U.S. Department of Interior
Bureau of Land Management
Roseburg District, Oregon

Environmental Assessment for the Swiftwater Field Office

Millpond Maintenance Facility
EA #OR – 104 – 07 – 01

This Environmental Assessment analyzes the environmental impacts associated with the Swiftwater Field Office's proposal for the construction of a new maintenance facility. The Swiftwater Field Office, Roseburg District, Bureau of Land Management has a need to replace the existing Rock Creek Maintenance Facility currently located on the east side of BLM Road 26-3-1.0, T. 25 S., R. 02 W., Section 21 due to safety and security concerns. There are two proposed locations for the new facility. One location (Site #1) is on the west side of BLM Road 26-3-1.0, T. 25 S., R. 02 W., Section 21, W.M. and the other location (Site #2) is on the east side of BLM Road 26-3-1.0, T. 25 S., R. 02 W., Section 21, W.M..

Site #1 is within the existing boundary of the Lone Pine Group Campground and Site #2 is within the existing boundary of the Millpond Recreation Site. Both sites are approximately 0.25 mile south of the existing Rock Creek Maintenance Facility. The project area lies within the General Forest Management Area and within the North Umpqua Special Recreation Management Area.

Project Lead:
Erik Taylor (Park Ranger/Recreation)

Writer/Editor:
Erik Taylor
777 NW Garden Valley Blvd.
Roseburg, OR 97470
(541) 464-3271

Date of Preparation: June 25, 2007

U.S. Department of the Interior, Bureau of Land Management
Roseburg District Office
777 NW Garden Valley Blvd.
Roseburg, Oregon 97470

Comments on this Environmental Assessment, including the names and street addresses of respondents, will be made available for public review at the above address during regular business hours, 8:00 A.M. to 4:30 P.M., Monday through Friday, except holidays.

Individual respondents may request confidentiality. Such requests will be honored to the extent allowed by the law. If you wish to withhold your name or street address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Submissions from organizations, businesses, and individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

In keeping with Bureau of Land Management policy, the Roseburg District posts Environmental Assessments, Environmental Impact Statements, Findings of No Significant Impact, and Decision Records/Documentations on the district web page under Planning & Environmental Analysis, at www.or.blm.gov/roseburg, on the same day in which legal notices of availability for public review and notices of decision are published in The News-Review, Roseburg, Oregon. Individuals desiring a paper copy of such documents will be provided one upon request. Individuals with the ability to access these documents on-line are encouraged to do so as this reduces paper consumption and administrative costs associated with copying and mailing.

Table of Contents

Chapter 1. Purpose and Need for Action

A. Background

The Bureau of Land Management, Roseburg District has a need to replace the existing Rock Creek Maintenance Facility currently located on the east side of BLM Road 26-3-1, T25S, R02W, Section 21. The existing facility was constructed in the 1950's and over the course of the last 50 years has become outdated and rundown. Recently, the facility has been the target of frequent break-ins and vandalism. Additionally, there are safety issues with the existing facility regarding proper emergency exit routes out of the building and rock fall from the surrounding hillside within the fenced perimeter of the facility.

Frequent break-ins, theft, and vandalism are occurring at the existing Rock Creek maintenance facility. It is estimated that over the past seven years, the Rock Creek facility has had at least ten incidents of theft and/or vandalism resulting in losses estimated between $60,000 to $70,000. Although the facility has a building alarm system, it is not audible to the campground hosts at Lone Pine Group Campground and Millpond Recreation Site. The proposed locations of the new maintenance facility would allow hosts at both sites to hear any alarm that may be set off. The proposed locations would also enable both hosts to observe any vehicle and/or pedestrian traffic coming into and out of the facility via the access road and other pedestrian entry points along the 26-3-1.0 road.

The only side-hinged door (i.e. walk-in door) has been barricaded in an effort to make the existing facility more secure. However, Occupational Safety Health Administration (OSHA) guidelines require that this door remain unlocked and unobstructed during operating hours as an emergency exit. There have been two findings (in 2001 and 2004) that the existing Rock Creek facility did not meet the OSHA guidelines for emergency exits. In 2004, Compliance Assessment Safety, Health and the Environment (CASHE) report recommended to relocate the building closer to the Millpond Recreation site where it can be visibly monitored.

In addition, a concern with the existing Rock Creek facility is the potential for rock fall from a steep cliff that forms the northern boundary of the facility. Rock fall events have been observed in the past and the possibility for serious injury to occur is present should someone be working near this cliff face when rock fall occurs. The proposed locations of the new facility offer a safer working environment.

B. Proposed Action

There are two alternative locations for the construction of the new facility. Site #1 (analyzed as Action Alternative 1) is on the west side of the 26-3-1.0 road, T25S, R02W, Section 21, W.M. and Site #2 (analyzed as Action Alternative 2) is on the east side of

BLM Road 26-3-1, T25S, R02W, Section 21, W.M..

The Swiftwater Field Office is proposing the construction of a new maintenance facility to be used primarily for the Roseburg District's Maintenance Organization as a place where tools and equipment can be stored. The facility would also be used as a place where maintenance can be performed on this equipment.

The features of the Proposed Alternatives are summarized below in Table 1 "Millpond Maintenance Facility Comparison of Action Alternatives." A more detailed description of the alternatives can be found in Chapter 2 "Discussion of Alternatives."

Table 1. Millpond Maintenance Facility Comparison of Action Alternatives. A brief summary of the key features of the site design under each Action Alternative are displayed along with the estimated cost for construction or installation. The total estimated cost of Action Alternative 1 is variable depending on which option would be used to improve drainage.

Feature	Action Alternative 1	Action Alternative 2
Shop Structure/Building		
Shop Building	1,600 square feet ($60,000)	1,600 square feet ($60,000)
Vault Toilet	New Installation ($30,000)	Existing ($0)
Facility Grounds		
Facility Footprint	1.2 acres	0.3 acres
Trees Removed	36 conifers, 103 hardwoods	22 conifers, 1 hardwood
Excavation & Backfill	3,700 cubic yards ($74,000)	100 cubic yards ($2,000)
Utilities	Electricity ($8,000)	Electricity, drinking water ($4,000)
Fencing	600 feet chain-link fence ($15,500)	600 feet wooden fence ($14,400)
Drainage Improvement		
Buried Culvert Option	1,080 feet ($93,100)	None ($0)
*French Drain Option	780 feet ($17,600)	None ($0)
*Armored Swale Option	780 feet ($25,000)	None ($0)
Crushed Rock Material	636 cubic yards ($22,300)	150 cubic yards ($5,300)
Other Miscellaneous Costs	$9,000	$3,500
Total Estimated Cost	$236,400-$311,900	$89,200

* Includes 300 feet of buried culvert required under roads and trails

C. Relevant Policies, Assessments, and Plans

1. National Policy and Northwest Forest Plan Level Guidance

This EA will consider the environmental consequences of the Proposed Actions (Action Alternative 1 and Action Alternative 2) and the No Action alternative in order to provide sufficient evidence for determining whether there would be impacts exceeding those considered in the Roseburg District PRMP/EIS, which would require preparation of a Supplemental Environmental Impact Statement (SEIS). In addition to the PRMP/EIS, this analysis is tiered to assumptions and analysis of consequences provided by:

- The Final Supplemental Environmental Impact Statement (FSEIS) on Management of Habitat for Late-Successional and Old-Growth Related Species Within the Range of the Northern Spotted Owl (USDA, USDI 1994a); and

- The FSEIS for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines in Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (USDA, USDI 2001).

Implementation of one of the Alternatives would conform to management direction from the ROD/RMP which incorporates as management direction the standards and guidelines of the Record of Decision for Amendments (ROD) to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (USDA, USDI 1994b). The ROD/RMP is further amended by the Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines in Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (USDA, USDI 2001).

2. Roseburg District ROD/RMP Guidance

The Roseburg District Record of Decision and Resources Management Plan (ROD/RMP) provides guidance to manage recreation use on BLM-administered land to protect natural resources, provide visitor safety, and minimize conflicts among various uses (pg. 55).

Action Alternatives 1 and 2 were developed in conformance within the scope of impacts anticipated/analyzed by the Final - Roseburg District Proposed Resource Management Plan / Environmental Impact Statement (PRMP/EIS) dated October 1994 and its associated Roseburg District Record of Decision and Resources Management Plan (ROD/RMP) dated June 2, 1995. These documents were written to be consistent with Federal Statute including the O&C Act, Endangered Species Act, and the Clean Water Act (PRMP/EIS, pg. 1-3).

3. Watershed Level Guidance

The Rock Creek Watershed Analysis identified that Millpond and Rock Creek campgrounds are used intensively by visitors and that use is expected to increase over time as improvements are made to the existing facilities (USDI, 1996; pgs. 2-1, 2-6). The Rock Creek Region Assessment and Action Plan also identified that these recreation facilities are regularly used by the public (pg. 54). The Rock Creek Watershed Analysis identified a need to develop a group reservation campground in the vicinity of Millpond (USDI, 1996; pg. 2-6) which has since been met with the development of the Lone Pine Group Campground in 2004.

4. BLM's Priorities for Recreation & Visitor Services

In May 2003, the Washington Office published a handbook titled "BLM's Priorities for Recreation & Visitor Services." This handbook is a national strategy that defines goals and objectives that are to be followed in order to provide a service and deliver benefits to the American people and their communities. Additionally, a Unified Strategy was designed to provide guidance in determining and defining the relationships between the goals and objectives contained in the handbook.

One of these goals is to manage public lands in order to provide a quality experience and the enjoyment of these lands (BLM's Priorities for Recreation & Visitor Services, pg. 18). An objective of this goal is to ensure public health and safety and improve the condition and accessibility of recreation sites and facilities (BLM's Priorities for Recreation & Visitor Services, pg. 22).

D. Objective

The objective for the Proposed Action is to provide a safe and secure maintenance facility for the Maintenance Organization to store equipment, tools and supplies.

E. Decision Factors

Factors to be considered when selecting among Alternatives will include:

- The degree to which the objective previously described would be achieved including: the safety of the maintenance facility for personnel and security for the equipment and tools stored there.

- The degree to which the Alternatives maintain, or affect, the quality of the recreational experience and enjoyment of public lands that include the Millpond and Lone Pine Recreation Sites.

- The nature and intensity of environmental impacts that would result from implementation. Also, the nature and effectiveness of measures to mitigate impacts to resources including, but not limited to recreation and visual resources, wildlife and wildlife habitat, soil productivity, water quality, air quality, and the spread of noxious weeds.

- Compliance with: management direction from the ROD/RMP; terms of consultation on species listed and habitat designated under the Endangered Species Act; the Clean Water Act, Clean Air Act, Safe Drinking Water Act and O&C Act, National Historic Preservation Act; and other programs such as Special Status and Survey & Manage Species).

- The judicious use of funds to meet the stated objective.

Chapter 2. Discussion of Alternatives

This section describes the No Action, proposed Action Alternatives, and Alternatives considered but eliminated from detailed analysis. These Alternatives represent a range of reasonable potential actions that would meet the reasons for taking this action, and the objectives to be met through taking the action. This section also discusses specific project design features that would be implemented under the proposed Action Alternative.

A. The No Action Alternative

The No Action Alternative provides a baseline for the comparison of the Alternatives. This Alternative describes the existing condition and continuing trends anticipated in the absence of the proposal but with the implementation of other reasonably foreseeable Federal and private projects.

Under the No Action Alternative, a new maintenance facility would not be constructed at either Site #1 or Site #2 at this time. The existing mixed hardwood-conifer stand at Site #1 (approximately 1.2 acres) would remain intact for the foreseeable future and existing inadequacies with the existing drainage system (refer to pgs. 26-27) would remain for the foreseeable future. The existing stand of young conifers (approximately 0.2 acres) at Site #2 would remain intact for the foreseeable future. In addition, at Site #2 the existing overflow parking lot that services the Millpond Recreation Site would not be modified or have its capacity reduced.

The existing Rock Creek Maintenance Facility would continue to be used to store heavy equipment and tools, leaving them vulnerable to continued theft and vandalism that has already been experienced at that site (pg. 3). Heavy equipment would also continue to be periodically stored at the Millpond overflow parking lot which would continue to pose a public safety hazard. In addition, conditions at the existing Rock Creek Maintenance Facility would continue to pose a safety concern to personnel due to rock fall (pg. 3).

B. The Proposed Action Alternative

The basic features of the new maintenance facility would be the same under either Alternative and are described below. Where features of the design differ between Alternatives, differences are described as appropriate in the Proposed Action below.

The types of heavy equipment that could be stored at the facility include: backhoes, trailers, dump trucks, road graders, and loaders. Other types of equipment and tools that would be stored include: lawn mowers, air compressors, welders, drills, chainsaws and assorted socket sets, wrenches, and other portable hand tools. The smaller hand tools would be stored within a locked tool room/cage within the shop building.

Hazardous materials that would be stored on-site include up to 55 gallons of oil and up to 55 gallons of diesel fuel or gasoline. The oil and fuel would be stored in an approved,

fire and spill-proof UL-Listed container. The fuel stored at the facility would be used for lawn-mowers, chainsaws, and other tools with small gas-powered engines. However, re-fueling of vehicles and heavy equipment would not be done at this facility.

1. Shop Structure/Building

The proposed size of the building at the new facility is a 1,600 square foot (40 feet by 40 feet) shop with a 16 foot ceiling. The building would be a wooden structure design to simulate designs typical of mid-20th century mills. It would be painted in earth-tone colors. There would be one regular sized walk-in door for personnel, one or two doors for heavy equipment (see below), one window on each side-wall, and a ventilation system for vehicle exhaust.

a) ***Alternative 1***

At Site #1, the shop building would have two roll-up doors 12 feet tall, 20 feet wide to be used for heavy equipment access on opposite ends of the structure. This would enable equipment to drive through the building. A self-contained vault toilet would be installed at Site #1. The cost of the shop structure/building is estimated to be $60,000 plus an additional $30,000 for the vault toilet.

b) ***Alternative 2***

At Site #2 the shop building would have a single roll-up door 12 feet tall, 20 feet wide to be used for heavy equipment access. The existing self-contained vault toilet at the Millpond Recreation Site would be used at Site #2. The cost of the shop structure/building is estimated to be $60,000.

2. Facility Grounds

The overall footprint of the facility would be approximately 1.2 acres at site #1 and 0.3 acres at site #2. The area around the shop building would include a parking area large enough to accommodate heavy equipment and regular sized vehicles. Additionally, an area would be provided that would allow for relatively easy turnaround of the larger equipment.

a) ***Vegetation***

Within the footprint of the facility, all existing vegetation is expected to be removed during the construction process.

(1) *Alternative 1*

At Site #1, approximately 25 merchantable conifers between six and 18 inches diameter breast height (dbh) would be removed; an additional 11 conifers less than six inches dbh would also be removed. Approximately 103 hardwoods would be removed (30 less than 6 inches dbh; 71 between 6-20 inches dbh; and 2 greater than 20 inches dbh). Merchantable conifers that would be felled to facilitate construction would be sold under a negotiated timber sale and the sub-merchantable (i.e. < 6 inches dbh and all hardwoods) would be used as firewood for the existing Roseburg District BLM campgrounds.

(2) Alternative 2

At Site #2, approximately 12 merchantable conifers between seven and 15 inches dbh would be removed and an additional ten conifers less than six inches dbh would also be removed. One hardwood (less than six inches dbh) would be removed. All trees removed from Site #2 would be used as firewood for the existing Roseburg District BLM campgrounds.

b) ***Utilities***

(1) Alternative 1

Underground power lines (i.e. electricity) would be installed at Site #1, but there would be no water plumbed at this site. However, a self-contained eye washing station would be installed for safety reasons. The cost estimated to install power lines would be approximately $8,000.

(2) Alternative 2

Underground power lines (i.e. electricity) would be installed at Site #2 and potable water would be plumbed for a drinking fountain. Water would not be available for equipment washing or hand washing. A self-contained eye washing station would be installed inside the shop building. The existing power and water lines that feed the vault toilet would be also be used to feed the maintenance facility. The cost estimated to install power and water lines to the shop building would be approximately $4,000.

c) ***Drainage Improvement***

(1) Alternative 1

In order to better channel the water from Site #1, the existing drainage network of ditch lines and culverts through Millpond campground would be upgraded and new drainage constructed where needed. Upgrades would include: (1) construct approximately 300 feet of drainage (armored swale, buried culvert, or French drain) through Site #1, (2) upgrade the existing culverts located under the 26-3-1.0 road, under access road/entrance into the Mill Pond Campground site, and under the site roads and trails within Millpond Campground with a 36 inch culvert, and (3) upgrade approximately 480 feet of an existing swale (i.e. a shallow depression that forms a ditch) from the Millpond host site to Rock Creek itself by one of three options, or a combination of the options, as described below. The three options considered to upgrade the swale include: (i) a buried culvert, (ii) a French drain, and (iii) an open swale.

(i) Buried Culvert

The buried culvert option would install approximately 1,080 feet of 36 inch culvert underground. Several clean-outs would be installed along the length of this culvert for maintenance purposes. The buried culvert option would cost approximately an additional $93,100 to install..

