramaria botryis</i> var. <i>aurantiiramosa</i>	BLM Tracking	Suspected
<i>Ramaria concolor</i> f. <i>tsugina</i>	BLM Tracking	Suspected
<i>Ramaria conjunctipes</i> var. <i>sparsiramosa</i>	BLM Tracking	Suspected
<i>Ramaria coulterae</i>	BLM Tracking	Suspected
<i>Ramaria gelatinaurantia</i>	BLM Tracking	Suspected
<i>Ramaria lagentii</i>	BLM Tracking	Documented
<i>Ramaria rubribrunnescens</i>	BLM Tracking	Suspected
<i>Ramaria suecica</i>	BLM Tracking	Documented
<i>Ramaria thiersii</i>	BLM Tracking	Suspected
<i>Rhizopogon brunneiniger</i>	BLM Tracking	Suspected
<i>Rhizopogon clavitisporus</i>	BLM Tracking	Suspected
<i>Rhizopogon flavofibrillosus</i>	BLM Tracking	Documented
<i>Rhizopogon truncatus</i>	BLM Tracking	Documented
<i>Rhizopogon variabilisporus</i>	BLM Tracking	Suspected
<i>Sarcodon fuscoindicus</i>	BLM Tracking	Documented
<i>Sarcosoma latahense</i>	BLM Tracking	Suspected
<i>Sowerbyella rhenana</i>	BLM Tracking	Documented

¹ Source: BLM Roseburg District Special Status Species list as of September 2005 and Tracking Species list as of February 2006 (Julie Knurowski and Susan Carter).

Table 4. Special Status vertebrate and invertebrate species (including Tracking Species) documented or suspected to occur on Roseburg District of the Bureau of Land Management¹.

Scientific Name	Common Name	Status	Roseburg District Occurrence
Amphibian and Reptiles			
<i>Aneides ferreus</i>	Clouded salamander	BLM Tracking	Documented
<i>Ascaphus truei</i>	Tailed frog	BLM Tracking	Documented
<i>Batrachoseps wrighti</i>	Oregon slender salamander	BLM Tracking	Documented
<i>Clemmys marmorata marmorata</i>	Northwestern pond turtle	BLM Sensitive	Documented
<i>Contia tenuis</i>	Sharp tailed snake	BLM Tracking	Documented
<i>Plethodon elongates</i>	Del Norte salamander	BLM Tracking	Documented
<i>Lampropeltis getula</i>	Common kingsnake	BLM Tracking	Documented
<i>Lampropeltis zonata</i>	California mountain kingsnake	BLM Tracking	Documented
<i>Rana boylei</i>	Foothill yellow-legged frog	BLM Assessment	Documented
<i>Rana cascadae</i>	Cascades frog	BLM Tracking	Documented
<i>Rhyacotriton variegatus</i>	Southern torrent (seep) salamander	BLM Tracking	Documented
Birds			
<i>Accipiter gentiles</i>	Northern goshawk	BLM Sensitive	Documented
<i>Brachyramphus marmoratus</i>	Marbled murrelet	Federal Threatened	Documented
<i>Chordeiles minor</i>	Common nighthawk	BLM Tracking	Documented
<i>Contopus cooperi</i>	Olive-sided flycatcher	BLM Tracking	Documented
<i>Dryocopus pileatus</i>	Pileated woodpecker	BLM Tracking	Documented
<i>Elanus leucurus</i>	White-tailed kite	BLM Assessment	Documented
<i>Empidonax traillii brewsteri</i>	Willow flycatcher	BLM Tracking	Documented
<i>Falco peregrinus anatum</i>	American peregrine falcon	BLM Sensitive	Documented
<i>Haliaeetus leucocephalus</i>	Bald eagle	Federal Threatened	Documented
<i>Histrionicus histrionicus</i>	Harlequin duck	BLM Assessment	Documented
<i>Icteria virens</i>	Yellow-breasted chat	BLM Tracking	Documented
<i>Melanerpes formicivorus</i>	Acorn woodpecker	BLM Tracking	Documented
<i>Melanerpes lewis</i>	Lewis' woodpecker	BLM Sensitive	Documented
<i>Poocetes gramineus affinis</i>	Oregon vesper sparrow	BLM Sensitive	Suspected
<i>Progne subis</i>	Purple martin	BLM Sensitive	Suspected
<i>Sialia mexicana</i>	Western bluebird	BLM Tracking	Suspected
<i>Sitta carolinensis aculeata</i>	Slender-billed nuthatch	BLM Tracking	Documented
<i>Strix nebulosa</i>	Great gray owl	BLM Tracking	Documented
<i>Strix occidentalis caurina</i>	Northern spotted owl	Federal Threatened	Documented
Mammals			
<i>Antrozous pallidus</i>	Pallid bat	BLM Assessment	Documented
<i>Antrozous pallidus pacificus</i>	Pacific pallid bat	BLM Assessment	Documented
<i>Arborimus albipes</i>	White-footed vole	BLM Tracking	Documented
<i>Arborimus longicaudus longicaudus</i>	Oregon red tree vole	BLM Tracking	Documented
<i>Bassariscus astutus</i>	Ringtail	BLM Tracking	Documented
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	BLM Sensitive	Documented
<i>Lasionycteris noctivagans</i>	Silver-haired bat	BLM Tracking	Documented
<i>Lasiurus cinereus</i>	Hoary bat	BLM Tracking	Documented
<i>Martes americana</i>	American Marten	BLM Tracking	Suspected
<i>Martes pennanti pacifica</i>	Fisher	Federal Candidate	Suspected ²
<i>Myotis californicus</i>	California myotis	BLM Tracking	Documented
<i>Myotis evotis</i>	Long-eared myotis	BLM Tracking	Documented

Table 4. Special Status vertebrate and invertebrate species (including Tracking Species) documented or suspected to occur on Roseburg District of the Bureau of Land Management¹.

Scientific Name	Common Name	Status	Roseburg District Occurrence
<i>Myotis thysanodes</i>	Fringed myotis	BLM Assessment	Documented
<i>Myotis volans</i>	Long-legged myotis	BLM Tracking	Documented
<i>Myotis yumanensis</i>	Yuma myotis	BLM Tracking	Documented
<i>Odocoileus virginianus leucurus</i>	Columbian white-tailed deer	BLM Sensitive	Documented
<i>Sciurus griseus</i>	Western gray squirrel	BLM Tracking	Documented
<i>Tadarida brasiliensis</i>	Brazilian free-tailed bat	BLM Tracking	Documented
Fish			
<i>Oncorhynchus clarki clarki</i>	Oregon coast cutthroat trout	Federal Candidate	Documented
<i>Oncorhynchus kisutch</i>	Coho salmon		Documented
<i>Oncorhynchus mykiss irideus</i>	Oregon coast steelhead trout	Federal Candidate	Documented
<i>Oncorhynchus tshawytscha</i>	Oregon coast Chinook salmon		Documented
Invertebrates			
<i>Anodonta oregonensis</i>	Oregon floater (mussel)	BLM Tracking	Documented
<i>Gonidea angulata</i>	Western Ridge mussel	BLM Tracking	Documented
<i>Margaritifera falcata</i>	Western pearlshell	BLM Tracking	Documented
<i>Branchinecta lynchi</i>	Vernal pool fairy shrimp	Federal Threatened	Unknown
<i>Helminthoglypta hertleini</i>	Oregon shoulderband (Snail)	BLM Sensitive	Documented
<i>Lanx subrotunda</i>	Rotund lanx (snail)	BLM Sensitive	Documented
<i>Megomphix hemphilli</i>	Oregon megomphix (snail)	BLM Tracking	Documented
<i>Monadenia fidelis beryllica</i>	Green sideband (snail)	BLM Sensitive	Documented
<i>Pristiloma arcticum crateris</i>	Crater Lake tightcoil (snail)	BLM Sensitive	Documented
<i>Pristiloma johnsoni</i>	Broadwhorl tightcoil (snail)	BLM Tracking	Suspected
<i>Pristinicola hemphilli</i>	Pristine springsnail	BLM Tracking	Documented
<i>Prophysaon sp.nov.</i>	Klamath tail-dropper (slug)	BLM Sensitive	Documented
<i>Prophysaon vanattaie pardalis</i>	Spotted tail-dropper (slug)	BLM Sensitive	Suspected
<i>Polymerus castilleia</i>	Indian paintbrush bug	BLM Tracking	Suspected
<i>Driloleirus (=Megascolides) macelfreshi</i>	Oregon giant earthworm	BLM Sensitive	Suspected ²

¹ Source: BLM Roseburg District Special Status and Tracking species lists as of March 14, 2005 (Elizabeth Gayner [Wildlife] and Chip Clough [Fisheries])

² Addition of species to Roseburg District Special Status Species list is pending review based on recent probable sightings (2006) within close proximity to or on District.