(ii) French Drain

The French drain would be a 12 foot wide, 24 inch deep trench approximately 780 feet in length filled with 185 cubic yards of six inch drain rock. This style of drainage would allow water to flow down the trench through the air spaces amongst the drain rock. The French drain would cost approximately an additional $17,600 to construct, including 300 feet of buried culvert needed to pass under site roads and trails.

(iii) Armored Swale

The open swale would be upgraded by widening and deepening the swale to 12 feet wide by 30 inches deep and the bottom would be armored with gravel. Riparian-type plant and/or tree species would be planted along the armored swale but not in the grassy lawn area behind the host site. It is estimated that it would cost $25,000 to construct the armored swale, including 300 feet of buried culvert needed to pass under site roads and trails.

(2) Alternative 2

At Site #2, there would be no upgrading of the existing drainage network or construction of additional drain ditches.

*d) **Perimeter Fencing & Gates***

There would be approximately 600 feet of perimeter fencing and a gate on the access road. The gate would be equipped with an alarm system.

(1) Alternative 1

A six foot tall forest green, chain-link fence with a metal vehicle gate would be installed at Site #1. The cost of the perimeter fencing and gate would be approximately $15,500.

(2) Alternative 2

An eight foot tall wooden fence would be installed at Site #2 and the existing metal vehicle gate would be used to control access to the facility. The cost of the perimeter fencing would be approximately $14,400.

C. Project Design Features as part of the Action Alternative

1. To protect riparian habitat:

To protect aquatic resources within riparian areas a Riparian Reserve consisting of the outer edge of the 100 year floodplain has been established along Rock Creek. A Riparian Reserve of 180 feet on each side of the stream channel has also been established around a small intermittent stream near Site 1. However, this part of the project area mostly overlaps with the 100 year floodplain of Rock Creek. Allow no chemical loading or similar toxic pollutant activities within 200 feet of Rock Creek (ROD/RMP, pg. 130).

2. **To minimize soil erosion as a source of sedimentation to streams and to minimize soil productivity loss from soil compaction, loss of slope stability or loss of soil duff layer:**

a. **Measures to limit soil erosion and sedimentation would consist of:**

(1) In-stream work would be limited to periods of low or no flow (between July 1st and September 15th).

(2) Restricting construction to the dry season (normally May 15th to October 15th). Operations during the dry season would be suspended during periods of heavy precipitation. This season could be adjusted if unseasonable conditions occur (e.g. an extended dry season beyond October 15th or wet season beyond May 15th).

(3) Sediment reducing measures (e.g., placement of straw bales and/or silt fences) would be placed near streams, if sediment is reaching the streams.

(4) Over-wintering exposed mineral soils in a condition that is resistant to sedimentation. This would be done by completing construction prior to the end of the dry season. Winterization would include: mulching exposed mineral soils with straw, seeding and mulching bare soil surfaces with native species (or a sterile hybrid mix if native seed is unavailable). Implementation of over-wintering measures would be restricted to the dry season (normally May 15th to October 15th).

b. **Measures to protect slope stability would consist of:**

(1) Locating the facility in a stable location (BMP II B2; RMP, pg. 132) with sufficient drainage structures (BMP II D; RMP, pg. 133).

(2) Below the potentially unstable area in the northern portion of Site #1, no construction shall be permitted from November 15th - April 15th, both days inclusive, or during other periods when soil moisture is high (greater than 30 percent), unless waived by the Authorized Officer. Construction activities would not be permitted to cut or excavate the toe of the slump at the base of the hill side.

3. **To retain biological legacies for present and future wildlife components:**

a. Snags and coarse woody debris would be retained or created in the following manner:

(1) Snags within the footprint of the new facility would be removed and any snags that are determined to pose a safety hazard would also be removed. There are five snags within Site #1 (5, 6, 7, 10 and 16 inches in diameter) and no snags within Site #2. No additional snags are currently known to pose a safety hazard to either of the proposed locations of the maintenance facility. Those that pose a safety concern would be cut and left for coarse woody debris outside of the footprint of the maintenance facility.

(2) Existing coarse woody debris within the facility footprint would be re-located to a new location within the Millpond/Lone Pine recreation complex. Re-location of coarse woody debris would be limited to the reach of the equipment (e.g. an excavator with a 20-30 foot arm) used to move the material. Therefore, coarse woody debris would be re-located up to 30 feet from the edge of the maintenance facility footprint.

4. **To prevent and/or control the spread of noxious weeds:**

Construction equipment would be required to be clean and free of weed seed prior to entry on to BLM lands (BLM Manual 9015-Integrated Weed Management).

5. **To protect cultural resources:**

If any objects of cultural value (e.g. historic or prehistoric ruins, graves, fossils or artifacts) are found during the implementation of the Proposed Action that were not found during pre-project surveys, operations would be suspended until the site has been evaluated for implementation of appropriate mitigation.

6. **To protect Special Status, and SEIS Special Attention Plants and Animals:**

a. Special Status (Threatened or Endangered, proposed Threatened or Endangered, Candidate Threatened or Endangered, State listed, Bureau Sensitive, Bureau Assessment, or Special Provision) and Special Attention plant and animal sites would be protected where needed to avoid listing of species and conserve candidate species, according to established Management Recommendations (RMP, pg. 40).

b. If during implementation of the Proposed Action, any Special Status Species are found that were not discovered during pre-disturbance surveys, operations would be suspended and appropriate protective measures would be implemented before operations would be resumed.

c. There are currently no known northern spotted owl sites, activity centers, or unsurveyed suitable habitat within 65 yards of the proposed project area. Therefore, the facility construction would not be seasonally restricted due to spotted owl concerns, unless future surveys locate a nest site within 65 yards of the proposed project area.

7. **To prevent and report accidental spills of petroleum products or other hazardous material and provide for work site cleanup:**

The operator would be required to comply with all applicable State and Federal laws and regulations concerning the storage, use and disposal of industrial chemicals and other hazardous materials. All equipment planned for in-stream work (e.g. culvert and/or ditch line upgrades) would be inspected beforehand for leaks. Accidental spills or discovery of the dumping of any hazardous materials would be reported to the Authorized Officer and the procedures outlined in the "Roseburg District

Hazardous Materials (HAZMAT) Emergency Response Contingency Plan" would be followed. Hazardous materials (particularly petroleum products) would be stored in appropriate and compliant UL-Listed containers and located so that any accidental spill would be fully contained and would not escape to ground surfaces or drain into watercourses. Other hazardous materials such as corrosives and/or those incompatible with flammable storage shall be kept in appropriate separated containment. All construction materials and waste would be removed from the project area.

8. To protect the aesthetic and recreational qualities of Lone Pine and Millpond recreation sites:

a. The natural forested character found within each recreation site would be retained to the extent practical.

b. Ground disturbing activities would be mitigated by using soil conservation measures (i.e., redistribution of the duff layer) when possible to protect the natural seed sources.

c. Construction of the maintenance facility is permissible only between 8:00 AM and 8:00 PM (local time), Monday through Friday, to avoid nuisance effects to visitors due to noise and activities associated with construction. This restriction is limited to when Millpond Recreation Site and/or Lone Pine Group Campground is open (typically May to October).

d. The idling of heavy equipment is permissible only between 8:00AM and 8:00 PM (local time) to avoid nuisance effects to visitors such as sounds and odors (i.e. diesel exhaust) that may emanate from the maintenance facility. This restriction is limited to when Millpond Recreation Site and/or Lone Pine Group Campground is open (typically May to October). This restriction would be waived in the event of an emergency and/or at the discretion of the Field Manager.

e. Storage of all Maintenance Organization equipment would be contained within the fenced perimeter of the facility. This provides a safer environment for recreationists and helps to prevent 'creep' by the Maintenance Organization from storing equipment elsewhere within the recreation sites.

D. Monitoring

The RMP (pg. 85) specifies that management activities would be monitored and the results reported on an annual basis. Monitoring would be done in accordance with the RMP guidelines outlined in Appendix I.

E. Resources that Would be Unaffected by Either Action Alternative

1. Resources Not in Project Area

The following resources or concerns are not present and would not be affected by either of the Action Alternatives:

Special areas (Areas of Critical Environmental Concern, Research Natural Areas, etc...)
Minority populations or low income populations
Farm Lands (prime or unique)
Hazardous Waste
Wild and Scenic Rivers
Wilderness

2. Cultural Resources

The project area has been inventoried several times for cultural resources, most recently in February 2007. Historic archaeological site 35DO897, the Rock Creek Mill, was recorded in 2001. It is not considered eligible for the National Register of Historic Places. The 2007 inventory did not reveal any additional resources. Implementation of the proposed project would have no effect on historic properties. Therefore, this project is expected to have no impacts to cultural resources and they will not be discussed further.

3. Native American Religious Concerns

No Native American religious concerns were identified by the interdisciplinary team or through correspondence with local tribal governments.

4. Indian Trust Resources

Secretarial Order No. 3175 (November 8, 1993) requires that any significant impact to Indian trust resources be identified and addressed in NEPA documents. There are no known Indian trust resources on the Roseburg District. Therefore, this project is expected to have no impacts to Indian Trust Resources and they will not be discussed further.

5. Environmental Justice

The Proposed Action is consistent with Executive Order 12898 which addresses Environmental Justice in minority and low-income populations. The BLM has not identified any potential impacts to low-income or minority populations, either internally or through the public involvement process, arising from this type of activity.

6. National Energy Policy

Executive Order 13212 provides that all decisions made by the BLM will take into consideration adverse impacts on the President's National Energy Policy. This project would not have a direct or indirect adverse impact on energy development, production, supply, and/or distribution and therefore would not adversely affect the President's National Energy Policy. Therefore, the President's National Energy Policy will not be discussed further in this EA.

7. Healthy Lands Initiative

This project would be consistent with the Healthy Lands Initiative. This project would be in compliance with the Roseburg District ROD/RMP which has been determined to be consistent with the standards and guidelines for healthy lands (43 CFR 4180.1) at the land use plan scale and associated time lines. Therefore, the Healthy Lands Initiative will not be discussed further in this EA.

8. Critical Elements of the Human Environment

"Critical Elements of the Human Environment" is a list of elements specified in BLM Handbook H-1790-1 that must be considered in all EA's. These are elements of the human environment subject to requirements specified in statute, regulation, or Executive Order. Consideration of "Critical Elements of the Human Environment" is given in Appendix C of this EA.

F. Alternatives Considered but Not Analyzed in Detail

1. Lease a Facility in Glide

An Alternative was considered to pursue finding an existing building/facility in the community of Glide to lease as a replacement for the Rock Creek maintenance facility. This Alternative would not satisfactorily meet the objective to provide a secure facility for the equipment since there would be no on-site host. In addition, there did not appear to be property readily available for leasing that would have both the shop building and grounds sufficient to meet the needs of storing heavy equipment.

2. Improve Security at Existing Rock Creek Maintenance Facility

An Alternative was considered to upgrade and improve the security systems at the existing Rock Creek maintenance facility. However, since the facility is in a remote location without the benefit of an on-site host, improvements to the security system would not serve as an effective deterrent to theft and vandalism. In addition, upgrades to the security system would not address the safety concerns due to rock fall. Therefore, this Alternative would not satisfactorily meet the
objective to provide a secure facility for equipment or a safe facility for personnel.

3. Construct a Facility at an Alternative Site

An Alternative location to Site #1 or Site #2 was considered for the location of the new maintenance facility on the west side of BLM road 26-3-1.0 at the existing sand/gravel stockpile location approximately 0.2 miles north-northeast of Lone Pine Group Campground. This location would not meet the objective of providing a secure facility since there is no on-site host and the existing Millpond and Lone Pine hosts do not have line-of-sight to the proposed facility.

Chapter 3. Affected Environment & Consequences by Resource

This chapter discusses specific resource values that may be affected, the nature of the short-term and long-term effects, including those that are direct, indirect and cumulative, that may result from implementation of the alternatives. The discussion is organized by individual resources. It addresses the interaction between the effects of facility construction with the current environment, describing effects that might be expected, how they might occur, and the incremental effects that could result.

The Council on Environmental Quality (CEQ) provided guidance on June 24, 2005, as to the extent to which agencies of the Federal government are required to analyze the environmental effects of past actions when describing the cumulative environmental effect of a Proposed Action in accordance with Section 102 of the National Environmental Policy Act (NEPA). CEQ noted the "[e]nvironmental analysis required under NEPA is forward-looking," and "[r]eview of past actions is only required to the extent that this review informs agency decision making regarding the Proposed Action." This is because a description of the current affected environment inherently includes effects of past actions. Guidance further states that "[g]enerally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historic details of individual past actions."

A. Recreation & Visual Resource Management

1. Visitor Experience

a) Affected Environment

Site #1 is located within the boundary of the existing Lone Pine Group Campground, but falls in an undeveloped portion of the recreation site. Lone Pine is a group reservation fee campground where visitors may reserve the entire area for exclusive group use. Amenities at the campground include 11 campsites, running water, a grass volleyball court, horseshoe pits, a group fire-pit area and a pavilion. The volleyball court and horseshoe pits are located approximately 150 feet from the eastern boundary of the proposed facility.

Site #2 is within the boundary of the Millpond Recreation Site, but falls within a developed portion of the recreation site. Millpond features 12 campsites and a day-use area. Campground amenities include running water, vault toilets, and fire pits; while the day-use area offers horseshoe pits, a large ball field, jungle gym, picnic tables, barbeque grills, and a large pavilion with a fire place.

A portion of the Sawmill Trail runs through both Lone Pine and Millpond. The trail is approximately one mile in length and is open to pedestrian and biking use. It has multiple interpretive areas that depict life as it existed during the times when the mill was operational and families lived and worked in the area. Site #2 would be immediately adjacent to a portion of this trail.

The Millpond overflow parking lot (which includes the proposed location of Site #2) is currently being used by the Maintenance Organization as a parking area to periodically store heavy equipment such as dump trucks, graders, and trailers. Currently, this area is secure by the presence of the hosts at Lone Pine and Millpond and a locked gate. However, the equipment is easily accessible and may attract visitors, especially children, which creates a potential safety hazard.

b) ***No Action Alternative***

Under the No Action Alternative, recreational activities would not be affected and the existing character of the visitor experience would remain unchanged. The potential safety hazards posed by: (1) the periodic storage of heavy equipment in the unfenced, overflow parking lot at the Millpond Recreation Site and (2) the rock fall hazard at the existing Rock Creek Maintenance Facility would continue under the No Action Alternative.

c) ***Action Alternative 1***

Site #1 is located in an area where minimal, if any, recreational activities take place since there are no trails or amenities that lead into the area. An analysis of usage patterns by visitors suggests that the area around Site #1 has little foot traffic (G. Morgan, personal observations, 1992-2006). However, recreationists to the volleyball court and horseshoe pits at Lone Pine and those visitors walking between Millpond and Lone Pine may be affected by sights, sounds, and odors emanating from the maintenance facility.

Visitors may experience a small decrease in their ability to enjoy nature or the sensory experience of a natural landscape. Approximately 1.2 acres of trees would be removed, thus creating a less natural landscape. Potentially distracting sounds (i.e. engine idling) and offensive odors (i.e. diesel exhaust) from heavy equipment idling at the maintenance facility may reach Lone Pine campground 150 feet to the northeast. Project design features (pg. 12 - 13) are included that would restrict the idling of heavy equipment to between 8:00 AM to 8:00 PM (local time) when the campground is open to visitors. This restriction coupled with vegetative screening would reduce the sensory distraction to visitors and help to attenuate the noise from the maintenance facility. Due to the low or non-existent volume of use patterns at this location, the site would not immediately catch the attention of visitors.

d) ***Action Alternative 2***

Site #2 is located in an area where a considerable amount of recreational use takes place based on an analysis of usage patterns by visitors (G. Morgan, personal observations, 1992-2006). Although a wooden fence would be constructed around the perimeter to deter visitors from entering the compound, the sight of the fence would be evident for Sawmill Trail and other area users. The facility may dominate the view from certain aspects. Additionally, there would be potentially distracting sounds (i.e. engine idling) and offensive odors (i.e. diesel exhaust) emanating at times from the facility while heavy equipment is idling and depending on facility design, an estimated 200 foot segment of the Sawmill Trail may have to be rerouted.

The maintenance facility would occupy approximately one-quarter of the overflow parking area which could cause traffic congestion during heavy visitor use, especially during special events. The nearby Millpond pavilion is consistently used every weekend for these special events from Memorial Day through mid-September, while the ball field is used on average 3-4 times by large groups during the summer. Users of both the pavilion and the ball field rely on their ability to park in the lot.

One special event in particular, the Street Memories classic car show in held in July, has historically used the overflow parking area extensively. The overflow lot is typically a staging area for display vehicles and a parking area for visitors. The cars are normally displayed on the Millpond ball field and cars enter the field through a removable portion of the fence in the overflow parking area. In years when the field was muddy due to rain, the car show has been moved onto the overflow parking area. A reduction in the size of the overflow parking area would limit the flexibility to alter the venue of special events based on weather.

Placement of the facility at this location reduces the area available to recreationists while other types of recreational activities would not be affected under this Alternative.

2. Visual Resource Management

a) Affected Environment

Both Site #1 and #2 are VRM Class II. Based on ROD/RMP guidance (pg. 55), management activities may be seen but should not attract the attention of the casual observer. Changes should repeat the basic elements of form, line, color, texture, and scale found in the predominant natural features of the characteristic landscape (ROD/RMP, pg. 52).

b) No Action Alternative

Under the No Action Alternative, visual resources would not be changed at either Site #1 or Site #2.

c) Action Alternative 1

The design of the shop building (refer to pgs. 7-10) would harmonize with the surrounding landscape as much as practical and vegetative screening would help the facility to repeat the basic features of the landscape. The maintenance facility would not typically attract the attention of the casual observer due to visual cues.

d) Action Alternative 2

The design of the shop building (refer to pgs. 7-10) would harmonize with the surrounding landscape as much as practical and vegetative screening would help the facility to repeat the basic features of the landscape. The maintenance facility would not typically attract the attention of the casual observer due to visual cues but it would be clearly visible for a 100-200 foot segment of the Sawmill Trail and the entire ball field.

3. Cumulative Effects

Under both Action Alternatives, the average visitor would experience small degradations of the sensory experience and a small reduction in the amount of available recreational activities. The project design features would limit nuisance effects from heavy equipment idling. The design of the facility is intended to visually complement the surrounding landscape and its character. No other cumulative effects to recreation or visual resource management are expected.

The potential safety hazards posed by: (1) the periodic storage of heavy equipment in the unfenced, overflow parking lot at the Millpond Recreation Site, (2) inadequate emergency exits out of the existing Rock Creek building, and (3) the rock fall hazard at the existing Rock Creek Maintenance Facility would be removed under both Action Alternative 1 and 2. However, the addition of the maintenance facility under both Action Alternatives would increase the equipment and worker traffic into the area which could present a safety hazard to area recreationists.

B. Wildlife

1. Federally Threatened & Endangered Wildlife Species

*a) **Bald Eagle***

*(1) **Affected Environment***

There are no known bald eagle (*Haliaeetus leucocephalus*) nest sites within the proposed project area. There have been repeated sightings of adult and sub adult bald eagles, including fishing in Rock Creek and roosting within a half-mile of the proposed project area (BLM 2005-2007). Based on the repeated observations, it is suspected that there is a nest site within two miles of the project area. The closest suitable nesting habitat is located within a half-mile to the northeast of the proposed project area.

There is no critical habitat (a specific geographical area designated by the US Fish and Wildlife Service as containing habitat essential for the conservation of a Threatened and Endangered species) designated for the bald eagle. The proposed project area is located outside of the Umpqua River Corridor Bald Eagle Management Area.

*(2) **No Action Alternative***

Under the No Action Alternative, there would be no impacts to suitable bald eagle habitat (i.e. large conifers with large limbs to support nesting platforms and roosting and large snags within close proximity of large bodies of water) for bald eagles. There would be no additional disturbance impacts to bald eagles.

*(3) **Action Alternatives 1 and 2***

The effects to bald eagles are the same for both Action Alternatives 1 and 2. The Proposed Action Alternatives would occur within the existing Millpond Recreation Site or Lone Pine Group Campground facility boundary. Both proposed sites do not contain suitable nesting habitat (i.e. large conifers with large limbs to support nesting platforms and roosting and large snags within close proximity of large bodies of water) for the bald eagle and therefore, the Proposed Action would not remove or modify suitable nesting or roosting habitat for the bald eagle.

Suitable habitat occurs within a quarter-mile of the project boundary, but based on its proximity on the landscape and to the campground it is not expected to be used by nesting eagles. Suitable nesting habitat for bald eagles is also located within a half-mile of the Proposed Action area. If eagles are nesting within a half-mile line-of-sight of the project area, construction activities are not expected to disrupt nesting birds due to their habituation to current campground activity levels. Therefore, there are no disturbance concerns to bald eagles due to the construction of the maintenance facility.

b) ***Marbled Murrelet***

Proposed Action Alternatives 1 and 2 are located outside of the range of the marbled murrelet (*Brachyramphus marmoratus*). Therefore, there would be no disturbance or habitat concerns for the marbled murrelet, nor concerns for marbled murrelet critical habitat. Marbled murrelets will not be discussed further in this EA.

c) ***Northern Spotted Owl***

(1) ***Affected Environment***

There are no known northern spotted owl (*Strix occidentalis caurina)* sites within 1.2 miles (Cascades provincial home range) of the proposed project area. The closest unsurveyed suitable nesting, roosting, and foraging habitat for the spotted owl is located approximately 290 meters south of the project area. Therefore, there is no disturbance or suitable habitat concerns for the northern spotted owl. The project area contains dispersal-only habitat for the spotted owl.

This project does not occur within spotted owl designated Critical Habitat (a specific geographical area designated by the US Fish and Wildlife Service as containing habitat essential for the conservation of a Threatened and Endangered species). Therefore, there is no concern for Critical Habitat for the spotted owl.

(2) ***No Action Alternative***

Under the No Action Alternative, there would be no impacts to spotted owl dispersal habitat. The 1.2 acres under Action Alternative 1 would remain intact and dispersal habitat qualities, including down wood debris, snags, large trees and canopy cover, would remain in its current condition for the northern spotted owl.

(3) ***Action Alternative 1***

Under Alternative 1, approximately 1.2 acres of spotted owl dispersal habitat located within the established campground boundary, but outside of the developed portion of the Lone Pine Group Campground would be removed. Dispersal habitat characteristics removed include down woody debris, snags, canopy cover, and large trees available as roosting/hunting perches. Dispersal opportunities for spotted owls would be reduced by 1.2 acres of habitat.

If this Alternative is selected, then consultation with the US Fish and Wildlife Service would be initiated due to the permanent removal of 1.2 acres of dispersal habitat for the northern spotted owl through construction of a permanent facility.

(4) ***Action Alternative 2***

Under Alternative 2, the proposed site does not contain the characteristics of dispersal habitat for the spotted owl. Therefore, there would be no dispersal habitat concerns under this Alternative.

2. Wildlife Bureau Sensitive, Assessment, & Tracking Species

Those Bureau Sensitive (BS) and Bureau Assessment (BA) species that are suspected to occur within the project area and may be affected by the Proposed Action are discussed below. The remaining BS and BA species, as well as Bureau Tracking species, are discussed briefly in Appendix D and E.

a) ***Northern Goshawk (BS)***

(1) ***Affected Environment***

There are currently no known northern goshawk (*Accipiter gentilis)* nest sites within the proposed project area. Nesting habitat for the northern goshawk is typically open stands of mature and late successional conifers and foraging habitat for this species tends to be in stands of open conifers. The proposed project area contains suitable nesting habitat (i.e. residual late-seral conifers in the campground) and foraging habitat (i.e. open forest canopy) for the goshawk. However given the amount of frequent human activity within the campground, goshawks are not expected to be using the stands within the campgrounds for nesting. The proposed project will not remove suitable habitat, therefore no habitat concerns for the northern goshawk.

There is additional suitable habitat for the northern goshawk approximately 290 meters south of the proposed project area. Goshawk surveys have not been conducted within the vicinity of the proposed project area, thus northern goshawks may be present in late-successional habitat adjacent to the proposed project area. If goshawks are present in suitable habitat adjacent to the campground, they would be expected to forage along the perimeter or within the campground during closure periods.

*(2) **No Action Alternative***

Under the No Action Alternative, activity levels within the proposed project area would remain at normal levels. Goshawks would be expected to utilize habitats within the proposed project area at current levels. Therefore, there would be no disturbance concerns for northern goshawks that may be present in adjacent suitable habitat.

*(3) **Action Alternative 1***

Under Alternative 1 there would be the removal of 1.2 acres of forest habitat used by goshawk prey (primarily birds) outside of the developed Lone Pine Group Campground. Thus, there would be a loss of 1.2 acres of foraging habitat for the northern goshawk.

*(4) **Action Alternative 2***

Construction of the maintenance facility would remove a 0.3 acre patch of trees from approximately a 1.6 acre patch of trees within the developed Mill Pond Recreation Site. Therefore, there would be a 0.3 acres loss of prey habitat for the goshawk. However, based on the proximity of stand to the surrounding habitat and to regular human activity, this stand is not likely to be used for hunting goshawks.

*(5) **Effects Common to Both Action Alternatives***

Disturbance effects are common under both Action Alternatives. Facility construction would increase human activity levels within the proposed project area above normal during the construction phase of the maintenance facility. Therefore, foraging goshawks may avoid the proposed project area due to the increased activity level. In addition, it is likely goshawks would be habituated to activity levels at the campground, thus it is not expected construction activities would disturb nesting goshawks within suitable habitat located approximately 290 meters from the proposed project area. Therefore, there would minimal disturbance concerns for northern goshawks that may be present in adjacent suitable habitat.

*b) **Northwestern Pond Turtle (BS)***

*(1) **Affected Environment***

The Northwestern pond turtle (*Clemmys marmorata marmorata*) prefers aquatic habitat with refugia such as undercut banks, submerged vegetation, rocks, logs and mud banks, and have been known to avoid areas with open water that lack refugia. Pond turtles also require emergent basking sites to thermoregulate their body temperature, taking advantage of mud banks, rocks, logs, root wads, and other opportunistic sites (Bettelheim February 2005). There are suitable habitat conditions along Rock Creek for the northwestern pond turtle. Turtles have been documented in Rock Creek, 2.9 stream miles downstream of the proposed project area (ONHP 1996), therefore turtles are expected to use Rock Creek within the vicinity of the campgrounds.

Pond turtles regularly utilize upland terrestrial habitat, most often during the summer and winter, especially for oviposition (females), mate seeking (males), over-wintering and overland dispersal (Bettelheim, February 2005). Northwestern pond turtles can migrate up to 1,639 feet (500 meters) into upland habitat where they burrow into the duff and litter layers or use fallen hollow logs or down wood debris. The northwestern pond turtle may use the upland habitat within and adjacent to the proposed project area.

(2) ***No Action Alternative***

Under the No Action Alternative, there would be no impacts to aquatic and upland habitat for the northwestern pond turtle. Use of these habitats by pond turtles would continue at their current levels.

(3) ***Action Alternative 1***

There would be the removal of 1.2 acres of upland habitat outside of the developed portion of the Lone Pine Group Campground. Upland habitat characteristics removed include down woody debris and litter and duff layers used by hibernating or breeding turtles. Thus, this option under the Proposed Action would result in the loss of 1.2 acres of upland habitat for the northwestern pond turtle.

(4) ***Action Alternative 2***

There would be the removal of a 0.2 acre patch of trees from approximately a 1.6 acre patch of trees within the developed Millpond Recreation Site. However, it is unlikely that northwestern pond turtles are using this 1.6 acre area since there is a lack of down woody debris and a sufficient duff/litter layer for them to burrow into. Therefore, there would be no impact to northwestern pond turtles under this Alternative.

(5) ***Effects Common to Both Action Alternatives***

Effects to aquatic habitat are common to both Action Alternatives. The water quality of Rock Creek would be maintained by mitigations for hydrologic systems and fisheries. Habitat structure, such as submerged vegetation, rocks, and logs, would not be removed by the Proposed Action. Thus, there would be no impacts to aquatic habitat for the northwestern pond turtle.

c) ***Rotund Lanx (BS)***

(1) ***Affected Environment***

Rotund lanx (*Lanx subrotunda*) is a freshwater snail that has been documented in the North Umpqua, on cobble and bedrock where the water was fast, clear and cold (Duncan, pers. comm., 2006). The rotund lanx is expected to occur in Rock Creek.

*(2) **No Action Alternative***

Under the No Action Alternative, there would be no impacts to the aquatic habitat. Use of the stream habitat by rotund lanx would continue at their current levels in Rock Creek.

*(3) **Action Alternative 1 and 2***

The effects to rotund lanx would be the same for both Action Alternatives. The water quality of Rock Creek would be maintained by mitigations for hydrologic systems and fisheries. Habitat structure, such as cobble and bedrock would not be removed or modified by the Proposed Action. Thus, there would be no impacts to aquatic habitat for the rotund lanx.

*d) **Townsend's Big-eared Bat (BS) & Fringed Myotis (BA)***

*(1) **Affected Environment***

The Townsend's big-eared bat (*Corynorhinus townsendii*) and the fringed myotis (*Myotis thysanodes*) can roost in snags or trees with deeply furrowed bark, loose bark, cavities, or with similar structures, typically in late-successional conifers. Surveys are not practical since potential bat roosts are typically located within the overstory canopy; thus, it is unknown if the Townsend's big-eared bat or the fringed myotis is present within the proposed project area. No caves are present within the proposed project area that might house these species.

*(2) **No Action Alternative***

Within the proposed project area, the existing snag habitat would continue to progress through the various stages of decadence and new snags would be recruited by insects, disease, storm events, or other sources of mortality.

*(3) **Action Alternative 1***

Under Alternative 1, there would be the removal of 1.2 acres of forest habitat outside of the developed Lone Pine Campground. Approximately 139 trees (hardwoods and conifers) and 5 snags have the potential of being utilized by bats for roosting within the forested habitat. Thus, this option under the Proposed Action would result in the loss of 1.2 acres of roosting habitat for the Townsend's big-eared bat and fringed myotis.

*(4) **Action Alternative 2***

Under Alternative 2, the construction of the maintenance facility would remove a 0.2 acre patch of (primarily conifer) trees from approximately a 1.6 acre patch of trees within the developed Mill Pond Campground. Approximately 22 conifers have the potential of being utilized by bats for roosting. Thus, there would be a loss of 0.3 acres of roosting habitat for the two bat species.

e) ***Foothill Yellow-legged Frog (BA)***

(1) ***Affected Environment***

The foothill yellow-legged frog (*Rana boylii*) is found in permanent streams at low to moderate elevations in areas of chaparral, open deciduous woodlands and coniferous forests. This species has been documented along Rock Creek above the proposed project area (ONHP 1997), and is expected to occur along all of Rock Creek.

(2) ***No Action Alternative***

Under the No Action Alternative, there would be no impacts to the aquatic habitat or riparian vegetation along the stream banks. Use of the habitat by the foothill yellow-legged frog would continue at their current levels in Rock Creek.

(3) ***Action Alternative 1 and 2***

Effects to the foothill yellow-legged frog would be the same for both Action Alternatives. For both options under the Proposed Action Alternative, the water quality of Rock Creek would be maintained by mitigations for hydrologic systems and fisheries. Habitat structure, such as streamside vegetation and rocky stream bottoms would not be removed or modified by the Proposed Action. Thus, there would be no impacts to aquatic habitat for the foothill yellow-legged frog.

3. Wildlife Survey & Manage Species

A species list was compiled from the 2003 Annual Species Review (IM-OR-2004-034) and incorporates those vertebrate and invertebrate species whose known or suspected range includes the Roseburg District Bureau of Land Management according to *Survey Protocols for Amphibians under the Survey & Manage Provision of the Northwest Forest Plan v3.0* (Oct. 1999), *Survey protocol for the Great Gray Owl within the Range of the Northwest Forest Plan v3.0* (Jan. 2004), *Survey Protocol for the Red Tree Vole v2.1* (Oct. 2002) and *Survey Protocol for S&M Terrestrial Mollusk Species v3.0* (Feb. 2003). There are no known Category B, D, E, and F wildlife species within the Proposed Action area.

a) ***Siskiyou Sideband (snail)***

The known range of the Siskiyou Sideband (*Monadenia chaceana*) is outside of the proposed project area. Therefore, equivalent-effort surveys are not required (*Survey Protocol for S&M Terrestrial Mollusk Species v3.0*, 2003) and there are no concerns for this species due to the proposed project.

b) ***Crater Lake Tightcoil (snail)***

The range for the Crater Lake tightcoil is above 2,000 feet elevation and east of Interstate-5 within the Roseburg District (pg. 39, *Survey Protocol for S&M Terrestrial Mollusk Species v3.0*, 2003). The proposed project area is located below the 2,000 foot requirement- at approximately 1,100 feet elevation. Therefore, equivalent-effort surveys are not required (*Survey Protocol for S&M Terrestrial Mollusk Species v3.0*, 2003) and there are no concerns due to the proposed project.

c) ***Great Gray Owl***

Pre-disturbance surveys for the great gray owl (*Strix nebulosa*) are not required since there is no suitable nesting habitat within the proposed project area. The required habitat characteristics of suitable habitat include: (1) large diameter nest trees, (2) forest for roosting cover, and (3) proximity [within 200 meters] to openings that could be used as foraging areas (*Survey Protocol for the Great Gray Owl within the range of the Northwest Forest Plan v3.0*, January 12, 2004). The stands in the project area do not have proximity to natural-openings (Gayner, staff review, 2006) and pre-disturbance surveys are not suggested in suitable nesting habitat adjacent to man-made openings at this time (pg. 14, *Survey Protocol for the Great Gray Owl within the range of the Northwest Forest Plan v3.0*, January 12, 2004).

d) ***Red Tree Vole***

The red tree vole (*Arborimus longicaudus*) is associated with late-successional and mid seral conifer forests. Important habitat components include typically of Douglas fir (*Pseudotsuga menziesii*) with live large crowns. The proposed project construction sites contain mid-seral forested habitat; however, there is no remnant conifer component. The remnant component within the project area is composed of hardwood tree species. The mean diameter of conifers to be removed from Site #1 is approximately 9.1 inches and approximately 8.0 inches from Site #2. Therefore, equivalent-effort surveys are not required (*Survey Protocol for the Red Tree Vole v2.0*, 2000) and there are no concerns for this species due to the proposed project.