APPENDICIES

Appendix A. Forest Service process for conducting Biological Evaluations for Sensitive Species (reproduced from of Forest Service Manual 2600).

2672.32 - Forest Plan Objectives for Sensitive Species. For sensitive species, include objectives in Forest plans to ensure viable populations throughout their geographic ranges. Once the objectives are accomplished and viability is no longer a concern, species shall not have "sensitive" status.

2672.4 - Biological Evaluations. Review all Forest Service planned, funded, executed, or permitted programs and activities for possible effects on endangered, threatened, proposed, or sensitive species. The biological evaluation is the means of conducting the review and of documenting the findings. Document the findings of the biological evaluation in the decision notice. Where decision notices are not prepared, document the findings in Forest Service files. The biological evaluation may be used or modified to satisfy consultation requirements for a biological assessment of construction projects requiring an environmental impact statement.

2672.41 - Objectives of the Biological Evaluation

1. To ensure that Forest Service actions do not contribute to loss of viability of any native or desired non-native plant or contribute to animal species or trends toward Federal listing of any species.
2. To comply with the requirements of the Endangered Species Act that actions of Federal agencies not jeopardize or adversely modify critical habitat of Federally listed species.
3. To provide a process and standard by which to ensure that threatened, endangered, proposed, and sensitive species receive full consideration in the decisionmaking process.

2672.42 - Standards for Biological Evaluations

In order to meet professional standards, biological evaluations must be conducted or reviewed by journey or higher level biologists or botanists (FSM 2634). Biological evaluations shall include the following:

1. An identification of all listed, proposed, and sensitive species known or expected to be in the project area or that the project potentially affects. Contact the Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) as part of the informal consultation process for a list of endangered, threatened, or proposed species that may be present in the project area.

2. An identification and description of all occupied and unoccupied habitat recognized as essential for listed or proposed species recovery, or to meet Forest Service objectives for sensitive species.

3. An analysis of the effects of the proposed action on species or their occupied habitat or on any unoccupied habitat required for recovery.

4. A discussion of cumulative effects resulting from the planned project in relationship to existing conditions and other related projects.

5. A determination of no effect, beneficial effect, or "may" effect on the species and the process and rationale for the determination, documented in the environmental assessment or the environmental impact statement.

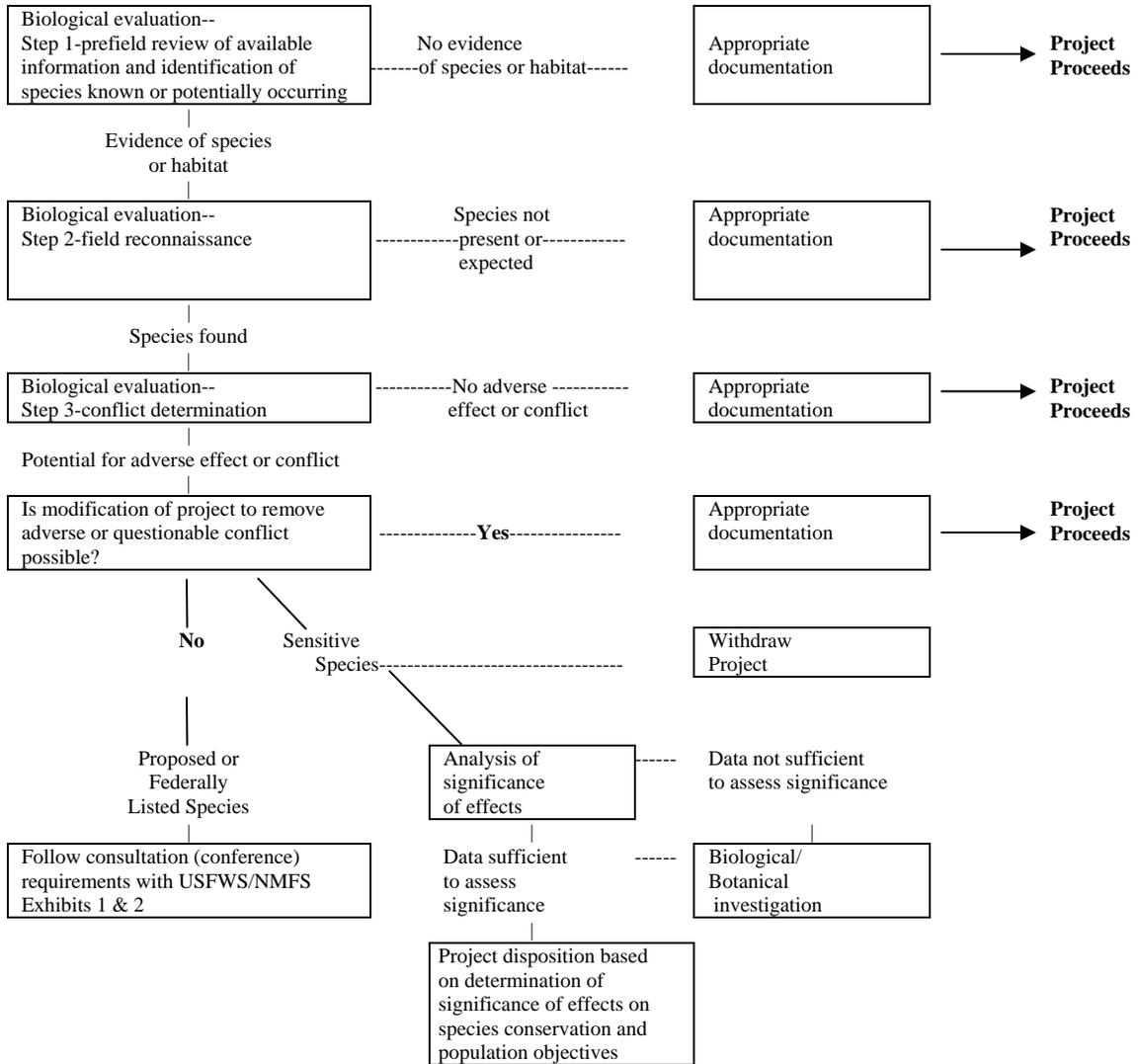
6. Recommendations for removing, avoiding, or compensating for any adverse effects.

7. A reference of any informal consultation with the Fish and Wildlife Service as well as a list of contacts, contributors, sources of data, and literature references used in developing the biological evaluation.

2672.43 - Procedure for Conducting Biological Evaluations. A suggested procedure for conducting and documenting findings of a biological evaluation is outlined in exhibit 1.

2672.43 - Exhibit 01

BIOLOGICAL EVALUATION PROCESS - THREATENED, ENDANGERED, PROPOSED AND SENSITIVE SPECIES PROJECT PROPOSAL



Appendix B. Bureau of Land Management Special Status Species Policy reproduced from BLM Manual 6840.

BLM MANUAL- 6840 SPECIAL STATUS SPECIES MANAGEMENT
Rel. 6-121 (1/19/01) Supersedes Rel. 6-116

.06 Policy. The policy of the BLM is described below.

A. Federally Listed Threatened and Endangered Species and Designated Critical Habitats.

1. The BLM shall conserve listed species and the ecosystems upon which they depend and shall use existing authority in furtherance of the purposes of the ESA.