4. Wildlife Cumulative Effects

The intensity of adverse impacts to wildlife would differ depending upon the Alternative selected. Under Alternative 1, construction activities would occur outside of the developed portion of the Lone Pine Group Campground and would remove a unique forest habitat consisting of young mixed conifers with a wet habitat component of black oak (*Quercus kelloggii*), legacy black cottonwood (*Populus trichocarpa*), red alder (*Alnus rubra*), and big leaf maple (*Acer macrophyllum*). Removal of this forest habitat type would result in the loss of foraging, nesting, and/or roosting habitat for avian and bat species associated with riparian habitats. There would also be a loss of microsite habitats, including downed wood, hardwood leaf litter and moist duff layers, used by various riparian associated amphibian, reptile, small mammal, and mollusk species. In addition, Columbian black-tailed deer (*Odocoileus hemionus columbianus*) and Roosevelt elk (*Cervus canadensis*) are regularly observed using the habitat for cover, foraging, and travel throughout the year (Anderson and Carter, personal communication, 2007). The construction and use of the maintenance facility would modify wildlife behavior due to removal of habitat and increased noise levels within adjacent habitat.

Implementation of the project under Alternative 2 would have minimal cumulative impacts for wildlife in the project area. The construction site is located within the developed portion of the existing Millpond Recreation Site. Current wildlife behavior patterns would not be noticeably modified since wildlife utilizing this area would likely be habituated to campground noise and associated activities. In addition, there would be no increase of impacts due to noise disturbance within adjacent habitat.

C. Hydrology

1. Stream Temperature, Stream Flow, Water Quality, & Beneficial Uses

a) Affected Environment

The proposed project is located within the Millpond Drainage Area of the Rock Creek 5th field Watershed. The Millpond Drainage Area (1,040 acres) is a small frontal watershed which includes all the land providing drainage to Rock Creek within the vicinity of the Millpond Recreation Site. Rock Creek has been placed on the Oregon 303(d) list for excessive summer temperature (ODEQ, 2003 [a] and [b]). Beneficial uses of water within the project area consist primarily of fish and aquatic life and water contact recreation. The hydrologic features potentially affected by this project are a small intermittent stream, a small wet area, and a segment of Rock Creek.

Both Site #1 and Site #2 are within the 100 year floodplain of Rock Creek and located within the Riparian Reserve land use allocation. A portion of Site 1 is also within the Riparian Reserve of a small intermittent stream. The flood of record (the largest flood documented in recorded history) occurred in December 1964. Based on current stream flow records, this flood event was estimated to have a return interval of 100 years. This means that this size of event occurs on average once every 100 years. Statistically, this means that there is a one percent chance of a flood of this size occurring in any given year. Aerial photography of the Millpond Recreation Site is available for July 1964 (just before the flood) and June 1965 (just after the flood). These photos show evidence of flooding was present at both proposed sites. Because this area has no direct surface connection to Rock Creek, this flood water can persist within the Millpond Recreation Site for several weeks after flood levels recede.

No surface water rights for domestic use exist within one mile downstream of the proposed project. No effect to domestic water users is expected as a result of the project and water rights will not be discussed further in this document. The drinking water intake for the Glide Water Association is 11 miles downstream.

(1) Site #1

Site #1 is near a small wet area on the west side of BLM road 26-3-1.0. This wet area is approximately 0.2 acres in size and intermittently ponds water through the wet season. This wet area was assessed to determine whether it should be classified as a wetland according to the US Army Corp of Engineers definition (ACOE 1987) for regulation purposes of Section 404 of the Clean Water Act. This wet area was found to not meet the definition of a wetland. This area does have some vegetation associated with wetlands; however, it does not have hydric soils or wetland hydrology to support saturated soil conditions during the growing season. Hydrologically, this wet area appears to be an ephemeral feature, as it ponds up water only in direct response to precipitation events, and then quickly drains and dries up during drier periods.

The main source of water for the wet area is an intermittent stream which drains the hill slope near this location. This intermittent stream appears to be hydrologically seasonal, as it continues to flow during drier periods through most of the wet season. As this stream comes down off the hill slope to the valley floor, it loses a defined path for its channel (possibly due to past disturbance) and dissipates its flow onto the forest floor. Under prolonged periods of precipitation, the soil in this area becomes saturated and some overland flow may occur. This flow is routed by the slope gradient towards the small low lying wet area where water will pond up until it reaches the elevation where it will drain along the road ditch to a culvert which then routes it to a shallow drainage ditch running through the Millpond Recreation Site towards Rock Creek. However, this drainage system is inadequate to handle high storm flows because the drainage ditch ends about half way through the recreation site, at which point the flow will pond up on the surface until it infiltrates into the soil. This results in some minor flooding of the Millpond Recreation Site during the wet season.

(2) ***Site #2***

Site #2 is on the east side of BLM road 26-3-1.0. This site is on level ground approximately 70 feet from Rock Creek. No other hydrologic features are present at this site. A portion of this site is currently being used as a parking lot and a small stand of trees is also present.

b) ***No Action Alternative***

There would be no change to stream temperature, stream flow, water quality, or beneficial uses of water under the No Action Alternative. Hydrologic functions would continue in their current state.

c) ***Action Alternative 1***

Construction of the maintenance facility at Site #1 would require approximately 1.2 acres of new disturbance. There would be no change to stream temperature since the trees here do not contribute shade to Rock Creek. To minimize the risk of flooding from Rock Creek, approximately five feet of fill material would be required to build up this location to above the 100 year floodplain. A small portion (< 10 %) of the low lying wet area may be affected by this fill. This area of fill would need to be leveled, compacted, and surfaced with crushed rock to provide a building pad, road access, parking, and a turn around area for large equipment. This would create an area of impervious surface at Site #1 which would result in less infiltration of precipitation and drainage from the adjacent uplands into the soil.

Because of the current drainage issues at Site #1, construction of this facility would require geo-textile materials to be incorporated into the subgrade to allow for subsurface drainage of water through the site. This would allow for more rapid drainage than the existing soil conditions. The combination of increased runoff and more rapid subsurface drainage would route water more quickly to the small wet area during precipitation events. Because of the slightly reduced capacity of the wet area, a greater volume of water would be routed through the existing drainage system to the

Millpond Recreation Site. This may result in an increase in the frequency and duration of flooding of the recreation site during the wet season.

As identified in the description of Action Alternative 1 (pg. 9), there are three options considered to improve and upgrade the drainage from Site #1 through the Rock Creek Recreational Site (i.e. buried culvert, French drain, and armored swale). All three options would be equally effective in draining water from Site #1. Without proper drainage control, undesirable drainage conditions may develop such as excessive ponding of water and saturated subgrade conditions. Improved drainage would allow for the direct passage of flow from the wet area to Rock Creek during precipitation events. This would have the added benefit to allow water to drain back out of the recreation site much quicker when over bank flows from Rock Creek occur.

Drainage improvement under Action Alternative 1 would also re-establish a surface connection between the intermittent stream coming down the hillside with the wet area through construction of approximately 350 feet of drainage in Site #1. Because flow from this stream currently spills out onto the forest floor, very wet soil conditions result during precipitation events. Although the exact response is unknown, construction of the new maintenance facility may effect how this water drains from the site. Improved drainage would provide a more sustained supply of water to the wet area which may enhance wetland conditions and possibly aquatic habitat. This would result in enhanced hydrologic function of this area. In terms of peak flows and water yield, the amount of runoff this small catchment produces relative to the Rock Creek Watershed is extremely small (40 acres out of 62000). The proposed drainage improvements would result in more rapid drainage of this area to Rock Creek. However, there would be no discernible change to peak flows or water yield in Rock Creek.

Improvement to the drainage system would result in minor amounts of sediment to be carried to Rock Creek during runoff generating precipitation events the first wet season following construction. Fine sediment may result in a slight increase in turbidity immediately below the confluence with Rock Creek. On site sedimentation rates would return to near baseline conditions following the first seasonal flush after the activity. The magnitude of the sediment release would be diluted and dispersed by the baseline discharge volume resulting from the first flush precipitation events of the season. These first hydrologic events of the wet season would also transport fine sediment collected naturally by the watershed over the dry season. The amount of sediment released into the stream channel from these activities would be indistinguishable from background levels (baseline conditions).

d) ***Action Alternative 2***

Construction of the maintenance facility would require approximately 0.3 acres of new disturbance. To minimize the risk of flooding from Rock Creek, approximately two feet of fill material would be required to build-up Site #2 above the 100 year floodplain. Drainage at this site appears to be adequate. The increase in impervious surface from construction at this site would have no measurable effect to infiltration or runoff of precipitation.

Approximately 23 trees would be removed for construction of the maintenance facility. These trees currently provide a minimal amount of shade to Rock Creek. Removal of these trees would not result in any measurable change in stream temperature. Any sediment produced from construction activities would not reach Rock Creek because the area around the construction site is level and runoff from precipitation events will infiltrate into the ground before reaching the stream.

e) ***Consequences Common to Both Action Alternatives 1 & 2***

Any chemicals or hazardous materials kept at the new building would be stored in appropriate and compliant containers with spill containment structures in place. Accidental spills would be managed according to procedures outlined in the "Roseburg District Hazardous Materials (HAZMAT) Emergency Response Contingency Plan".

Water quality would not be affected by the Proposed Action. There would be no change to stream temperature or any other physical or chemical parameter. Sediment delivery from construction activities and the resulting structure would be well within natural background levels. Therefore, there would be no impact to the Glide Water Association's drinking water source.

f) ***Cumulative Effects***

At the fifth-field watershed scale, the scope of the proposed project is too small to substantively alter current watershed functions. Because the Proposed Actions under Alternative 1 or Alternative 2 would not alter water quality or beneficial uses of water at the project level, they would not incrementally add to the cumulative effects beyond the project area.

D. Soils

1. Soil Productivity

a) ***Affected Environment***

The slope of Site #1 varies from one to seven percent. There are slight depressions where water ponds during wet periods. The most prominent depression forms the small wet area discussed previously in the Hydrology section (pgs. 25-28). In the middle of this slope, there is a small mound approximately five to six feet tall, with twenty percent slopes.

The soils of Site #1 are very deep (greater than 60 inches to bedrock) and have dark brown silt loam surfaces and dark yellowish, brown silty clay loam subsoils. They have high water tables at or very near the surface (within six inches) during periods of extended or intense precipitation and for short periods following these events. There are faint signs of oxidation-reduction features in the soil indicating that the upper soil profile may occasionally become saturated with moisture for long enough periods for some reduction to occur under anaerobic conditions. However, these soils do not have dark enough surfaces or distinct enough oxidation-reduction features and

therefore do not meet the criteria for designation as "hydric" based on the United States Department of Agriculture publication, Field Indicators of Hydric Soils in the United States. Hydric soils are those that are formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper portion of the soil horizon (Federal Register, July 13, 1994).

The silt loam and silty clay loam soil of Site #1 has moderately high erodibility under bare soil conditions. The gentle gradients and litter layer of deciduous leaves covering the soils keep erosion at very low levels during most years.

Site #2 occupies 0.3 acres on a nearly level flood plain of Rock Creek and consists of very deep, loamy soils that are gravelly and cobbley. Approximately half of this area is highly disturbed ground consisting of a dirt parking area and earth disposal site. The soil of the other half of this area supports conifers and is well drained.

The loamy soils of Site #2 are moderately erodible under bare soil conditions. Outside of the overflow parking area, the nearly level slope and vegetative cover keeps erosion at very low levels.

b) ***No Action Alternative***

Under the No Action Alternative, the soil of Site #1 would continue to support the ecology there with no foreseeable decrease in the soil productivity. The soils would continue to be periodically saturated during the wet season. Soil productivity would also remain unchanged at Site #2 under the No Action Alternative.

c) ***Action Alternative 1***

New soil disturbance from the construction of the maintenance facility (including both the building and the grounds) would be an irretrievable loss of approximately 1.2 acres to soil productivity. The soil water holding capacity of this area would be diminished, thereby increasing the water volume to be drained from the site (refer to Hydrology section pgs. 25-29).

d) ***Action Alternative 2***

New soil disturbance, outside of the existing overflow parking area, from the construction of the maintenance facility would be an irretrievable loss of approximately 0.3 acres to soil productivity.

2. Landslides

a) ***Affected Environment***

The upper part of the hill slope overlooking Site #1 has 80-90 percent slopes and consists of shallow, well-drained loamy soils over hard volcanic bedrock. Below this is a scarp and deep-seated slump that extends down to the hill slope's base that borders Site #1. The slump has a 55 percent sloping bench and a 65 percent toe slope comprised of soil of various depths and hard bedrock. The soils are loamy, have high

gravel and cobble content, and are well drained. The hill slope is currently in a stable state.

This assessment is based on the following observations:

- No apparent landslides have occurred on the mountain slope during the life of the mid-seral trees growing there despite high intensity, long-return interval storms having occurred during this period (based on field observation and interpretation of 1964 to 2004 aerial photos).
- No tension cracks were discovered.
- The boles of the conifers growing on these slopes are only slightly bowed in shape. They do not have the indicators of strong soil creep or active slope failure (e.g. the pronounced bowing of the bole, "S-shaped" boles, or leaning upslope).

Site #2 is on a level plain and has no slope stability concerns.

b) ***No Action Alternative***

There would be a very low potential for landslides under undisturbed conditions for most years. Under conditions following a stand-replacing fire the risk for small shallow debris avalanches, the risk would increase in the low to moderate range. A series of intense storms during the same wet season (or well above normal precipitation spanning more than one wet season) especially in combination with a stand replacing fire, could re-activate the slump.

c) ***Action Alternative 1***

There would be no change to landslide potential over the No Action Alternative because excavation would not be permitted within the toe of the slump at the base of the hill side. If a shallow-seated movement were to occur at the toe of the hill slope, it would impact the maintenance facility. A diversion structure might prevent damage to the maintenance facility. If a deep-seated movement caused by reactivation of the slump were to occur, it would likely cause major damage to the maintenance facility. Diversion structures would be ineffective in deflecting a deep-seated movement.

d) ***Action Alternative 2***

There would not be any landslide risks.

3. Cumulative Effects

The effects to soil productivity from the small scale of the proposed project under either Action Alternative would not be meaningfully measurable or consequential.

E. Fish Populations & Habitat

1. Affected Environment

Oregon Coast coho salmon (*Oncorhynchus kisutch*), summer and winter Oregon Coast steelhead (*Oncorhynchus mykiss ssp.*), coastal cutthroat trout (*Oncorhynchus clarki clarki*), spring Oregon Coast chinook salmon (*Oncorhynchus tshawytscha*), and Pacific lamprey (*Lampetra tridentata*) are present in the Rock Creek fifth-field watershed. The National Marine Fisheries Service determined that the Oregon Coast coho Ecologically Significant Unit does not warrant listing under the ESA at this time and therefore withdrew the proposed listing (Fed. Reg., Vol. 71 No. 12, Jan. 19, 2006). However, under OR/WA BLM guidelines the Oregon Coast coho is considered Bureau Sensitive. The ROD/RMP (pg. 41) states that Bureau Sensitive species "...will be managed for the conservation of Bureau Sensitive species and its habitat so as not to contribute to the need to list, and to recover the species". There are currently no federally listed endangered, threatened, or proposed for listing, fish species in the Roseburg District.

The Oregon Department of Fish and Wildlife conducted stream habitat surveys in the Rock Creek 5th field watershed in 1994. These surveys generally show that fish-bearing streams within the watershed lack dammed pool habitat and large wood complexity. The reach of Rock Creek that is adjacent to the Millpond Recreation Site was rated as "fair" for pool habitat, "poor" for large wood complexity, and "fair" for riparian habitat (Rock Creek WA, Maps 3-3, 3-5, and 3-6).

There are no stream crossings over fish-bearing streams in either Action Alternative 1 or 2. Fish passage would not be affected by Alternative 1 or 2 and will not be discussed further in this EA.

2. No Action Alternative

Under the No Action Alternative, there would be no effects to fisheries habitat and fish populations would maintain their current trends.

3. Action Alternative 1

a) ***Large Wood Complexity and Stream Temperature***

Action Alternative 1 would maintain existing levels of large woody debris in Rock Creek and would not affect the mechanisms for future recruitment. Approximately 36 small conifers ($\leq$18 inches dbh) would be removed for the construction of the maintenance facility (pgs. 8-9). These trees are located more than 100 feet from Rock Creek and do not contribute shade to Rock Creek. Action Alternative 1 would not affect stream temperatures (pg. 27) or change large wood complexity within Rock Creek. Therefore, this alternative would not have adverse impacts to fish populations or population trends since no changes in stream temperature or large wood complexity would occur. Fish populations should maintain current trends related to the current stream temperature and wood complexity.

b) ***Fine Sediment and Substrate***

As discussed previously, Action Alternative 1 would result in minor amounts of sediment to be carried to Rock Creek during runoff generating precipitation events the first wet season following construction and sedimentation rates would return to near baseline conditions following the first seasonal flush after the activity (pg. 27-29). The amount of sediment released into the stream channel from these activities would be indistinguishable from background levels (pg. 27-29). The indistinguishable amount of sediment released would not affect water quality or spawning habitat. Fish populations would therefore continue current migration and spawning behaviors. The probability of adverse effects from this alternative on fish populations and their habitat is very low.

4. Action Alternative 2

a) ***Large Wood Complexity and Stream Temperature***

Action Alternative 2 would maintain existing levels of large woody debris within Rock Creek and the impacts on future woody debris recruitment would be minimal. Approximately 22 conifers ($\leq$ 15 inches dbh) would be removed for the construction of the maintenance facility (pgs. 8-9). The removal of these conifers would have a minimal effect on large wood recruitment to Rock Creek because these trees are young, small diameter trees (7-15 inches dbh). It would be approximately 50 years (when they are at least 24 inches dbh and 50 feet tall) before these trees would be of sufficient size to serve as large woody debris in Rock Creek (National Oceanic and Atmospheric Administration and United States Fish and Wildlife Service).

Even though these trees are within the Riparian Reserve, their removal would not result in a measurable change in stream temperature (pg. 28). Therefore, this alternative would not have adverse impacts to fish populations or population trends since no changes in stream temperature or large wood complexity would occur. Fish populations should maintain current trends related to the current stream temperature and wood complexity.

b) Fine Sediment and Substrate

As discussed previously in the hydrology section, sedimentation would not reach Rock Creek because the area around the construction site is level and runoff from precipitation events would infiltrate into the ground before reaching the stream (pg. 28). Fish populations would therefore continue current migration and spawning behaviors. The probability of adverse effects from this alternative on fish populations and their habitat is very low.

5. Cumulative Effects

Sediment regime, stream temperature, and water chemistry together influence fish habitat and habitat for aquatic species. Action Alternative 1 or 2 would not affect stream temperature or water quality and the sediment regime would either be unaffected (Alternative 2) or the effects would be immeasurable (Alternative 1) (pgs. 27-29). Therefore, fish populations would continue current migration and spawning behaviors.

As mitigation for re-licensing its hydropower facilities on the North Umpqua River, Pacific Corps. has created a large multi-year restoration fund. As a result of this fund, the BLM and other cooperators are currently planning for restoration in Rock Creek. Over the next five years a number of restoration projects including culvert replacements, large wood placements, and riparian habitat improvement projects would increase the overall quality of fisheries habitat within the Rock Creek watershed.

6. Essential Fish Habitat

Essential Fish Habitat (EFH) is designated by the Magnuson-Stevens Fishery Conservation and Management Act of 1996 as habitat that is currently or was historically available to Oregon Coast coho and chinook salmon (Federal Register 2002 Vol. 67, No. 12). The nearest EFH is 500 feet downslope of Site #1 and 50 feet downslope of Site #2.

The following components were analyzed to assess the effects of the proposed project on EFH and the appropriate page(s) of this document are referenced:

Water quality/Water quantity – There would be no discernable effect to water quality or water quantity in Rock Creek (pgs. 27-28) as a result of the Proposed Action.

Substrate characteristics – There would be no measurable effect to substrate as a result of sediment. The amount of sediment released into the stream channel from these activities would be indistinguishable from background levels under Action Alternative 1 (pgs. 27-28) and sediment produced from Action Alternative 2 would not reach Rock Creek because it would infiltrate into the ground before reaching the stream (pg. 28).

Large woody debris within the channel and large woody debris source areas – There would be no effect to large woody debris or large woody debris source areas (pg. 31-32).

Channel geometry – Since there would be no discernible change to peak flows or water yield in Rock Creek (pg. 28), there would be no measurable impact to fisheries or aquatic organisms from peak flows capable of altering the channel geometry.

Fish passage – There would be no effect to fish passage. There are no new crossings along fish-bearing streams (pg. 31).

Forage species (aquatic and terrestrial invertebrates) – Forage for coho and Chinook salmon would remain unaffected. Riparian vegetation would continue to provide sources of terrestrial invertebrates. Aquatic invertebrate populations would be unaffected since there is no measurable effect to water quality or substrate (pgs. 27-28).

Federal agency conclusions regarding the effects of the action on EFH:
The Proposed Action "*Will Not Adversely Effect"* (WNAE) EFH for coho or Chinook salmon in Rock Creek or its tributaries.

Proposed mitigation (if applicable):

Without any mechanisms for an adverse affect on EFH, there are no proposed mitigation measures.

7. Aquatic Conservation Strategy

The Aquatic Conservation Strategy (ACS) was developed to restore and maintain the ecological health of watersheds and aquatic ecosystems contained within them on public lands. The ACS must strive to maintain and restore ecosystem health at watershed and landscape scales to protect habitat for fish and other riparian-dependent species and resources and restore currently degraded habitats. This approach seeks to prevent further degradation and restore habitat over broad landscapes as opposed to individual projects or small watersheds. (Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl, page B-9). The 1994 ROD at B-10 requires a finding by a decision-maker that a project or management action is consistent with the Aquatic Conservation Strategy Objectives. This document provides an analysis for that purpose.

a) ***ACS Components:***

(1) *Riparian Reserves (ACS Component #1)*

Riparian Reserves were established. The ROD/RMP (pg. 24) specifies Riparian Reserve widths equal to the height of two site potential trees on each side of fish-bearing streams and one site-potential tree on each side of perennial or intermittent non-fish bearing streams, wetlands greater than an acre, and constructed ponds and reservoirs. The height of a site-potential tree for the Rock Creek Watershed has been determined to be the equivalent of 180 feet (Rock Creek Watershed Analysis, pg. 1-4). The Riparian Reserve also extends to the outer edge of the 100 year floodplain of Rock Creek. Approximately 1.2 acres of this project are within Riparian Reserves under Action Alternative 1 and approximately 0.3 acres under Action Alternative 2.

(2) *Key Watersheds (ACS Component #2)*

Key Watersheds were established "as refugia . . . for maintaining and recovering habitat for at-risk stocks of anadromous salmonids and resident fish species [ROD/RMP, pg. 20]." There are no key watersheds within the Rock Creek 5th field Watershed.

(3) *Watershed Analysis (ACS Component #3) and other pertinent information:*

The Rock Creek Watershed Analyses (BLM 1996) & Rock Creek Region Assessment and Action Plan (PUR 2006) describe existing watershed conditions and were used in this assessment and are available for public review at the Roseburg District office or can be viewed under "Plans & Projects" on the Roseburg District website at www.blm.gov/or/districts/roseburg/index.htm and the Partnership for the Umpqua Rivers website at http://www.umpquarivers.org/Assessments.php.

Existing watershed conditions at the project area are described in the Hydrology (pg. 27-30) and Fisheries (pg. 32-36) sections of the EA. The short and long term effects to aquatic resources are also described in these sections of the EA.

(4) Watershed Restoration (ACS Component #4)

Since 1994, numerous stream enhancement projects have been implemented in the Rock Creek Watershed. This includes replacing culverts identified as barriers to fish passage to open up access to additional habitat, or improving or decommissioning roads to reduce road sediment impacts to aquatic systems. PacifiCorp and Oregon Department of Fish and Wildlife have begun a restoration project in East Fork Rock Creek as part of a settlement agreement that includes off-site mitigation related to the North Umpqua Hydroelectric Project relicensing. Large woody debris will be placed into the stream for improved aquatic habitat. Future opportunities for restoration are discussed in the Rock Creek Region Assessment and Action Plan (PUR 2006). This work will be implemented as budgets allow.

b) ***Range of Natural Variability within the Watershed:***

Based on the dynamic, disturbance-based nature of aquatic systems in the Pacific Northwest, the range of natural variability at the site scale would range from 0-100% of potential for any given aquatic habitat parameter over time. Therefore, a more meaningful measure of natural variability is assessed at scales equal to or greater than the 5th field watershed scale. At this scale, spatial and temporal trends in aquatic habitat condition can be observed and evaluated over larger areas, and important cause/effect relationships can be more accurately determined.

Natural disturbance events to aquatic systems in the Pacific Northwest include wildfires, floods, and landslides. Average fire return intervals have not been calculated for Rock Creek. However, a discussion of fire history in the Rock Creek Watershed Analyses (BLM 1996) indicates that the Rock Creek Watershed has had a wide variety of fire frequency and intensity across the watershed.

The geology of the Rock Creek watershed is classified as Western Cascades sub-province. This area is deeply eroded terrain of volcanic and sedimentary rock. Mass wasting is the dominate erosion process. Rock Creek Watershed contains a higher component of sedimentary bedrock than the more typical volcanic bedrock located within much of the Western Cascades. This sedimentary rock may have contributed to historically higher erosion rates (PUR 2006).

On BLM land, future landslides, mostly during large storm events, are expected to deliver large wood and rock fragments to lower-gradient streams because of BLM Riparian Reserves. These events would more closely resemble landslides within relatively unmanaged forests. These disturbance events are the major natural sources of sediment and wood to a stream system and are very episodic in nature.

Due to the dynamic nature of these disturbance events, stream channel conditions vary based on the time since the last disturbance event. This results in a wide range of aquatic habitat conditions at the site level.

*c) **Individual ACS Objective Assessment for Site #1***

Based upon the information listed below (Table 2), the proposed action at Site #1 would meet ACS Objectives one though seven at the site scale. Objectives two and three would actually see a slight restorative effect in terms of aquatic connectivity and the physical integrity of the aquatic system at the site scale due to the reconnection of a small stream and wet area to Rock Creek. Objectives eight and nine would see a slight decline due to the loss of 1.2 acres of riparian habitat for plant and animal species at the site scale.

With the very small amount of the 5th field watershed affected by the proposed action and the fact that Site #1 is located within an existing recreational facility, BLM determined that the proposed action would have no impact on the ability of the agency to achieve the goals of the ACS within the Rock Creek Watershed. This project would not retard or prevent attainment of ACS objectives at the watershed level. Therefore, this action is consistent with the ACS, and its objectives at the watershed scale.

Table 2. Individual ACS Objective Assessment for Site #1

ACS Objective	Site/Project Scale Assessment Mill Pond Drainage Area	5th Field Watershed Scale Assessment
	Scale Description: This project is located in the Millpond 7th field drainage. This drainage is roughly 1040 acres in size. The BLM manages approximately 670 acres in this drainage (64%). Site #1 represents 0.1% of the total drainage area, and 0.2% of the BLM-managed lands in the drainage.	Scale Description: This project is located in the Rock Creek 5th field watershed. This watershed is roughly 62800 acres in size. The BLM manages approximately 28000 acres in this watershed (45%). Site #1 represents .002% of the total watershed area, and .004% of the BLM-managed lands in the watershed.
1. Maintain and restore the distribution, diversity, and complexity of watershed and landscape-scale features to ensure protection of the aquatic systems to which species, populations, and communities are uniquely adapted.	Within the drainage, the proposed action would result in 1.2 acres of disturbance to the landscape. Much of this location has already been developed for use as a recreational facility. Although Site #1 is currently in an undeveloped part of the recreation facility, this site has had heavy historical disturbance due to an old log mill which once existed in this location. Development of Site #1 would affect a very small portion (0.1%) of the drainage area and would not alter the distribution, diversity, or complexity of watershed and landscape-scale features within the rest of the 7th field drainage.	Site #1 represents 0.002% of the 5th field watershed, and .004% of the federal ownership within the watershed. At this scale, there would be no measurable change in any of the ACS objectives, and the construction at Site #1 would not prevent the agency from attaining the ACS objectives on the remaining federal land within the watershed.
2. Maintain and restore spatial and temporal connectivity within and between watersheds	Within the drainage, the proposed project at Site #1 would reconnect aquatic connectivity of a small intermittent stream running through the site. As described on page 28 of the EA, this stream loses its defined channel and gets	Within the watershed, the proposed project would restore aquatic connectivity of one small intermittent stream. Therefore this project would slightly improve the existing connectivity condition at the watershed

	hindered by an inadequate drainage system which prevents hydrologic connection to Rock Creek. This project would provide drainage of this flow to Rock Creek by one of three options. Therefore this project would restore the connectivity of this small stream system at the site scale.	scale.
3. Maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations	As discussed on page 29 of the EA, this project would re-establish a surface connection between the small stream with the wet area and then with Rock Creek. Although some capacity of the wet area may be lost to development of the site, the improved drainage would provide a more sustained supply of water to the remaining wet area which may enhance wetland conditions and possibly aquatic habitat. This would result in enhanced hydrologic function of this area. Therefore, this project would restore some of the physical integrity of the aquatic system at the site scale.	Within the watershed, the proposed project would restore some of the physical integrity of the aquatic system of the small wet area and the hydrologic connection to Rock Creek. Therefore this project would slightly improve the physical integrity of the aquatic system at the watershed scale.
4. Maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. Water quality must remain within the range that maintains the biological, physical, and chemical integrity of the system and benefits survival, growth, reproduction, and migration of individuals composing aquatic and riparian communities.	Project design criteria (PDC) would ensure that water quality would not be adversely impacted by the proposed action. PDC's such as restricting construction to the dry season, limiting in-stream work to periods of low or no flow, using sediment reducing measures (e.g., placement of straw bales and/or silt fences) near streams and over-wintering exposed mineral soils in a condition that is resistant to sedimentation. Winterization would include seeding and mulching bare soil surfaces. Page 30 of the EA states "Water quality would not be affected by the Proposed Action. There would be no change to stream temperature or any other physical or chemical parameter. Sediment delivery from construction activities and the resulting structure would be well within natural background levels." Therefore, this project would maintain the existing water quality at the site scale.	Based on the information discussed at the site scale, this project would also maintain water quality at the watershed scale.
5. Maintain and restore the sediment regime under which aquatic ecosystems evolved.	As mentioned above, Sediment delivery from construction activities and the resulting structure would be well within natural background levels. Therefore, this project would maintain the existing sediment regime.	This project would maintain the existing sediment regime at the watershed scale as well.
6. Maintain and restore in-stream flows sufficient to create and sustain riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing.	As discussed on page 29 of the EA, the proposed drainage improvements would result in more rapid drainage of this area to Rock Creek. However, there would be no discernible change to peak flows or water yield in Rock Creek. Also, as discussed in #3 above, the improved drainage would provide a more sustained supply of water to the	At the larger watershed scale, this project would also maintain stream flows within the range of natural variability.

	remaining wet area which may enhance wetland conditions and possibly aquatic habitat. This would result in enhanced hydrologic function of this area. Therefore, this project would maintain stream flows within the range of natural variability at the site scale and would maintain existing patterns of sediment, nutrient, and wood routing.	
7. Maintain and restore the timing, variability, and duration of floodplain inundation and water table elevation in meadows and woodlands.	As discussed in #6 above, this project would maintain stream flows within the range of natural variability at the site scale. Although floodplain capacity would be slightly reduced due to development, this project would not prevent or retard floodplain functions in the remainder of the area. Therefore, it would also maintain stream interactions with the floodplain and respective water tables at the site scale.	At the watershed scale, this project would also maintain stream interactions with the floodplain and respective water tables within the range of natural variability.
8. Maintain and restore the species composition and structural diversity of plant communities in riparian areas and wetlands to provide adequate summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration and to supply amounts and distributions of coarse woody debris sufficient to sustain physical complexity and stability.	At the site scale, Development of Site #1 would remove 1.2 acres of forest habitat consisting of a mix of conifers and hardwoods. There would also be a loss of micro-site habitats, including downed wood, hardwood leaf litter and moist duff layers, which would modify the use of this area by various riparian species. However, as discussed in the other objectives above, there would be no change to the physical integrity of the aquatic system, water quality, sediment regime, in-stream flows, and patterns of sediment, nutrient, and wood routing at the site scale.	Site #1 represents 0.002% of the 5th field watershed, and .004% of the federal ownership within the watershed. At this scale, there would be no measurable change in this objective at the watershed scale. The construction at Site #1 would not prevent the agency from attaining this ACS objective on the remaining federal land in the watershed.
9. Maintain and restore habitat to support well-distributed populations of native plant, invertebrate and vertebrate riparian-dependent species.	Development of Site #1 would remove 1.2 acres of forest habitat. Page 26 of the EA states, "Removal of this forest habitat type would result in the loss of foraging, nesting, and/or roosting habitat for avian and bat species associated with riparian habitats. There would also be a loss of micro-site habitats, including downed wood, hardwood leaf litter and moist duff layers, used by various riparian associated amphibian, reptile, small mammal, and mollusk species. The construction and use of the maintenance facility would modify wildlife behavior due to removal of habitat and increased noise levels within adjacent habitat."	Site #1 represents 0.002% of the 5th field watershed, and .004% of the federal ownership within the watershed. At this scale, there would be no measurable change in this objective at the watershed scale. The construction at Site #1 would not prevent the agency from attaining this ACS objective on the remaining federal land in the watershed.

d) ***Individual ACS Objective Assessment for Site #2***

Based upon the information listed below (Table 3), the proposed action at Site #2 would meet ACS Objectives one though seven at the site scale. Objectives eight and

nine would have minimal cumulative impacts due to the loss of 0.2 acres of habitat for plant and animal species at the site scale.