Specifically the BLM shall:

- a. Determine, to the extent practicable, the occurrence, distribution, population dynamics and habitat condition of all listed species on lands administered by BLM, and evaluate the significance of lands administered by BLM in the conservation of those species.
- b. Ensure management plans and programs provide for the conservation of designated critical habitat on lands administered by the BLM.
- c. Develop and implement management plans and programs that will conserve listed species and their habitats.
- d. Monitor and evaluate ongoing management activities to ensure conservation objectives for listed species are being met.
- e. Ensure that all activities affecting the populations and habitats of listed species are designed to be consistent with recovery needs and objectives.
- f. Implement mandatory terms and conditions and reasonable and prudent alternatives as outlined in final biological opinions.
- g. Implement conservation recommendations included in biological opinions if they are consistent with BLM land use planning and policy and they are technologically and economically feasible.

2. Ensure that all actions authorized, funded, or carried out by the BLM are in compliance with the ESA. To accomplish this, the BLM shall:

- a. Evaluate all proposed actions to determine if individuals or populations of listed species or their habitat, including designated critical habitat, may be affected.

b. Initiate consultation with the FWS and/or NMFS, including preparation of biological assessments, as appropriate, for those actions that may affect listed species or their habitats.

c. Until the consultation proceedings are completed and a final biological opinion has been issued, BLM shall not carry out any action that would cause an irreversible or irretrievable commitment of resources such that it would foreclose the formulation or implementation of any reasonable and prudent alternative measure that might avoid jeopardy to listed species and/or prevent the adverse modification of critical habitat.

d. Ensure that BLM actions will not reduce the likelihood of survival and recovery of any listed species or destroy or adversely modify their designated critical habitat.

3. Cooperate with the FWS and NMFS in planning and providing for the recovery of listed species. To accomplish this, the BLM shall:

a. As appropriate, participate on recovery teams and in recovery plan preparation, in addition to participating on State or regional working teams responsible for listed species recovery.

b. Review technical and agency drafts of recovery plans for species affected by BLM management to ensure that proposed actions assigned to BLM are technically and administratively feasible and consistent with BLM's mission and authority.

c. Cooperate with FWS and NMFS and non-Federal entities, as appropriate, in preparation of Habitat Conservation Plans.

d. Ensure that decisions, standards and guidelines, and best management practices in resource management plans and site-specific plans prepared for lands covered by previously approved recovery plans are consistent with meeting recovery plan objectives and terms and conditions of applicable biological opinions.

4. Retain in Federal ownership all habitat essential for the survival and recovery of any listed species, including habitat that was used historically, that has retained its potential to sustain listed species, and is deemed to be essential to their survival.

B. Federally Proposed Species and Proposed Critical Habitats. The BLM shall manage species proposed for listing as threatened or endangered and proposed critical habitat with the same level of protection provided for listed species and designated critical habitat except that formal consultations are not required. Specifically, the BLM shall:

1. Confer with the FWS and/or NMFS on any action that is likely to adversely affect a proposed species or proposed critical habitat.
2. Until the conference proceedings are completed, BLM shall not carry out any action that would cause an irreversible or irretrievable commitment of resources such that it would foreclose the formulation or implementation of a reasonable and prudent alternative that might avoid jeopardy to the proposed species and/or prevent the adverse modification of proposed critical habitat.

C. Candidate Species. Consistent with existing laws, the BLM shall implement management plans that conserve candidate species and their habitats and shall ensure that actions authorized, funded, or carried out by the BLM do not contribute to the need for the species to become listed. Specifically, BLM shall:

1. In coordination with FWS and/or NMFS determine, to the extent practicable, the distribution, population dynamics, current threats, abundance, and habitat needs for candidate species occurring on lands administered by the BLM; evaluate the significance of lands administered by the BLM or actions undertaken by the BLM in maintaining and restoring those species.
2. For candidate species where lands administered by the BLM or BLM authorized actions have a significant effect on their status, manage the habitat to conserve the species by:
 - a. Ensuring candidate species are appropriately considered in land use plans (BLM 1610 Planning Manual and Handbook, Appendix C).
 - b. Developing, cooperating with, and implementing range-wide or site-specific management plans, conservation strategies, and assessments for candidate species that include specific habitat and population management objectives designed for conservation, as well as management strategies necessary to meet those objectives.
 - c. Ensuring that BLM activities affecting the habitat of candidate species are carried out in a manner that is consistent with the objectives for managing those species.
 - d. Monitoring populations and habitats of candidate species to determine whether management objectives are being met.
3. Request technical assistance from the FWS and/or NMFS, and other qualified sources, on any planned action that may contribute to the need to list a candidate species as threatened or endangered.

D. State Listed Species. The BLM shall carry out management for the conservation of State listed plants and animals. State laws protecting these species apply to all BLM programs and

actions to the extent that they are consistent with the Federal Land Policy and Management Act (43 U.S.C. 1701 et seq.) and other Federal laws. In states where the State government has or proposes species in categories such as State threatened or endangered, implying potential endangerment or extinction, State Directors will develop policies that will assist States in achieving their management objectives for those species.

E. Sensitive Species. State Directors, generally in cooperation with State agencies that are responsible for fisheries, wildlife and botanical resources and State Natural Heritage programs, shall designate BLM sensitive species. The Director in some cases, may designate BLM sensitive species. The protection provided by the policy for candidate species shall be used as the minimum level of protection for BLM sensitive species. The State Director shall establish the process for developing, reviewing, maintaining and coordinating with other agencies, organizations, and States to ensure the accuracy and completeness of the state's BLM sensitive species list. The sensitive species designation is normally used for species that occur on Bureau administered lands for which BLM has the capability to significantly affect the conservation status of the species through management. The State Director may designate additional categories of special status species as appropriate and applicable to his or her state's needs. The sensitive species designation, for species other than federally listed, proposed, or candidate species, may include such native species as those that:

1. could become endangered in or extirpated from a state, or within a significant portion of its distribution in the foreseeable future,
2. are under status review by FWS and/or NMFS,
3. are undergoing significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution,
4. are undergoing significant current or predicted downward trends in population or density such that federally listed, proposed, candidate, or State listed status may become necessary,
5. have typically small and widely dispersed populations,
6. are inhabiting ecological refugia, specialized or unique habitats, or
7. are State listed but which may be better conserved through application of BLM sensitive species status. Such species should be managed to the level of protection required by State laws or under the BLM policy for candidate species, whichever would provide better opportunity for its conservation.

Appendix C. PacifiCorp actions and a preliminary estimate of potential to affect Sensitive and Special Status species.

The following table specifies PacifiCorp actions proposed to occur during the License term and provides an estimated likelihood for the action to affect Sensitive and Special Status species. PacifiCorp will contact the appropriate agency to determine the likelihood of effects for proposed actions not listed in the table.

Document Reference¹	PacifiCorp Action	Potential to Adversely Affect²
Construction		
Aquatic Resources		
SA 4.1.1 (a)	Design upstream fish passage facilities	No
SA 4.1.1 (b)	Install a video camera and video recording system to count fish at the Soda Springs fish ladder	No
SA 4.1.1 (e)	Provide upstream fish passage facilities at Soda Springs Dam	High
SA 4.1.1 (f)	Design and provide tailrace barriers at Soda Springs powerhouse	High
SA 4.1.1 (f)	Design and provide tailrace barriers at Slide Creek	High
SA 4.1.2 (a)	Design downstream fish passage facilities at Soda Springs	No
SA 4.1.2 (e)	Provide downstream fish passage facilities at Soda Springs Dam	High
SA 4.1.2 (f)	Improve downstream fish passage over the spillway at Soda Springs Dam	Medium
SA 4.3.1 a.	Modify upstream fish passage facilities at Lemolo No. 2	Medium
SA 4.3.2 a	Install a fish screen at the Fish Creek intake	High
SA 5.5	Install and maintain gauge stations at the head of the bypass reaches to monitor compliance with the instream flow regimes	Medium
SA 6.1	Reroute Lemolo No. 2 powerhouse peaking flows (via a pipe to Stinkhole)	High
SA 6.9	Evaluate the current bypass flow configuration at Slide Creek powerhouse; if necessary, install a new emergency bypass valve to prevent adverse impacts to aquatic resources during emergency shutdowns	Low
SA 7.5	Design reconnections of Clearwater River to the Toketee bypass reach, as well as the modification of Clearwater 1 Dam at Stump Lake, to allow passage of sediment and woody debris during high-flow events	Medium
SA 8.2	Enhance spawning habitat in the area from Slide Creek powerhouse upstream to the confluence of Fish Creek	Low
SA 8.2.4	Place boulders at Slide Creek to evaluate how gravel deposits are affected by different boulder sizes and configurations under the full range of existing flow regimes	Low
SA 10.2	Design and construct a crossing structure at Stump Lake Dam (for amphibians and macroinvertebrates)	Medium
SA 10.3	Design and construct a structure to reconnect the Clearwater and North Umpqua rivers	Medium
SA 10.4	Remove existing diversion structures on tributaries along Lemolo Nos. 1 and 2 waterways	Medium
SA 10.5	Restore riparian habitat along White Mule Creek	Medium
SA 10.6	Reconnect Priority 1 and 2 aquatic sites (intercepted tributaries and drainages)	Medium
Terrestrial Resources		
SA 11.2	Install 34 new wildlife crossings to maximize wildlife movement	Medium