With the very small amount of the 5th field watershed affected by the proposed action and the fact that Site #2 is located in a developed portion of an existing recreational facility, BLM determined that the proposed action would have no impact on the ability of the agency to achieve the goals of the ACS within the Rock Creek Watershed. This project would not retard or prevent attainment of ACS objectives. Therefore, this action is consistent with the ACS, and its objectives at the site and watershed scales.

Table 3. Individual ACS Objective Assessment for Site #2.

ACS Objective	Site/Project Scale Assessment Mill Pond Drainage Area	5th Field Watershed Scale Assessment
	Scale Description: This project is located in the Millpond 7th field drainage. This drainage is roughly 1040 acres in size. The BLM manages approximately 670 acres in this drainage (64%). Site #2 represents 0.03% of the total drainage area, and 0.04% of the BLM-managed lands in the drainage.	Scale Description: This project is located in the Rock Creek 5th field watershed. This watershed is roughly 62800 acres in size. The BLM manages approximately 28000 acres in this watershed (45%). Site #2 represents 0.0005% of the total watershed area, and 0.001% of the BLM-managed lands in the watershed.
1. Maintain and restore the distribution, diversity, and complexity of watershed and landscape-scale features to ensure protection of the aquatic systems to which species, populations, and communities are uniquely adapted.	Within the drainage, the proposed action would result in 0.3 acres of disturbance to the landscape. Much of this location has already been developed for use as a recreational facility. Site #2 is currently considered a developed part of the recreation facility. This site has had heavy historical disturbance due to an old log mill which once existed in this location. Development of Site #2 would affect a very small portion (0.03%) of the drainage area and would not alter the distribution, diversity, or complexity of watershed and landscape-scale features within the rest of the 7th field drainage.	Site #2 represents 0.0005% of the 5th field watershed, and 0.001% of the federal ownership within the watershed. At this scale, there would be no measurable change in any of the ACS objectives, and the construction at Site #2 would not prevent the agency from attaining the ACS objectives on the remaining federal land.
2. Maintain and restore spatial and temporal connectivity within and between watersheds	Within the drainage, the proposed project at Site #2 would have no influence on aquatic connectivity. Therefore this treatment would maintain the existing connectivity condition at the site scale.	Within the watershed, the proposed project at Site #2 would have no influence on aquatic connectivity. Therefore this treatment would maintain the existing connectivity condition at the watershed scale.
3. Maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations	Within the drainage, the proposed project at Site 2 would have no influence on the physical integrity of the aquatic system. Therefore, this project would maintain the physical integrity of the aquatic system at the site scale.	This project would also maintain the physical integrity of the aquatic system at the watershed scale.
4. Maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. Water quality must remain within the	Project design criteria (PDC) would ensure that water quality would not be adversely impacted by the proposed action. PDC's such as restricting construction to the dry season, limiting in-stream work to periods of low or no flow, using sediment reducing measures	Based on the information discussed at the site scale, this project would also maintain water quality at the watershed scale.

range that maintains the biological, physical, and chemical integrity of the system and benefits survival, growth, reproduction, and migration of individuals composing aquatic and riparian communities.	(e.g., placement of straw bales and/or silt fences) near streams and over-wintering exposed mineral soils in a condition that is resistant to sedimentation. Winterization would include seeding and mulching bare soil surfaces. Page 30 of the EA states "Water quality would not be affected by the Proposed Action. There would be no change to stream temperature or any other physical or chemical parameter. Sediment delivery from construction activities and the resulting structure would be well within natural background levels." Therefore, this project would maintain the existing water quality at the site scale.	
5. Maintain and restore the sediment regime under which aquatic ecosystems evolved.	As mentioned above, "Sediment delivery from construction activities and the resulting structure would be well within natural background levels." Therefore, this project would maintain the existing sediment regime.	This project would maintain the existing sediment regime at the watershed scale as well.
6. Maintain and restore in-stream flows sufficient to create and sustain riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing.	Within the drainage, the proposed project at Site #2 would have no influence on in-stream flows. Therefore, this project would maintain stream flows within the range of natural variability at the site scale, which will also retain the existing patterns of sediment, nutrient, and wood routing.	At the larger watershed scale, this treatment would also maintain stream flows within the range of natural variability.
7. Maintain and restore the timing, variability, and duration of floodplain inundation and water table elevation in meadows and woodlands.	As discussed in #6 above, this project would maintain stream flows within the range of natural variability at the site scale. Although floodplain capacity would be slightly reduced due to development, this project would not prevent or retard floodplain functions in the remainder of the area. Therefore, it would also maintain stream interactions with the floodplain and respective water tables at the site scale.	At the watershed scale, this project would also maintain stream interactions with the floodplain and respective water tables within the range of natural variability.
8. Maintain and restore the species composition and structural diversity of plant communities in riparian areas and wetlands to provide adequate summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration and to supply amounts and distributions of coarse woody debris sufficient to sustain physical complexity and stability.	Development of Site #2 would have minimal cumulative impacts for plants in the project area. The construction site is located within the developed portion of the existing Millpond Recreation Site. Approximately 0.2 acres of Site #2 is a young regenerating stand dominated by conifers and would be lost. The understory beneath the regenerating conifers is poorly developed. The remainder of the site is the existing overflow parking lot devoid of suitable habitat for desirable plant species (EA page 37). As discussed above, there would be no change to the physical integrity of the aquatic system, water quality, sediment regime, in-stream flows, and patterns of sediment, nutrient, and wood routing at the site scale.	Site #2 represents 0.0005% of the 5th field watershed, and 0.001% of the federal ownership within the watershed. At this scale, there would be no measurable change in this objective at the watershed scale. The construction at Site #2 would not prevent the agency from attaining this ACS objective on the remaining federal land in the watershed.

9. Maintain and restore habitat to support well-distributed populations of native plant, invertebrate and vertebrate riparian-dependent species.	Development of Site #2 would have minimal cumulative impacts for wildlife and plants in the project area. The construction site is located within the developed portion of the existing Millpond Recreation Site. Current wildlife behavior patterns would not be noticeably modified since wildlife utilizing this area would likely be habituated to campground noise and associated activities (EA, page 26).	Site #2 represents 0.0005% of the 5th field watershed, and 0.001% of the federal ownership within the watershed. At this scale, there would be no measurable change in this objective at the watershed scale. The construction at Site #2 would not prevent the agency from attaining this ACS objective on the remaining federal land in the watershed.

F. Botany

Surveys were conducted for special status plants and Survey & Manage (S&M) botanical species in Site #1 and Site #2 on February 6, 2007. No Special Status Plants (SSP) or Survey & Manage botanical species were observed.

In addition, surveys for special status plants were conducted in 2002 for the Swiftwater Recreation Sites Programmatic Actions EA (# OR-104-03-02) in the vicinity of the proposed Millpond maintenance facility sites. No S&M botanical species or Special Status Plants were observed. The nearest, known S&M sites are located approximately two miles north of the project area. The nearest, known special status plant site is located along Miller Creek approximately one mile to the north.

There are no sites of Kincaid's lupine (*Lupinus sulphureus* ssp. *kincaidii*) that were discovered during surveys at Site #1 or Site #2 (Appendix F).

1. Botanical Special Status Species and Survey & Manage Species

a) Affected Environment

At Site #1 there is a mix of conifers and hardwoods including: Douglas-fir (*Pseudotsuga menziesii*), western hemlock (*Tsuga heterophylla*), western red cedar (*Thuja plicata*), grand fir (*Abies grandis*), black oak (*Quercus kelloggii*), red alder (*Alnus rubra*), big leaf maple (*Acer macrophyllum*), and a few legacy black cottonwoods (*Populus trichocarpa*).

Approximately 0.3 acres of Site #2 is a young regenerating stand dominated by conifers including incense cedar (*Calocedrus decurrens*) and Douglas-fir and the remainder is the existing overflow parking lot devoid of suitable habitat for desirable plant species. The understory beneath the regenerating conifers is poorly developed.

b) No Action Alternative

Site #1 and the forested portion of Site #2, barring naturally occurring catastrophic events (e.g. wildfire, windstorms, flooding, insect infestation), would continue to mature through the seral stages. There would be potential for Site #1 and the forested portion of Site #2

to develop habitat suitable for some Special Status Plant species or Survey & Manage vascular or non-vascular species.

*c) **Action Alternative 1***

Approximately 1.2 acres of the mixed conifer/hardwood forest at Site #1 would be converted to a maintenance facility that would be maintained for the foreseeable future. This would preclude the development of suitable habitat for Special Status Plants on 1.2 acres and the establishment of new populations of Special Status Plants or Survey & Manage vascular or non-vascular species at this site.

*d) **Action Alternative 2***

Approximately 0.3 acres (i.e. the forested portion of Site #2) would be converted to a maintenance facility that would be maintained for the foreseeable future. This would preclude the development of suitable habitat for Special Status Plants on 0.3 acres and the establishment of new populations of Special Status Plants at this site.

2. Noxious Weeds

*a) **Affected Environment***

The Project Area is infested with Himalayan blackberry (*Rubus discolor*), Tansy ragwort (*Senecio jacobaea*), and Canada thistle (*Cirsium arvense*). The level of infestation is approximately limited to 0.2 acres of Himalayan blackberry, 0.1 acres of Tansy ragwort, and 0.1 acres of Canada thistle.

Infestations of noxious weeds in the recreation sites are treated annually (either manually or with the use of herbicides) under the Roseburg District Integrated Weed Control Plan (1995).

*b) **No Action Alternative***

Increased canopy closure from the maturation of the tree canopy in Site #1 and the forested portion of Site #2 combined with treatment (i.e. either manual removal or herbicide application) would reduce the abundance and distribution of noxious weeds over time.

*c) **Action Alternatives 1 & 2***

There is potential that the construction and use of Site #1 or Site #2 as a maintenance facility could introduce additional noxious weed species. Weeds could be introduced through fill material contaminated with weed seed or by exposing disturbed soil for weed seeds to colonize.

However, maintenance of the facility would control the spread of noxious weeds through active control (i.e. manual removal and/or herbicide application). Active control measures would result in a reduction in the abundance and magnitude of the noxious weed infestation at the maintenance facility. Noxious weed treatment would follow guidelines established in the "Roseburg District Integrated Weed Control Plan Environmental Assessment (EA# OR-100-94-11). Project design features are included in the proposed action to prevent or control the spread of noxious weeds (EA, pg. 11).

Chapter 4. Contacts, Consultations, and Preparers

A. Agencies, Organizations, and Persons Consulted

The Agency is required by law to consult with certain federal and state agencies (40 CFR 1502.25).

1. **Threatened and Endangered (T&E) Species Section 7 Consultation -** The Endangered Species Act of 1973 (ESA) requires consultation to ensure that any action that an Agency authorizes, funds or carries out is not likely to jeopardize the existence of any listed species or destroy or adversely modify critical habitat.

a. Consultation is in progress with the U.S. Fish and Wildlife Service regarding the permanent removal of 1.2 acres of dispersal habitat for the northern spotted owl by the construction of the maintenance facility. The results of this consultation will be disclosed in the Decision record.

b. There are currently no listed, or proposed for listing, fish species in the Roseburg District. There are currently, no further consultation obligations with the National Marine Fisheries Service.

2 . **Magnuson-Stevens Fishery Conservation and Management Act of 1996 -** Essential Fish Habitat (EFH) is designated by the as habitat that is currently or was historically available to Oregon Coast coho and chinook salmon (Federal Register 2002 Vol. 67, No. 12). The Swiftwater Field Office determined that the Proposed Action *"Will Not Adversely Effect"* EFH for coho or Chinook salmon in Rock Creek or its tributaries (pg. 34).

3. **Cultural Resources Section 106 Compliance –** Compliance with Section 106 of the National Historic Preservation Act under the guidance of the 1997 National Programmatic Agreement and the 1998 Oregon Protocol has been documented with a Project Tracking Form dated March 1, 2007. A "No Effect" determination was made.

B. Public Notification

1. Notification was provided (January 29, 2007) to affected **Tribal Governments** (Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz, and the Cow Creek Band of Umpqua Tribe of Indians). No comments were received.

2. A letter was sent (January 29, 2007) to three **adjacent landowners**. One comment was received, via telephone, from an adjacent landowner inquiring about the design of the facility with regards to plumbing, running water, and drain fields for the toilet.

3. The **general public** was notified via the *Roseburg District Planning Update* (Spring

2007) which was sent to approximately 150 addressees. These addressees consist of members of the public that have expressed interest in Roseburg District BLM projects. Requests were made from tow members of the public to be included in future mailings regarding this project.

4. This EA, and its associated documents, would be provided to certain **State, County and local government** offices including: USFWS, NMFS, Oregon Department of Environmental Quality, and the Oregon Department of Fish and Wildlife. If the decision is made to implement this project, it will be sent to the aforementioned State, County, and local government offices.

5. A 30-day **public comment period** would be established for review of this EA. A Notice of Availability would be published in *The News-Review*. The public comment period will begin with publication of the notice published in *The News-Review* on May 1, 2007 and end close of business June 1, 2007. Comments must be received during this period to be considered for the subsequent decision. This EA and its associated documents will be sent to all parties who request them. If the decision is made to implement this project, a notice will be published in *The News-Review* and notification sent to all parties who request them.

C. List of Preparers

Core Team

Erik Taylor	Project Lead / EA Preparer / Recreation / VRM
Dan Dammann	Hydrology
Dan Cressy	Soils
Jeff McEnroe	Fisheries
Evan Olson	Botany
Elizabeth Gayner	Wildlife
Rex McGraw	Planning & Environmental Coordinator
Randy Lopez	Engineering
Garth Stacey	Engineering
Chris Prinz	Maintenance Organization
Bruce Sconce	Maintenance Organization
Ralph Klein	Management Representative

Expanded Team (Consulted)

Isaac Barner	Cultural Resources
Gregg Morgan	Recreation / Visual Resource Management
Tim Votaw	Hazardous Materials & Solid Wastes
Stacy Mican	Safety

D. References Cited

Oregon Department of Environmental Quality, 2003a. Consolidated assessment and listing methodology for Oregon's 2002 303(d) list of water quality limited water bodies and integrated 305(b) report, Portland Oregon [http:///www.deq.state.or.us/wq/303dlist/Final2002AssessmentAndListingMethodolgy.pdf].

Oregon Department of Environmental Quality, 2003b. Oregon's final 2002 303(d) list, Portland Oregon [http://www.deq.state.or.us/wq/303dlist/303dpage.htm].

U.S. Army Corps of Engineers, 1987. *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

U.S. Department of Agriculture, Forest Service, and U.S. Department of the Interior, Bureau of Land Management. Feb. 1994a. Final supplemental environmental impact statement on management of habitat for late-successional and old growth forest related species within the range of the Northern spotted owl (FSEIS).

U.S. Department of Agriculture, Forest Service, and U.S. Department of the Interior, Bureau of Land Management. April 13, 1994b. Record of decision for amendments to Forest Service and Bureau of Land Management planning documents within the range of the Northern spotted owl (ROD) and standards and guidelines for management of habitat for late-successional and old growth related species within the range of the Northern spotted owl (S&G).

U.S. Department of Agriculture, Forest Service, and U.S. Department of the Interior, Bureau of Land Management. 2001. Final Supplemental Environmental Impact Statement for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines in Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl.

USDA, USDI. U.S. Forest Service and BLM. 2004b. Final Supplemental Environmental Impact Statement to Clarify Provisions Relating to the Aquatic Conservation Strategy.

U.S. Department of the Interior, Bureau of Land Management. October 1994. Roseburg District: Final - Roseburg District Proposed Resources Management Plan / Environmental Impact Statement (PRMP/EIS).

U.S. Department of the Interior, Bureau of Land Management. March 1995a. Roseburg District Integrated Weed Control Plan Environmental Assessment (EA #OR-100-94-11).