Document Reference¹	PacifiCorp Action	Potential to Adversely Affect²
	opportunity	
SA 11.4	Excavate at least nine wildlife underpasses below Project penstocks	Medium
SA 11.5	Enhance/create wetlands to improve stillwater breeding amphibian habitat	Medium
SA 13.1	Modify Project power poles to minimize adverse effects to birds	Low
EMS ¹	Transmission line pole replacements	Medium
EMS ¹	Removal of transmission line poles	Low
EMS ¹	Digging of trenches for new foundations, water or sewer lines, or pit toilets	Medium
EMS ¹	Construction of new roads	High
EMS ¹ , RRMP	Recreation site development where Project facilities will involve ground disturbance	Medium
EMS ¹	Fence construction and maintenance that does not require blading of the fence line and that does not disturb rock cairns or channel animals in transportation corridors through archaeological sites	Low
Land Use / Land Management/Facilities		
SA 14.2	Develop a waterway drainage/shutoff system in the event of a flume failure on any section of the Fish Creek, Lemolo No. 2, and Clearwater No. 2 Project Waterways	Medium
SA 14.2 pt. 1	Develop and implement an emergency waterway shutoff and drainage system – Fish Creek	Medium
SA 14.2 pt. 2	Develop and implement an emergency waterway shutoff and drainage system – Lemolo No. 2	Medium
SA 14.2 pt. 3	Develop and implement an emergency waterway shutoff and drainage system – Clearwater No. 2	Medium
SA 15.6	Upgrade inventoried culverts to 100-year flood standard (7.5% of inventory per year) within previously disturbed areas	Low
SA 16.2	Develop and implement a landscape plan for the Clearwater switching station and maintenance area	Low
SA 17.8, RRMP	Provide capital improvements at existing recreation facilities and future expansion areas	Medium
Routine and Special Maintenance		
Aquatic Resources		
SA 4.1.1(c)	Prepare O&M plans for new fish passage facilities at Soda Springs	No
SA 5.1	Implement minimum instream flow regimes on the North Umpqua River	No
SA 5.1	Implement flows at Soda Springs bypass	No
SA 5.2	Re-evaluate instream flows at Clearwater No. 2 bypass reach	No
SA 5.3	Reconsider and adjust instream flows	No
SA 6.5	Limit ramping rates in the Soda Springs bypass reach (target of 0.2 feet per hour) and in all other bypass reaches (target of 0.5 feet per hour)	No
SA 7.2	Develop a gravel augmentation program (for below Soda Springs Dam)	No
SA 7.3	Provide woody debris passage at Soda Springs and Slide Creek reservoirs	Low
SA 7.4	Provide passage of sediment past Slide Creek Dam	Low
SA 9.3	Manage seasonal water levels at Lemolo Reservoir as defined in the SA	Low
SA 9.5	Salvage and relocate live fish from Project waterways during maintenance shutdowns (use of roads)	No
SA 9.6	Enhance rainbow trout populations in the upper North Umpqua watershed as specified in the ODFW MOU	No

Document Reference¹	PacifiCorp Action	Potential to Adversely Affect²
SA 4.1.1 f	Maintain existing protection measures at the Soda Springs tailrace until new tailrace barriers are installed	No
SA 4.1.1 f	Maintain existing protection measures at the Slide Creek tailrace until new tailrace barriers are installed	No
SA 4.1.2	Maintain downstream passage facilities (i.e., screens) at Soda Springs	No
SA 4.3.2	Maintain downstream passage facilities (i.e., screens) at Fish Creek	No
SA 5.5	Monitor and maintain gauge stations to monitor compliance with the instream flow regimes	No
EMS ¹	Place monitoring stations where no ground disturbance is involved (e.g., stream gauges)	Low
EMS ¹	Place instream structure that does not involve ground-disturbing activities	Low
EMS ¹	Remove logjams and debris dams in water using hand labor or small mechanical devices	No
EMS ¹	Collect stream gage data and maintain gage	No
EMS ¹	Inspect Hydro Facility (powerhouse, substations, waterways, forebays, penstocks, dams, etc) activities that require visual and physical inspection of equipment where there will be no new ground disturbance	No
EMS ¹	Forebay maintenance activities that include the removal of trash rack vegetation where there will be no new ground disturbance	No
EMS ¹	Canal maintenance activities where no new ground disturbances would occur including canal drainage, debris removal, patching and dam and penstock inspection activities that require visual inspections on adjacent access roads. Equipment such as a 4WD truck, dump truck, bobcat, and excavator could be used	No
	Terrestrial Resources	
	Hydro Facilities	
TMP, RRMP	Install new routine signs or markers within or alongside existing roadways or trailways	No
RRMP, EMS	Campground, non-historic company housing or facilities operation and maintenance when no new ground disturbance occurs (i.e., repair of existing buried utilities, tables, and fire rings) are involved	No
TMP, ECP, EMS ¹	Flood or storm damage repair to roads, bridges, canals, flumes, and other facilities when the rehabilitation is confined to the previously affected area	Low
EMS ¹	New construction of aboveground water holding tanks and lines with no new ground disturbance	Low
RRMP, EMS ¹	Campground, company housing or facilities and maintenance when there may be new ground disturbance	Medium
EMS ¹	Installation of buried utilities when placed in previously disturbed ground	Low
RRMP, ECP, EMS ¹	Placing riprap material on eroding lake, reservoir, or river shoreline where there may be new ground disturbance	Medium
EMS ¹	Waterway inspection activities for hydro facilities that require visual inspection of waterways by traveling on adjacent access roads with vehicles	No
EMS ¹ , ECP	Exterior painting of penstock. Surfaces and colors should be approved prior to painting (refer to Aesthetics Plan). Access by 4WD truck or similar vehicles allowed where there will be no new ground disturbance	No
EMS ¹	Sediment removal/disposal activities where there will be no new ground disturbance, such as forebay drainage, sediment excavation and	Low

Document Reference¹	PacifiCorp Action	Potential to Adversely Affect²
	transportation to approved disposal sites. 4WD truck, excavators, or dump trucks allowed	
EMS ¹	Conductor and insulator replacement upon failure (e.g. high winds or lightning) on Level 1 roads. ATV, 4WD truck or pedestrian access allowed where there will be no new ground disturbance	Low
EMS ¹	Cross arm replacement on poles which are dragged or trucked to site and replaced via 4WD truck or boom truck	Low
EMS ¹	Replacing anchor wires using truck, excavator, or other similar equipment	Medium
EMS ¹	Pole replacement requiring the creation of landing pads and pole laydown areas, digging new pole and anchor wire holes, and restringing conductor. 4WD truck, boom truck, FMC, excavator, D8-CAT, line truck equipment acceptable	Medium
EMS ¹	Upgrade or add new conductors or lines to existing poles, when there is no change in pole configuration	No
EMS ¹	Inspect lines and poles testing activities (visual and physical ground inspection) that require bore samples and chemical pole treatment. Access by ATV, 4WD truck or by pedestrians allowed where there will be no new ground disturbance	No
	Road and Trail Maintenance	
SA 15.2a, TMP	Maintain PacifiCorp-responsibility Hydro Roads to FS standards	Low
SA 15.2b, TMP	Maintain PacifiCorp-responsibility Transmission Line Roads to Forest Service standards	Low
EMS ¹ , TMP	Maintenance of Level 2, 4, & 5 roads (non-native, rocked and hardened roads)	Low
RRMP	Trail reconstruction within existing trail right-of-way (Note: risk depends on affected habitats and length of relocation)	Medium
RRMP	Trail obliteration when there are minor route changes	Low
TMP	Remove and replace culverts that are located entirely within the road prism	No
EMS ¹ , TMP	Seismic operations on maintained roads or trails, including the controlled placement or subsurface use of explosive charges, where no blading, or other land modifications are necessary	Low
TMP, EMS ¹	Rocking non-native road surfaces (to armor against road surface erosion and maintain design drainage configuration against traffic impacts, especially where roads must remain open during wet periods)	No
TMP	Road decommissioning including ripping, culvert removal, out sloping, water barring, stabilization (following analysis) potentially unstable fills, and seeding and planting native vegetation, and mulching if needed	Medium
TMP	Designated road or trail closures accomplished with gates, barricades, berms, and waterbars	Low
TMP, VMP	Seeding and planting, blading, or the ripping of native- or nonnative-surfaced roadways or trailways	Medium
RRMP	Relocation of trail segments	Medium
TMP	Maintenance, snow removal, and resurfacing when confined to an existing road prism, parking lot, or heliport where native surface roads (maintenance level 1) are not involved	No
EMS ¹ , TMP	Installation of aquatic connectivity crossings also known as a low water crossing within existing roadway	Low

Document Reference¹	PacifiCorp Action	Potential to Adversely Affect²
EMS ¹	Removal of sidecasted dirt and rock material stockpiled along canals and adjacent roads	Low
	Vegetation Management	
VMP, ECP	Planting on streamside landslides or flood deposit “high-bars” near streams and rivers	Low
VMP, TMP	Encroachment thinning of hydro and transmission line corridors using hand methods to remove branches and small trees, leaving debris on the ground	Low
VMP	Meadow mowing to prevent encroachment by brush species and establishment of noxious weeds. Meadows could include wetlands with a diverse mix of plants	Medium
VMP	Removal of hazard trees less than 12 inches in dbh using existing skid trails or roads	Low
VMP	Removal of hazard trees greater than 12 inches in dbh using existing skid trails or roads	Medium
VMP	Aerial or hand vegetation spraying/fertilization or grass seeding	Low
VMP	Eradicate invasive plant species through the application of herbicides and hand removal (including hand tools such as shovels to dig up roots)	Low
VMP, TMP, RRMP, FSP	Recurrent brushing (hand, machine, chipping) activities to control vegetation within the existing clearing limits of roads, trails, parking lots, power line corridors, and Project facilities/buildings	No
VMP, ECP	Mulch and re-vegetate bare, erosion-prone surfaces such as cuts and fills	No
TMP, EMS ¹	Vegetation removal adjacent to canals or forebays where no new ground disturbances would occur. Equipment such as a 4WD truck, chainsaw, chipper, loader with claw shovel could be used	Low
VMP	Vegetation removal associated with road maintenance	Low
	Wildlife	
SA 11.1	Maintain wildlife bridges or crossings	Low
SA 11.3	Monitor 34 new wildlife crossings	Low
EMS ¹	Install nesting platforms and boxes in wetlands	Medium
	Land Use / Land Management/Facilities	
SA 14.2	Waterway drainage and shutoff system implementation (use)	Low
SA 15.5.1	Perform deferred critical and non-critical bridge maintenance	Low
SA 15.6	Maintain and upgrade culverts within previously disturbed areas based on inventory	Low
SA 17.1	Implement the RRMP and associated programs not involving ground or habitat disturbance	Low
SA 17.1	Implement the RRMP and associated programs involving ground or habitat disturbance	Medium
RRMP	Replace non-historic recreational, special designation, bulletin boards or information signs, barrier posts, and visitor registers within the existing footprint in both Forest Service developed sites and PacifiCorp facilities	No
EMS ¹	Construction of snow fences for safety purposes or to accumulate snow for small water facilities	Medium

¹ “EMS”, Environmental Management System Manual, which establishes appropriate implementation of PacifiCorp actions not specifically covered by the License or SA.

² Refer to Section 3.2 for definitions

Appendix D. Example of a Forest Service Biological Evaluation.

**Biological Evaluation and Assessment
For
Forest Service Sensitive and
Federally Listed
Plant Species**

Creampuff Timber Sale Project

**Diamond Lake Ranger District
Umpqua National Forest**

Prepared by: _____

Craig Odegard
District Botanist

Date: _____

I. Management Direction

Forest Service sensitive plant species, identified by the Regional Forester, are species “for which population viability is a concern, as evidenced by significant current or predicted downward trends in 1) population numbers or density and/or 2) habitat capability that would reduce a species’ existing distribution” (FSM 2670.5). Forest Service management practices should “avoid or minimize impacts” on sensitive species to ensure they “do not become Threatened or Endangered species because of Forest Service actions” and to “maintain viable populations of all native species throughout their geographic range on National Forest System lands” (FSM 2670.22 and 2670.32). The purpose of this Biological Evaluation and Assessment is to review the potential effects of the proposed Creampuff Timber Sale Project on Forest Service Sensitive and Federally listed Threatened or Endangered plant species, and to determine whether the proposed action will result in a trend toward any sensitive species becoming Federally listed.

II. Consultation

The Internet site of the Pacific Field Office, US Fish and Wildlife Service (USFWS) was consulted on July 7, 2006 for an updated list of proposed and listed Endangered and Threatened species that may be present on the Umpqua National Forest. Two listed species occur in Douglas County near the Umpqua National Forest: *Lupinus sulphureus* ssp. *kincaidii* and *Plagiobothrys hirtus* (USFWS 2006). *Lupinus sulphureus* ssp. *kincaidii* occurs in low elevation, well-drained prairies in the Umpqua Valley, including the Tiller Ranger District of the Umpqua National Forest. It has proposed critical habitat on the Tiller District. *Lupinus sulphureus* ssp. *kincaidii* does not occur on the Diamond Lake Ranger District and does not have critical habitat on the district. *Plagiobothrys hirtus* is known from low-elevation wetlands near Sutherlin; it has not been found on the Umpqua National Forest, and does not have critical habitat on the forest. Since no federally listed plant species or their critical habitat occur on the Diamond Lake Ranger District, consultation with the USFWS is not needed for this project.

III. Description of Proposed Action

The Creampuff Timber Sale Project involves ground-based logging of 70 acres on Fish Creek Flat, approximately 2 miles southwest of Toketee Ranger Station. The project area was previously clearcut in 1949 under the Brink Timber Sale. Currently dense stands would be commercially thinned to improve the health of remaining trees, producing an average spacing of 30-50 feet among leave trees. Approximately ½-mile of temporary roads would be constructed. At project completion, disturbed areas (temporary roads, skid trails, and landings) would be seeded with native grasses and shrubs. Fuels would then be treated through underburning and (in the spotted owl CHU portion of the project area) piling and burning. Where Velvet Creek bisects the project area, its associated riparian zone would be protected with a 50 to 150-foot wide no activity buffer.

IV. Pre-Field Review

Upland habitats in the project area are dominated by ponderosa pine (*Pinus ponderosa*) forest north of Velvet Creek and Douglas-fir (*Pseudotsuga menziesii*) forest south of the creek. Other conifers such as western hemlock (*Tsuga heterophylla*) and grand fir/white fir (*Abies grandis/A. concolor*) are common in the understory. Understory shrubs include vine maple (*Acer circinatum*), thimbleberry (*Rubus parviflorus*), and dwarf Oregon grape (*Berberis nervosa*). Due to previous clearcut logging, no large “relict” trees remain within the proposed thinning area. However, large logs (including cull logs left from previous logging), other woody material, and accumulated duff are abundant in much of the project area. A corridor of diverse riparian shrubs, forbs, and graminoids occurs along Velvet Creek, within the proposed riparian buffer zone.