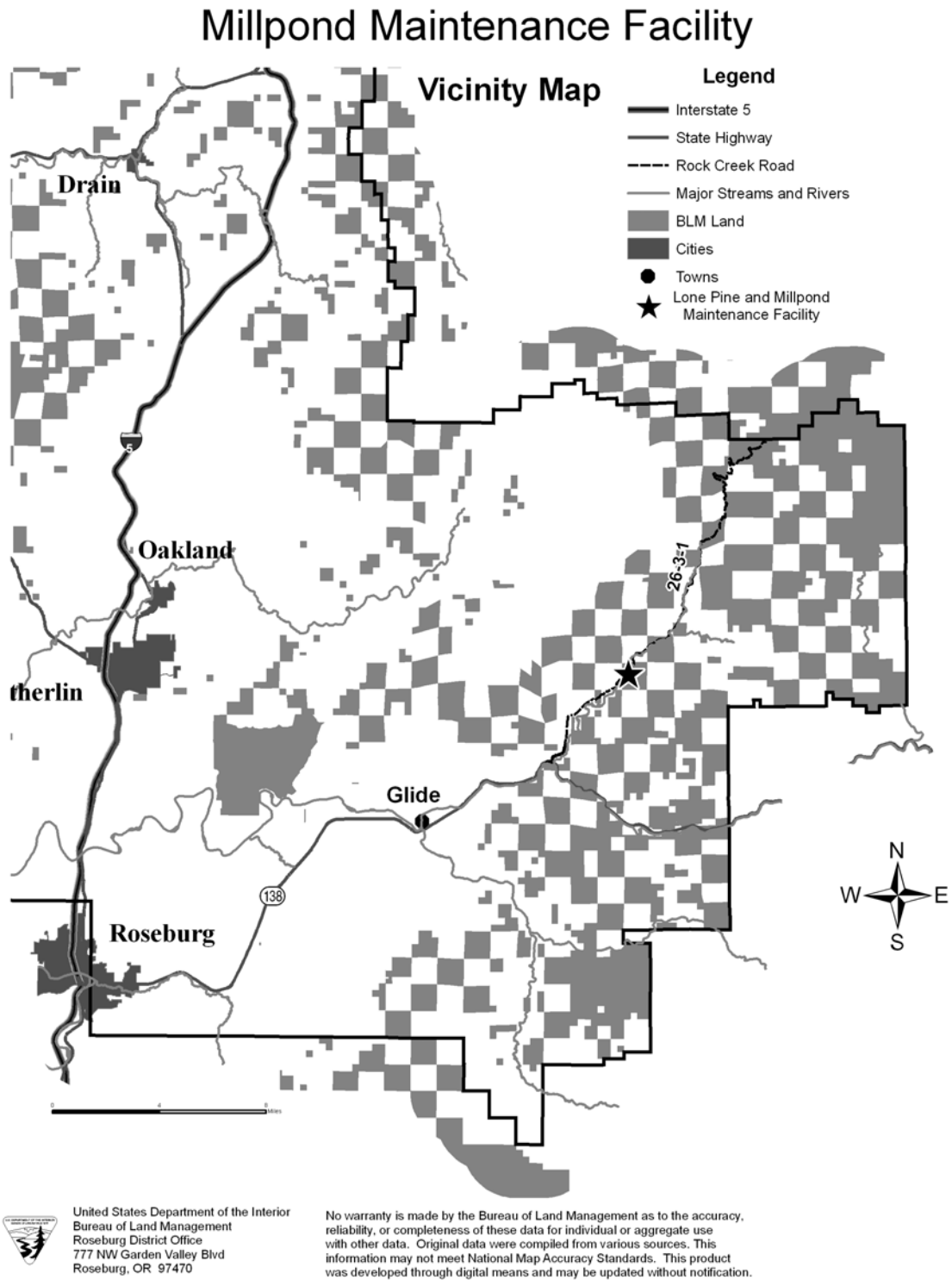
U.S. Department of the Interior, Bureau of Land Management. June 2, 1995b. Roseburg District: record of decision and resources management plan (RMP).

U.S. Department of the Interior, Bureau of Land Management. February, 1996. Watershed Analysis: Rock Creek.

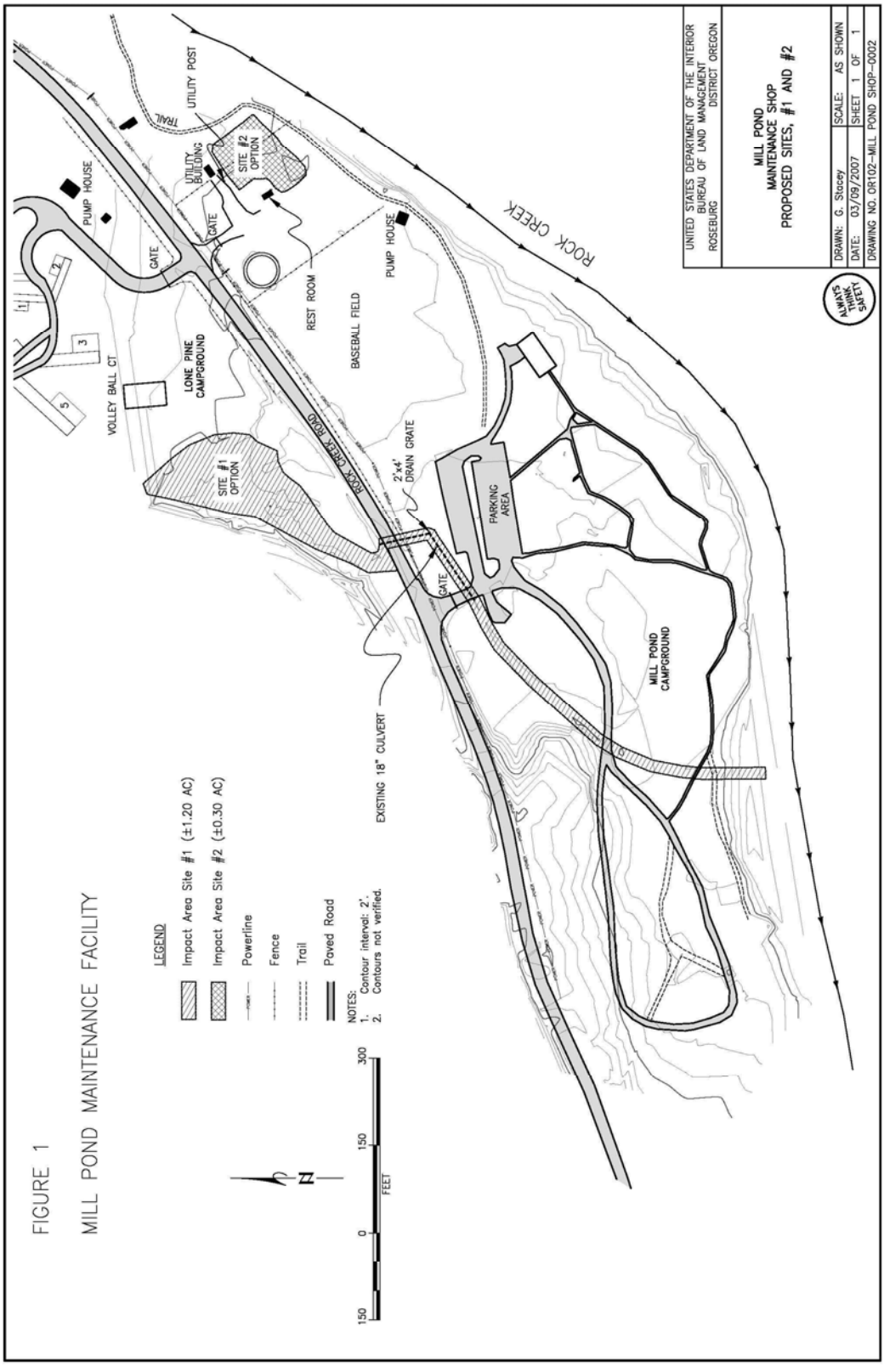
U.S. Department of the Interior, Bureau of Land Management. March 2004. Roseburg District: Rock Creek Watershed Analysis. 117 pgs.

Winn, Lisa A. Rock Creek Region Assessment and Action Plan. Roseburg, Oregon: Prepared for the Umpqua Basin Watershed Council and Roseburg Bureau of Land Management; 2006 March.

Appendix A. Millpond Maintenance Facility Vicinity Map



Appendix B. Millpond Maintenance Facility Map



Appendix C. Critical Elements of the Human Environment

Element	Relevant Authority	Environmental Effect
Air Quality	The Clean Air Act (as amended)	Impacts to areas designated for attainment of federal Clean Air standards is not considered likely. The only action that could contribute to Air Quality is the potentially offensive odor (i.e. diesel exhaust) to nearby campers from heavy equipment idling at the maintenance facility (EA, pg. 16).
Areas of Critical Environmental Concern	Federal Land Policy and Management Act of 1976 (FLPMA)	**None** - Project area is not within or near a designated or candidate ACEC.
Cultural Resources	National Historic Preservation Act of 1966 (as amended)	**"No Effect"** - Implementation of the Alternative 1 or 2 would have no effect on historic properties or cultural resources (EA, pg. 13).
Environmental Justice	E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (Feb. 02, 1994). ***This EO requires that agencies insure that adverse health or environmental effects do not disproportionately affect minority or low-income populations.***	**None** - The proposed project areas are not known to be used by, or disproportionately used by, Native Americans, minorities or low-income populations for specific cultural activities, or at greater rates than the general population (EA, pg. 13). According to 2004 U.S. Census Bureau data approximately six percent of the population of Douglas County was classified as minority status. It is estimated that approximately 14% of the county is below the poverty level (2003 U.S. Census Bureau data).
Farm Lands (prime or unique)	Surface Mining Control and Reclamation Act of 1977. ***This act seeks to identify and restore prime farmlands and other unique federal land characteristics.***	**None** - "No discernable effects are anticipated" (PRMP, pgs. 1-7).
Floodplains	E.O. 11988, as amended, Floodplain Management (May 24, 1977). ***This EO requires agencies to determine if a proposed action will occur in a floodplain and that the action will avoid adverse impacts associated with occupancy and modification of floodplains and avoids floodplain development.***	Both Site #1 and Site #2 are within the floodplain of Rock Creek (EA, pg. 24). However, approximately five feet of fill material would be required to build-up Site #1 above the 100 year floodplain (EA, pg. 26) and approximately two feet of fill material would be required to build-up Site #2 above the 100 year floodplain (EA, pg. 27).
Invasive and Nonnative Species	Lacey Act, as amended; Federal Noxious Weed Act of 1974 as amended; Endangered Species Act of 1973, as amended; and EO 13112 on Invasive Species dated Feb. 03, 1999. ***This EO requires the prevention of introduction of invasive species and to provide for their control to minimize their economic, ecological, and human health impacts.***	Infestations of noxious weeds would be treated under the Roseburg District Integrated Weed Control Plan (1995). Project design features are included in the proposed action to prevent or control the spread of noxious weeds (EA, pg. 12).

Element	Relevant Authority	Environmental Effect
Native American Religious Concerns	American Indian Religious Freedom Act of 1978. ***This act seeks to protect and preserve for American Indians the right of exercise of traditional religion including access to religious sites.***	**None** – There are no known Indian trust resources on the Roseburg District. No concerns were noted as the result of public and tribal contact including impacts to Indian Trust Resources (EA, pg. 12).
Threatened or Endangered Species	Endangered Species Act of 1973 (as amended); The Pacific Coast Recovery Plan for the American Peregrine Falcon (1982); Columbian White-tailed Deer Recovery Plan (1983); Recovery Plan for the Pacific Bald Eagle (1986); and Recovery Plan for the Marbled Murrelet (1997).	**Botany** – Surveys were performed in 2007 and Kincaid's Lupine (federally threatened) and the rough popcorn flower (federally endangered) were not detected (EA, pg. 32). **Wildlife** – Consultation is in progress with the U.S. Fish and Wildlife Service regarding the permanent removal of 1.2 acres of dispersal habitat for the northern spotted owl by the construction of the maintenance facility. The results of this consultation will be disclosed in the Decision record (EA, pg. 34). The proposed action has no effect on the bald eagle. (EA, pgs. 19-20). **Fisheries** – The proposed action "*Will Not Adversely Effect"* EFH for coho or Chinook salmon in Rock Creek or its tributaries. There are currently no listed or proposed fish species in the project area (EA, pg. 34)
Wastes, Hazardous or Solid	Resource Conservation and Recovery Act of 1976; Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (as amended). ***These laws regulate hazardous waste that endangers public health or the environment.***	**None** - Applicable HazMat policies would be in effect.
Water Quality, Drinking / Ground	Clean Water Act of 1987; Safe Drinking Water Act Amendments of 1996; EO 12088, Federal compliance with pollution control standards (Oct. 13, 1978); EO 12589 on Superfund implementation (Feb. 23, 1987); and EO 12372 Intergovernmental review of federal programs (July 14, 1982).	**None** - Project is not in a municipal watershed covered under a Memorandum of Understanding. No domestic water users have been identified within one mile downstream from the project area (EA, pgs. 24-25).
Wetlands/ Riparian Zones	E.O. 11990, Protection of Wetlands (May 24, 1977). ***This EO requires federal agencies to avoid destruction or modifications of wetlands and to avoid undertaking or providing assistance for new construction located in wetlands.***	**None** - "The selected alternative [of the FEIS] complies with [E.O. 11990]..."(ROD/RMP, pg. 51, paragraph 7).
Wild and Scenic Rivers	Wild and Scenic Rivers Act of 1968 (as amended); The North Umpqua Wild and Scenic River Plan (July 1992).	**None** - Project is not within the North Umpqua Scenic River corridor.
Wilderness	Federal Land Policy and Management Act of 1976; Wilderness Act of 1964.	**None** - "There are no lands in the Roseburg District which are eligible as Wilderness Study Areas." (ROD/RMP pg. 54).

OTHER RESOURCES CONSIDERED

Resource	Environmental Effect / Concerns
Land Use (Leases, Grazing etc.)	**None** – The proposed project has no conflicting land uses.
Minerals	**None** - Project has no mining claims or leases of record.
Recreation	Under both Action Alternatives, the average visitor would experience small degradations of the sensory experience and a small reduction in the amount of available recreational activities. The project design features would limit nuisance effects from heavy equipment idling and the design of the facility is intended to visually complement the surrounding landscape and character. No other cumulative effects to recreation or visual resource management are expected. (EA, pgs. 16-19)
Visual Resources	Both Site #1 and #2 are VRM Class II. Site #1 would not typically attract the attention of the casual observer but at Site #2 it would be clearly visible for a 100-200 foot segment of the Sawmill Trail and the entire ball field (EA, pg. 18).
Other (Adjacent Landowners)	Adjacent landowners are in the vicinity of this sale were notified (Jan. 29, 2007) and one comment was regarding specifics of the proposed design of the project (EA, pg. 34).

Appendix D. Bureau Sensitive, Assessment, & Tracking Wildlife Species.

Roseburg District BLM – Swiftwater Field Office

Project Name: Millpond Maintenance Facility Construction
Project Type: Campground Facility Construction
Location: T25S-R02W-Section 21

Prepared By: Elizabeth Gayner
Date: February 26, 2007
SSSP List Date: March 14, 2005

The following tables include those species which are documented or suspected to occur within the Roseburg District BLM. Those Bureau Sensitive or Bureau Assessment species which are suspected or documented to occur within the project area are detailed in **Table 1: Wildlife Summary** and may be further discussed in the body of the EA as appropriate.

Table 3a. Bureau Sensitive & Bureau Assessment Species. BLM districts are responsible to assess and review the effects of a proposed action on *Bureau Sensitive* and *Bureau Assessment* species. To comply with Bureau policy, Districts may use one or more of the following techniques:

- **a.** Evaluation of species-habitat associations and presence of potential habitat.
- **b.** Application of conservation strategies, plans, and other formalized conservation mechanisms.
- **c.** Review of existing survey records, inventories, and spatial data.
- **d.** Utilization of professional research and literature and other technology transfer methods.
- **e.** Use of expertise, both internal and external, that is based on documented, substantiated professional rationale.
- **f.** Complete pre-project survey, monitoring, and inventory for species that are based on technically sound and logistically feasible methods while considering staffing and funding constraints.

When Districts determine that additional conservation measures are necessary, options for conservation include, but are not limited to: modifying a project (e.g. timing, placement, intensity), using buffers to protect sites, or implementing habitat restoration activities (IM-OR-2003-054).