Part of the project area was previously surveyed on July 31, 2002 for the Fish Creek Timber Sale (unit 72). At that time a sensitive lichen species, *Peltigera pacifica*, was found on a large, decaying log near the southwest edge of the Creampuff project area. Based on preliminary habitat information and the presence of *Peltigera pacifica* in the project area, an additional field survey was conducted.

V. Field Survey Results

On June 22, 2006, Eric Baxter (Biological Technician) and Craig Odegard (District Botanist) surveyed the project area. We found the previously documented *Peltigera pacifica* occurrence, and found additional individuals on decaying logs in the Velvet Creek riparian zone. A total of approximately 70 *Peltigera pacifica* individuals were located. No other sensitive vascular plants, fungi, lichens, or bryophytes were found in the project area (Table 1).

Potentially suitable habitat was found in the project area for *Boletus pulcherrimus*, *Cortinarius barlowensis*, *Cudonia monticola*, *Gomphus bonarii*, *G. kaufmanii*, *Gyromitra californica*, *Leucogaster citrinus*, *Mycena monticola*, *Ramaria amyloidea*, *R. aurantiiscescens*, *R. largentii* (all fungi), and *Peltigera pacifica*.

VI. Effects of the Proposed Project

Peltigera pacifica sites on the Umpqua National Forest are generally found on decaying logs in sheltered forest with localized high humidity, often near streams or seeps. The *Peltigera pacifica* occurrence in the project area is unusual in that the lichens are in a historically clearcut logged unit. This suggests that under some conditions *Peltigera pacifica* can withstand forest canopy removal and associated microclimatic changes. An abundance of remnant large logs in the project area may have provided sheltered microsites where *Peltigera pacifica* survived until the shrub and/or forest canopy redeveloped. Since the factors allowing *Peltigera pacifica* to persist after historic logging in the project area are unknown, known sites in the project area would be protected with a 100-foot no activity buffer during Creampuff project logging and underburning activities. Project thinning adjacent to the buffer could indirectly affect microclimatic conditions inside the buffer, for

example, by allowing more wind to penetrate under the forest canopy. However, existing forest canopy density would remain inside the buffer, creating shady conditions and higher relative humidity compared to areas that are thinned (Chen et al 1999). A 100-foot buffer would substantially reduce the risk of project-induced effects on *Peltigera pacifica* lichens, and help to maintain their habitat in the project area.

The project area also contains potentially suitable habitat for the following fungi: *Boletus pulcherrimus*, *Cortinarius barlowensis*, *Cudonia monticola*, *Gomphus bonarii*, *G. kaufmanii*, *Gyromitra californica*, *Leucogaster citrinus*, *Mycena monticola*, *Ramaria amyloidea*, *R. aurantiisiccescens*, *R. largentii*. Surveys for these species are not required, due to the unpredictable production of fungi fruiting bodies. In the absence of surveys, it was assumed the project area contained potentially suitable habitat for these species, and that they could occur in the project area. *Cudonia monticola*, *Gyromitra californica*, and *Mycena monticola* grow on wood and/or litter on the forest floor. The other fungi species listed above are mycorrhizal associates of vascular plants, typically conifer trees and hardwoods; mycorrhizal fungi depend on their vascular plant associates for growth and survival. Although knowledge of species-specific habitat needs is limited, many forest-associated fungi (hereafter, “forest fungi”) are thought to share basic habitat requirements, such as: relatively consistent moisture in the soil and duff layers; limited soil compaction; abundant decaying logs or other well-rotted wood debris; adequate duff accumulation; and relatively small (< 100 feet diameter) forest canopy gaps (Amaranthus et al 1996; Durall et al 1999). Conifer forest thinning can encourage forest fungi diversity, as long as the above habitat characteristics are maintained (Kranabetter and Kroeger 2001). Since tree spacing after Creampuff project thinning would average 30-50 feet, canopy gaps would be relatively small. Log skidding would be confined to a network of designated routes to minimize soil compaction and litter/duff displacement; it is estimated that “detrimental” soil conditions would be restricted to 15% of the project area upon project completion (see project Soils Report). Project mitigations also specify that large wood would not be displaced during ground operations. To prevent widespread tree mortality, underburning would occur in the spring under controlled conditions, creating relatively low fire intensity and patchy burn patterns. Fire would consume some small logs, other woody debris, and litter/duff, while leaving many areas lightly burned or unburned. Most large logs and much of the litter/duff would be too moist to burn in the spring. Therefore, large logs and litter/duff should remain extensive enough after underburning to maintain suitable habitat for forest fungi. Underburning would also scorch the lower branches of some trees; in subsequent years, the fire-killed needles and branches would fall to the forest floor and contribute to litter/duff accumulation.

There would be no effects on all other species listed in Table 1 because they do not occur in the project area and do not have habitat in the project area.

VII. Determinations

For *Peltigera pacifica*, *Boletus pulcherrimus*, *Cortinarius barlowensis*, *Cudonia monticola*, *Gomphus bonarii*, *G. kaufmanii*, *Gyromitra californica*, *Leucogaster citrinus*, *Mycena monticola*, *Ramaria amyloidea*, *R. aurantiisiccescens*, and *R. largentii*, my determination is

the Creampuff Timber Sale project “may affect individuals or habitat, but is not likely to result in a trend toward federal listing or loss of viability for the species”.

For all other species in Table 1, my determination is the Creampuff Timber Sale project “will not affect the species”.

VIII. References Cited

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Table 1. Threatened, Endangered and Sensitive plant species known or suspected to occur on the Umpqua National Forest.

	Pre-field Review	Field Reconnaissance	Determination*
Threatened or Endangered Plant Species	(Habitat Present?)	(Species Located?)	
<i>Lupinus sulphureus</i> Dougl. <i>ssp. Kincaidii</i> (Smith) Phillips	N	N	NE
<i>Plagiobothrys hirtus</i> (Greene) Johnst.	N	N	NE
Sensitive Vascular Plant Species			
<i>Arabis suffrutescens</i> S. Wats. <i>var. horizontalis</i> (Greene) Rollins	N	N	NE
<i>Arnica viscosa</i> Gray	N	N	NE
<i>Asplenium septentrionale</i> (L.) Hoffman	N	N	NE
<i>Botrychium laceolatum</i> (Gmel.) Angstrom	N	N	NE
<i>Botrychium minganense</i> Vict.	N	N	NE
<i>Botrychium pumicola</i> Coville ex Underwood	N	N	NE
<i>Calamagrostis breweri</i> Thurb.	N	N	NE
<i>Calochortus umpquaensis</i> N.A. Fredericks	N	N	NE
<i>Carex crawfordii</i> Fern.	N	N	NE
<i>Carex serratodens</i> W. Boott	N	N	NE
<i>Cimicifuga elata</i> Nutt.	N	N	NE
<i>Collomia mazama</i> Coville	N	N	NE
<i>Cypripedium fasciculatum</i> Kellogg ex S. Wats	N	N	NE
<i>Eucephalus vialis</i> <i>syn. = Aster vialis</i> (Brads.) Blake	N	N	NE
<i>Frasera umpquaensis</i> Peck & Applegate	N	N	NE
<i>Fritillaria glauca</i> Greene	N	N	NE
<i>Gentiana newberryi</i> A. Gray <i>var. newberryi</i>	N	N	NE
<i>Hazardia whitneyi</i> (A. Gray) Greene <i>var. discoidea</i> (J. Howell) W. Clark	N	N	NE
<i>Illiamna latibracteata</i> Wiggins	N	N	NE
<i>Isopyrum stipitatum</i> (Gray) Drumm. & Hutchinson	N	N	NE
<i>Kalmiopsis fragrans</i> Meinke & Kaye <i>sp. nov</i>	N	N	NE
<i>Lewisia columbiana</i> (How.) Robins. <i>Var. columbiana</i>	N	N	NE
<i>Lewisia leana</i> (Porter) Robins.	N	N	NE
<i>Montia howellii</i> S. Wats.	N	N	NE
<i>Ophioglossum pusillum</i> Raf.	N	N	NE
<i>Pellae andromedaefolia</i> (Kaulf.) Fee	N	N	NE
<i>Perideridia erythrorhiza</i> (Piperi) Chuang & Constance	N	N	NE
<i>Polystichum californicum</i> (D.C. Eat.) Diels	N	N	NE
<i>Romanzoffia thompsonii</i> Marttala	N	N	NE
<i>Scheuchzeria palustris</i> L. <i>var. americana</i> Fern	N	N	NE
<i>Scirpus subterminalis</i> Torr.	N	N	NE

<i>Wolffia borealis</i> (Engelm.) Landolt	N	N	NE
<i>Wolffia columbiana</i> Karst.	N	N	NE
Sensitive Fungi Species			
<i>Boletus pulcherrimus</i>	Y	N/A**	MAIH
<i>Cortinarius barlowensis</i> (syn. <i>Cortinarius azureus</i>)	Y	N/A**	MAIH
<i>Cudonia monticola</i>	Y	N/A**	MAIH
<i>Gomphus bonarii</i>	Y	N/A**	MAIH
<i>Gomphus kaufmanii</i>	Y	N/A**	MAIH
<i>Gyromitra californica</i>	Y	N/A**	MAIH
<i>Leucogaster citrinus</i>	Y	N/A**	MAIH
<i>Mycena monticola</i>	Y	N/A**	MAIH
<i>Ramaria amyloidea</i>	Y	N/A**	MAIH
<i>Ramaria aurantiisiccescens</i>	Y	N/A**	MAIH
<i>Ramaria largentii</i>	Y	N/A**	MAIH
Sensitive Lichen Species			
<i>Chaenotheca subroscida</i>	N	N	NE
<i>Dermatocarpon luridum</i>	N	N	NE
<i>Leptogium burnetiae</i> var. <i>hirsutum</i>	N	N	NE
<i>Leptogium cyanescens</i>	N	N	NE
<i>Nephroma occultum</i>	N	N	NE
<i>Pannaria rubiginosa</i>	N	N	NE
<i>Peltigera neckeri</i>	N	N	NE
<i>Peltigera pacifica</i>	Y	Y	MAIH
<i>Pseudocyphellaria rainierensis</i>	N	N	NE
<i>Ramalina pollinaria</i>	N	N	NE
<i>Usnea longissima</i>	N	N	NE
Sensitive Bryophyte Species			
<i>Encalyptra brevicola</i> var. <i>crumiana</i>	N	N	NE
<i>Rhizomnium nudum</i>	N	N	NE
<i>Schistostega pennata</i>	N	N	NE
<i>Scouleria marginata</i>	N	N	NE
<i>Tetraphis geniculata</i>	N	N	NE

* Definition of Determinations

NE: No Effect; Will Not Affect the Species.

MAIH: May Affect Individuals or Habitat, But is Not Likely to Result in a Trend toward Federal Listing or Loss of Viability for the Species.

** Surveys are not required for these fungi species.

Appendix E. Forest Service and Bureau of Land Management formal comments on draft Sensitive Species Plan.

Comment Number	Draft Plan Page No.	Agency Comment	PacifiCorp Response
Forest Service Comments (November 7, 2006)¹			
FS01	General	The plan needs to include language to manage disturbance related activities for spotted owls and peregrine falcons.	Section 2.1.5 was added to the Plan to discuss PacifiCorp requirements under the FWS Biological Opinion for ESA-listed species protection including the spotted owl. Section 2.1.4 was added to the plan to address PacifiCorp requirements under the SA to protect peregrine falcons.
FS02	General	Owls - Inside of CHU and LSR, activities which may cause disturbance (currently defined as use of an internal combustion engine off of an existing open road) should be prohibited within the primary reproductive season for owls (unless an emergency). And projects that use internal combustion engines off of open roads also need to be evaluated for potential impacts to suitable nesting habitat for spotted owls, based upon the current Forest suitable owl habitat mapping. A copy of which has been provided to the company.	Section 2.1.5 was added to the Plan describing PacifiCorp requirements under the FWS Biological Opinion for ESA-listed species protection including the spotted owl.
FS03	General	Peregrines - Aircraft flights need to continue to avoid falcon nest locations (Eagle Rock, Rattlesnake Rock, and Pig Iron currently) as in the past.	Section 2.1.4 was added to the plan to address PacifiCorp requirements under the SA to protect peregrine falcons. Additional information was obtained from the FS for peregrine nest site management associated with the Project.
FS04	General	For MSA, critical and Essential fish habitat go to www.nwr.noaa.gov website	The Plan was not modified to address the Magnuson-Stevens Act or corresponding Essential Fish Habitat. FERC addressed Magnuson-Stevens Act, Essential Fish Habitat, and section 7 ESA consultation requirements in the Project's License and corresponding NMFS Biological Opinion (December 17, 2002). In a letter dated March 2, 2006, referencing the Oregon Coast Coho Salmon, the NMFS stated, "We previously streamlined our EFH consultations by completing them in conjunction with ESA section 7 consultations. EFH conservation recommendations from previously-completed combined ESA/MSA consultation documents are still valid and in effect. Magnuson-Stevens Act is not linked to FS Sensitive Species and is not required by the FS 4(e) Terms and Conditions in the License. Furthermore, FS Manual 2600, Chapter 2670

Comment Number	Draft Plan Page No.	Agency Comment	PacifiCorp Response
			(Threatened, Endangered, and Sensitive Plants and Animals) does not direct Magnuson-Stevens Act compliance.
FS05	iii	BLM U.S. Department of the Interior, Bureau of Land Management	Edit adopted as recommended.
FS06	iii	EFH Essential Fish Habitat	Edit adopted as recommended.
FS07	iii	FS United States Department of Agriculture, Forest Service	Edit adopted as recommended.
FS08	iii	FWS U.S. Department of the Interior, Fish and Wildlife Service	Edit adopted as recommended.
FS09	iii	MSA Magnuson-Stevens Act	Edit adopted as recommended.
FS10	iii	Sensitive Species Plan????	Edit adopted as recommended.
FS11	iv	FS United States Department of Agriculture	Edit adopted as recommended.
FS12	iv	BLM United States Department of Interior Bureau of Land Management	Edit adopted as recommended.
FS13	iv	FWS United States Department of Interior Fish and Wildlife Service	Edit adopted as recommended.
FS14	2	While efficiency is always a desirable objective, it is not the stated goal in the introductory paragraph.. This sentence implies that PacifiCorp will not use FS procedures when they impact or lower their efficiency. Please remove the first part of this sentence.	Edit adopted as recommended.
FS15	2	All ground disturbing activities	Section 4.1 of the Plan adopts comment.
FS16	3	ADD definitions for statuses in Table 2	Edit adopted as recommended.
FS17	4	Critical Habitat -	Edit adopted as recommended.
FS18	4	Essential Fish Habitat -	Edit adopted as recommended.
FS19	5	Magnuson-Stevens Act -	Edit adopted as recommended.
FS20	14	2.3 MAGNUSON-STEVENSON ACT Both the FS and BLM are required to follow the Magnuson-Stevenson Act (MSA).....	Edit not adopted as recommended. See response to FS04.
FS21	17	All ground disturbing activities require BEs...even routine ones.	Section 4.1 of the Plan adopts comment.
FS22	17	All actions require a BE. We suggest that a programmatic BE should be prepared for the “No” and “Low” rated projects. The BE needs to provide discussion as to why these projects would have “No Impact” on sensitive species. Once completed, this BE would need to be reviewed and signed by FS Journey Level Bios.	Section 4.1 of the Plan adopts comment.

Comment Number	Draft Plan Page No.	Agency Comment	PacifiCorp Response
FS23	18	Need to also include disturbance when considering potential impacts to spotted owl, which jumps to 1 miles for aircraft operations.	Section 2.1.5 was added to the Plan describing PacifiCorp requirements under the FWS Biological Opinion for ESA-listed species protection including the spotted owl.
FS24	19	FS	Edit adopted as recommended.
FS25	19	potentially occupied habitat	Edit adopted as recommended.
FS26	19	or suitable habitat	Edit adopted as recommended.
FS27	25-27	There were unspecified errors in the botanical list, according to Richard Helliwel, Forest Botanist. Please contact him for specifics. Be advised that this list will change within the next year or so.	Table 2 was updated to address plant species per direction of Craig Odegard (North Umpqua and Diamond Lake district Botanist) in an October 30, 2006 email. Section 6.1 of the plan addresses annual updates to the Sensitive and Special Status Species Lists.
FS28	25-27	Multiple UNF Occurrence corrections in Table	Edits adopted as recommended.
FS29	26	No longer suspected on the Umpqua National Forest. Take off list.	Edit adopted as recommended.
FS30	37	*****THIS SECTION OF THE FLOWCHART NEEDS WORK*****	Diagram edited to conform to FS Manual Section 2672.43 – Exhibit 01.
FS31	42	There needs to be a discussion for each project that documents rationale for the effect. We suggest clarifying that this table is an estimate of effects and that Biological Evaluations will be conducted either programmatically (for no and low) or as individual evaluation (mod or high).	The proposed programmatic BE will provide a discussion for PacifiCorp actions to document rational for estimated effect. The term “estimate” was inserted. Section 4.1 of the plan clarifies that a programmatic BE will be conducted for actions with “No” and “Low” ratings, and individual BEs will be conducted for actions with “Medium” and “High” ratings.
FS32	42-46	Multiple changes to Potential to Adversely Affect	Edits adopted as recommended.
FS33	42	In general, there are projects that occur within 10 meters of permanent water that could potentially qualify as Crater Lake tightcoil habitat that had a No or Low rating. Change these so that a prefield review is completed to determine whether suitable habitat occurs on-site	Edit adopted as recommended.
FS34	42-46	Multiple change so pre-field review is completed	Edit adopted as recommended.
FS35	43	within previously disturbed areas	Edit adopted as recommended.
FS36	45	Does this involve disturbing new ground? If so then Medium	Edit adopted as recommended.
FS37	45	(NOTE-risk depends on affected habitats and length of relocation)	Edit adopted as recommended.
FS38	46	Meadows could include wetlands with a diverse mix of plants	Edit adopted as recommended.
FS39	46	(NOTE: if installation require ground disturbance in a wetlands, sensitive plants is medium)	Edit adopted as recommended.

Comment Number	Draft Plan Page No.	Agency Comment	PacifiCorp Response
FS40	46	within previously disturbed areas	Edit adopted as recommended.
FS41	46	(NOTE: if activities involve new ground disturbance, list separately with medium risk)	Edit adopted as recommended.
Forest Service Comments (December 15, 2006)²			
FS42	13	Is having the RCC as the responsible group consistent with achieving the timelines discussed later in the plan?	Additional text was added to Section 21.1 to clarify the RCP project review and approval process and emphasize that RCC Notification should occur as early as possible in the six-phase RCP project the review and approval process. Early notification is necessary to ensure ample time to complete Sensitive and Special Status species evaluations without compromising PM&E schedules.
FS43	15	as of December 2006	Edit adopted as recommended.
FS44	15	The Regional Forester's Sensitive Species list and will be subject to periodic revision and will be incorporated as they occur.	Intent of edit adopted as recommended but with a variation in text.
FS45	15	Typically	Edit adopted as recommended. An additional sentence was added to the paragraph to indicated that the FS NEPA process routinely initiate the BE process.
FS46	16	rather than future NEPA analyses (this sentence, as written, implies that it is unnecessary to conduct BEs in any future NEPA should it occur).	This paragraph was modified to indicate that 1) PacifiCorp BEs will normally be conducted for actions already addressed by the FERC License and corresponding NEPA analysis, and 2) PacifiCorp will also conduct BEs for future FERC-required NEPA analyses although this is envisioned to be rare.
FS47	21	scale of impact	The word "scale" was added to the sentence as recommended. The word "impact" was omitted because impact implies a preconceived determination that any proposed action will have a negative effect, when some projects might in fact have no effects to Sensitive Species.
FS48	21	Significant	Edit adopted as recommended.
FS49	22	" preliminary rating, Appendix C (While the concept is sound, at this time, I think we only have enough information to treat Appendix C as tentative ratings. Some of the "low" rated projects sound like they may not fit into a programmatic BE but it's impossible to access from a simple list)	This comment is assumed to be rhetorical, because the Plan fully acknowledges that the ratings are tentative. The title for Appendix C clearly states that the effect ratings are preliminary estimates of the potential to affect Sensitive and Special Status species. Nonetheless the following sentence was added to Section 3.3 to further emphasized the tentative nature of the ratings: "Estimated ratings are considered preliminary and will be refined in consultation with the FS and BLM during implementation of the Plan."

Comment Number	Draft Plan Page No.	Agency Comment	PacifiCorp Response
FS50	22	Preliminary	Not adopted at the recommended location, but addressed with response to FS49.
FS51	22	Preliminary	Not adopted at the recommended location, but addressed with response to FS49.
FS52	22	(it is unclear what this means. The requirements of a BE are what's in FSM 2670. I assume the intent is for the FS to share its expectations and experiences regarding individual species).	FS 2670 provides very general BE policies, objectives, and procedures that are to be applicable throughout the National Forest System. Furthermore, PacifiCorp has observed great variability in format and levels of analysis and reporting detail among FS BEs on the UNF. The intent of the statement was for the FS to provide action- and site-specific requirements for PacifiCorp BEs such that the FS expectations are met despite the wide BE variation within the UNF. Section 4.1 was modified with introductory statements a list of items that PacifiCorp requests from the FS to guide individual BE development.
FS53	22	(I read this 6-12mo review period as a "heads up" communication period allowing the FS time to provide any new sensitive species info, or project specific concerns to PacifiCorp... but agree with Richard, that the wording is confusing)	See response to FS52
FS54	32-33	Various edits to table 2	Edits adopted as recommended.
Bureau of Land Management Comments (November 6, 2006)³			
	13	"Bureau" inserted at various locations	Edits adopted as recommended.
	14	Counts of Special Status Species taxa provided.	Edits adopted as recommended.
	28	Please alphabetize the species names within each group.	Edit adopted as recommended.
	28	Remove Survey and Manage species	Edit adopted as recommended.
	28	Remove. S&M species	Edits adopted as recommended.
	28	Not on BLM Roseburg's SSS list. Remove.	Edits adopted as recommended.
	28	What is footnote for?	Deleted.
	28	Remove. Not special status species.	Edit adopted as recommended.
	28	Some tracking species are included, but only a small percentage of all of the BLM Tracking species within Roseburg. To be consistent either remove all Tracking species from this table or include all tracking species.	All tracking species within the BLM Roseburg District were incorporated into Table 3.
	28-31	Various edits and additions to Table 3.	Edits adopted as recommended.
	32-33	Various edits and additions to Table 4.	Edits adopted as recommended.
	45	For trees less than 20 inches in diameter	Edits adopted as recommended except 20 inches was replaced with 12 inches for consistency with the FWS Biological

Comment Number	Draft Plan Page No.	Agency Comment	PacifiCorp Response
			Opinion for the Project.
	45	Hazard tree removal for trees 20 inches in diameter and greater using existing skid trails and road.	Edits adopted as recommended except 20 inches was replaced with 12 inches for consistency with the FWS Biological Opinion for the Project.
<p>¹ FS formal comments on the October 3, 2006, draft plan were provided via email from Pam Sighting (FS Roseburg) on November 7, 2006. ² FS formal comments on the November 7, 2006, draft plan were provided via email from Pam Sighting (FS Roseburg) on December 15, 2006. ³ BLM formal comments on the October 3, 2006, draft plan were provided via email from Dan Couch (BLM Roseburg) on November 6, 2006.</p>			