Species	Status[1]	Present in Project Area?[1]	General Habitat Requirements
BUREAU SENSITIVE			
American Peregrine Falcon *Falco peregrinus anatum*	BS, SE	No Habitat	Cliffs, rock outcrops; open habitats for hunting birds
Chace Sideband *Monadenia chaceana*	BS	Out of Range	Rocky, talus habitats in the Klamath Province and southwards
Columbian White Tailed Deer *Odocoileus virginianus leucurus*	BSO, CR	Out of Range	Bottomlands, oak/hardwood forests; cover for fawning
Crater Lake Tightcoil *Pristiloma arcticum crateris*	BSO	Out of Range	Perennially wet areas in late seral forests above 2000ft elevation and east of Interstate-5; seeps, springs, riparian areas
Green Sideband *Monadenia fidelis beryllica*	BSO	Out of Range	Coast Range, riparian forests at low elevations; deciduous trees & shrubs in wet, undisturbed forest
Klamath Tail-Dropper *Prophysaon sp. nov.*	BS	Out of Range	Moist, open areas along streams or springs in Ponderosa Pine forests; as far North as Crater Lake
Lewis' Woodpecker *Melanerpes lewis*	BSO, CR	No Habitat	Open woodland habitat near water; open woodland canopy and large diameter dead/dying trees, snag cavities
Northern Goshawk *Accipiter gentilis*	BSO, XC, CR	Suspected	Mature and older conifer forests; multi-storied canopies and great structural diversity
Northwestern Pond Turtle *Clemmys marmorata marmorata*	BSO, XC, CR	Suspected	Ponds, low gradient rivers; upland over-wintering habitat, CWD
Oregon Shoulderband *Helminthoglypta hertleini*	BSO	No Habitat	Talus and rocky substrates, grasslands or other open areas with low-lying vegetation
Oregon Vesper Sparrow *Pooecetes gramineus affinis*	BSO, CR	No Habitat	Open habitats such as grasslands, meadows, farmlands

Species	Status[1]	Present in Project Area?[1]	General Habitat Requirements
Purple Martin *Progne subis*	BSO, CR	Suspected	Snags cavities in open habitats (e.g. grasslands, brushlands, open woodlands)
Rotund Lanx *Lanx subrotundata*	BSO	Suspected	Major rivers and large tributaries with cold, well-aerated water and rocky substrate
Scott's Apatanian Caddisfly *Allomyia scotti*	BSO	Out of Range	High-elevation (>4,000ft), cold streams in the mountainous regions of Oregon
Spotted Tail-dropper *Prophysaon vannattae pardalis*	BS	Out of Range	Mature conifer forests in the Coast Range; associated with significant deciduous tree/shrub component
Townsend's Big-eared Bat *Corynorhinus townsendii*	BSO, XC, CR	Suspected	Late successional forests; Caves, mines, buildings, bridges, tunnels
BUREAU ASSESSMENT			
Foothill Yellow-legged Frog *Rana boylii*	BAO, XC, V	Suspected	Low gradient streams/ponds; gravel/cobble, bedrock pools
Fringed Myotis *Myotis thysanodes*	BAO, XC, V	Suspected	Late-successional conifer forests, associated with water; caves, mines, bridges, rock crevices
Harlequin Duck *Histrionicus histrionicus*	BAO, XC, U	Suspected	Mountain Streams in forested areas on west slope of the Cascade Mountains
Pacific Pallid Bat *Antrozous pallidus pacificus*	BA	No Habitat	Usually rocky outcroppings near open, dry open areas; occasionally near evergreen forests
Pallid Bat *Antrozous pallidus*	BA	No Habitat	Usually rocky outcroppings near open, dry open areas; occasionally near evergreen forests
White-Tailed Kite *Elanus leucurus*	BAO	No Habitat	Open grasslands, meadows, emergent wetlands, farmlands, lightly, wooded areas; wooded riparian habitats close to open hunting; tall trees and shrubs

[1] *A "Suspected" species has not been documented, however based on literature review, species is expected to occur.*

Table 3b. Bureau Tracking Species. To enable an early warning for species which may become threatened or endangered in the future, Districts are encouraged to collect occurrence data on species for which more information is needed to determine status within the state. Until status of such species changes, Bureau Tracking species will not be considered as Special Status Species for management purposes (IM-OR-2003-054).

Species	Status[1]	Present in Project Area?[1]	General Habitat Requirements	Source of Detection
BUREAU TRACKING				
Acorn Woodpecker *Melanerpes formicivorus*	BT	No Habitat	Mixed oak woodlands; snags	-
American Marten *Martes americana*	BTO, V	Suspected	Late-successional forest; large CWD, snags, uneven age stands with adequate cover	-
Brazilian Free-tailed Bat *Tadarida brasiliensis*	BTO	No Habitat	At low elevations where climatic conditions are warm; roosts in caves, mines, buildings	-
Broadwhorl Tightcoil *Pristiloma johnsoni*	BT	Out of Range	Moist forest sites, typically with deciduous component; Coast/Cascades in WA, Coast Range in OR, as far south as Lane County	-
California Mountain Kingsnake *Lampropeltis zonata*	BT, V	Suspected	Pine forests, oak woodlands, chaparral; rotting logs, loose soil	-
California Myotis *Myotis californicus*	BT	Suspected	Forested areas, shrub-steppe areas, arid grasslands; forage over water and tree canopies where insects congregate	-
Cascades Frog *Rana cascadae*	BT	No Habitat	Lakes, ponds, streams in meadows above elevations of 2600 feet; muddy or silty substrate of shallow waters	-
Clouded Salamander *Aneides Ferreus*	BTO, U	Suspected	Forested Habitats; CWD, talus	-
Common Kingsnake *Lampropeltis getula*	BT	Suspected	Grassland, mixed oak woodlands; riparian	-
Common Nighthawk *Chordeiles minor*	BT	Suspected	Forest mountain clearings, open woodlands & meadows, urban areas; (nests on ground)	-
Del Norte Salamander *Plethodon elongates*	BT	Out of Range	Late-successional conifer forests; rock rubble or talus slopes	-
Great Gray Owl *Strix nebulosa*	BT, V	Suspected	Coniferous forests; meadows and natural openings (>10ac) near late-seral nesting habitat	-
Hoary Bat *Lasiurus cinereus*	BT	Suspected	Open, grassy areas and/or lakes near forest lands; large trees for roosting and access to hatching aquatic insects are important features	-
Indian Paintbrush Bug *Polymerus castilleja*	BTO	No Habitat	Old-growth and late-successional conifer forests, mature riparian woodlands; Indian Paintbrush (*Castilleja spp*.)	-
Long-eared Myotis *Myotis evotis*	BT, XC, U	Suspected	Late-successional conifer forests, associated with water; roosts in caves, mines, bridges, snags	-
Long-legged Myotis *Myotis volans*	BT, XC, U	Suspected	Late-successional conifer forests, associated with water; roosts in caves, mines, bridges, loose bark, rock crevices	-
Northern Red-legged Frog *Rana aurora aurora*	BT	Suspected	Low gradient streams/ponds with aquatic vegetation	-
Olive-sided Flycatcher *Contopus cooperi*	BTO, XC, V	Suspected	Coniferous forests; uneven canopy with snags and tall trees	-
Oregon Floater *Anondonta oregonensis*	BT	Suspected	Slow-moving reaches of permanent streams; sand/gravel substrates in very	-

Species	Status[1]	Present in Project Area?[1]	General Habitat Requirements	Source of Detection
			cold, clear water w/o macrophytes; historically in Umpqua R. and major tribs.	
Oregon Megomphix *Megomphix hemphilli*	BTO	Suspected	Moist conifer/hardwood forests up to 3000ft; HWD leaf litter and decaying HWD matter under big leaf maple trees, sword fern	-
Oregon Red Tree Vole *Arborimus longicaudus longicaudus*	BTO, U	Suspected	Late-successional and mid seral Douglas-fir forests; arboreal platform structures	-
Pileated Woodpecker *Dryocopus pileatus*	BT, V	Suspected	Forests 40 years and older; Large diameter snags, CWD	-
Pristine Springsnail *Pristinicola hemphilli*	BT	Out of Range	Shallow, cold, clear springs/seeps; strongly spring-influenced streams, slow-moderate flow; Umpqua R. drainage	-
Ringtail *Bassariscus astutus*	BTO, U	Suspected	Coniferous forests, mixed woodlands; vertical structure to habitat. Streams and rivers	-
Sharp-tailed Snake *Contia tenuis*	BT, V	Suspected	Forested Habitats; CWD, talus, riparian	-
Silver-haired Bat *Lasionycteris noctivagans*	BTO, U	Suspected	Late-successional conifer forests, associated with water; caves/mines, bridges, loose bark, rock crevices, snags	-
Slender-billed Nuthatch *Sitta carolinensis aculeate*	BT	No Habitat	Open woodlands, preferring oak woodlands in Western OR; nests in cavities	-
Southern Torrent (Seep) Salamander *Rhyacotriton variegatus*	BTO, XC, V	Outside of Range	Springs and streams; riparian/wetland, CWD	-
Tailed Frog *Ascaphus truei*	BT	Suspected	High gradient, perennial streams; cobbles/boulders	-
Western Bluebird *Sialia mexicana*	BT, V	Suspected	Open habitats (incl. clearcuts), tree cavities	-
Western Gray Squirrel *Sciurus griseus*	BTO, U	Suspected	Oak/hardwood forests, conifer forests, riparian; broad-leafed component in habitat	-
Western Pearlshell *Margaritifera falcata*	BT	Suspected	Fast, clear, very cold streams with coarse substrate; hosts include Chinook salmon, trout, speckled dace; Umpqua R. and major tribs.	-
Western Ridgemussel *Gonidea angulata*	BT	Suspected	Creeks, rivers, coarse substrates; Umpqua R. and possibly major tribs.	-
White-footed Vole *Arborimus albipes*	BTO, XC	Suspected	Riparian habitats within conifer forests in the Coast Range; small clearings supporting forb growth	-
Willow Flycatcher *Empidonax traillii brewsteri*	BT, XC, V	Suspected	Riparian, edges of forest clearings; willows brushy vegetation	-
Yellow-breasted Chat *Icteria virens*	BT	Suspected	Dense streamside/riparian vegetation, marshes	-
Yuma Myotis *Myotis yumanensis*	BTO, XC	Suspected	Late-successional conifer forests, associated with water; roosts in caves, mines, bridges, buildings, snags	-

[1] *A "Suspected" species has not been documented, however based on literature review, species is expected to occur.*

Appendix E. Wildlife Summary

Roseburg District BLM – Swiftwater Field Office

Project Name: Millpond Maintenance Facility Construction
Project Type: Campground Facility Construction
Location: T25S-R02W-Section 21

Prepared By: Elizabeth Gayner
Date: February 26, 2007
SSSP List Date: March 14, 2005

Critical Habitat				Management Concerns	
Species	**Present (Y / N)**	**Concern (Y / N)**	**Critical Habitat Unit(s) (CHU #)**	**Habitat Removal or Modification or Both?**	**Critical Habitat Affected by Project (acres)**
Marbled Murrelet	No	No	-	-	-
Spotted Owl	No	No	-	-	-

Species	**Within Species Range?**	**Habitat Present?**	**Species Present?[2]**	**Wildlife Concern[1]?**	**Reason for concern or no concern[1]**	**Mitigation Measures**		
						Seasonal Restriction Required?	**Daily Operating Restriction Required?**	**Buffers Required?**
Threatened & Endangered Species								
Bald Eagle	Yes	No	No	No	No roost or nest sites	No	No	No
Canada Lynx	No	No	No	No	Out of species range	No	No	No
Fender's Blue Butterfly	Yes	No	No	No	No suitable habitat	No	No	No
Marbled Murrelet	No	No	No	No	Out of species range	No	No	No
Northern Spotted Owl	Yes	Yes	Yes	Yes	Degradation of dispersal habitat	No	No	No
Bureau Sensitive Species								
American Peregrine Falcon	Yes	No	No	No	No cliffs/ rock outcrops	No	No	No
Northern Goshawk	Yes	Adjacent	Suspected	No	No impact to adjacent suitable habitat	No	No	No
Northwestern Pond Turtle	Yes	Yes	Suspected	Yes	Removal of over-wintering habitat	No	No	No
Oregon Vesper Sparrow	Yes	No	No	No	No suitable habitat	No	No	No
Purple Martin	Yes	No	No	No	No suitable habitat	No	No	No
Rotund Lanx	Yes	Yes	Suspected	No	No impacts to suitable habitat	No	No	No
Townsend's Big-eared Bat	Yes	Yes	Suspected	No	Removal of roosting habitat	No	No	No
Bureau Assessment Species								
Foothill Yellow-legged Frog	Yes	Yes	Suspected	No	No aquatic effects	No	No	No
Fringed Myotis	Yes	Yes	Suspected	No	Removal of roosting habitat	No	No	No
Other Species of Interest								
None								

[1] *Wildlife concerns and rationale are discussed more fully in Bell Mountain CT EA.*
[2] *Suspected = species has not been documented, however based on literature review, species is expected to occur.*
[3] Species would be expected to forage in the area if suitable habitat is present within one mile of the project area.

Appendix F. Botany Summary

Roseburg District BLM – Swiftwater Resource Area

Project Name: Millpond Maintenance Facility Construction
Project Type: Campground Facility Construction
Location: T25S-R02W-Section 21

Prepared By: Evan Olson
Date: March 1, 2007

ISSUE IDENTIFICATION:
The following tables include those species which are documented or suspected to occur within the Roseburg District BLM. Those Bureau Sensitive or Bureau Assessment species which are suspected or documented to occur within the project area are detailed in **Table A** and may be further discussed in the body of the decision as appropriate.

Table A. Bureau Sensitive & Bureau Assessment Species. BLM districts are responsible to assess and review the effects of a proposed action on *Bureau Sensitive* and *Bureau Assessment* species. To comply with Bureau policy, Districts may use one or more of the following techniques:

- **a.** Evaluation of species-habitat associations and presence of potential habitat.
- **b.** Application of conservation strategies, plans, and other formalized conservation mechanisms.
- **c.** Review of existing survey records, inventories, and spatial data.
- **d.** Utilization of professional research and literature and other technology transfer methods.
- **e.** Use of expertise, both internal and external, that is based on documented, substantiated professional rationale.
- **f.** Complete pre-project survey, monitoring, and inventory for species that are based on technically sound and logistically feasible methods while considering staffing and funding constraints.

When Districts determine that additional conservation measures are necessary, options for conservation include, but are not limited to: modifying a project (e.g. timing, placement, and intensity), using buffers to protect sites, or implementing habitat restoration activities (IM-OR-2003-054).

Species	Within species range?	Habitat Present?	Species Present?	Reason for concern or no concern[1]	Surveys Completed	Mitigation Measures
Threatened & Endangered Species						
Lupinus sulphureus ssp. *kincaidii* Kincaid's lupine (T)	**Yes**	No	No	No habitat present.	N/A	N/A
Plagiobothrys hirtus Rough popcorn flower (E)	**Yes**	No	No	No habitat present.	N/A	N/A
Bureau Sensitive						
Chiloscyphus gemmiparus Liverwort	**Yes**	No	No	No habitat present.	N/A	N/A
Trematodon boasii Moss	**Yes**	No	No	No habitat present.	N/A	N/A
Arcangeliella camphorata Fungus	**Yes**	No	N/A	Surveys Not Practical.[2]	N/A	N/A
Bridgeoporus nobilissimus Giant polypore fungus	No	No	N/A	No habitat present.	N/A	N/A
Dermocybe humboldtensis Fungus	**Yes**	**Yes**	N/A	Surveys Not Practical.[2]	N/A	N/A
Phaeocollybia californica Fungus	**Yes**	**Yes**	N/A	Surveys Not Practical.[2]	N/A	N/A
Phaeocollybia gregaria Fungus	**Yes**	**Yes**	N/A	Surveys Not Practical.[2]	N/A	N/A
Phaeocollybia olivacea Fungus	**Yes**	**Yes**	N/A	Surveys Not Practical.[2]	N/A	N/A
Phaeocollybia oregonensis Fungus	**Yes**	**Yes**	N/A	Surveys Not Practical.[2]	N/A	N/A

Species	Within species range?	Habitat Present?	Species Present?	Reason for concern or no concern[1]	Surveys Completed	Mitigation Measures
Ramaria spinulosa var. *diminutiva* Fungus	**Yes**	**Yes**	N/A	Surveys Not Practical.[2]	N/A	N/A
Rhizopogon chamalelotinus Fungus	**Yes**	**Yes**	N/A	Surveys Not Practical.[2]	N/A	N/A
Rhizopogon exiguus Fungus	**Yes**	**Yes**	N/A	Surveys Not Practical.[2]	N/A	N/A
Eucephalus vialis Wayside aster	**Yes**	**Yes**	No	Surveys performed, not detected.	Feb. 2007	N/A
Calochortus coxii Crinite mariposa-lily	**Yes**	No	N/A	No habitat present.	N/A	N/A
Calochortus umpquaensis Umpqua mariposa-lily	**Yes**	No	N/A	No habitat present.	N/A	N/A
Arabis koehleri var. *koehleri* Koehler's rockcress	**Yes**	No	N/A	No habitat present.	N/A	N/A
Bensoniella oregana Bensonia	**Yes**	No	N/A	No habitat present.	N/A	N/A
Cimicifuga elata Tall bugbane	**Yes**	**Yes**	No	Surveys performed, not detected.	Feb. 2007	N/A
Frasera umpquaensis Umpqua swertia	**Yes**	No	N/A	No habitat present.	N/A	N/A
Horkelia congesta ssp. *congesta* Shaggy horkelia	**Yes**	No	N/A	No habitat present.	N/A	N/A
Kalmiopsis fragrans Fragrant kalmiopsis	**Yes**	No	N/A	No habitat present.	N/A	N/A
Lathyrus holochlorus Thin-leaved peavine	**Yes**	No	N/A	No habitat present.	N/A	N/A
Limnanthes gracilis var. *gracilis* Slender meadow-foam	**Yes**	No	N/A	No habitat present.	N/A	N/A
Perideridia erythrorhiza Red-rooted yampah	**Yes**	No	N/A	No habitat present.	N/A	N/A
Romanzoffia thompsonii Thompson's mistmaiden	**Yes**	No	N/A	No habitat present.	N/A	N/A
Sisyrinchium hitchcockii Hitchcock's blue-eyed grass	**Yes**	No	No	No habitat present.	N/A	N/A
BUREAU ASSESSMENT						
Crumia latifolia Moss	**Yes**	No	N/A	No habitat present.	N/A	N/A
Diplophyllum plicatum Liverwort	**Yes**	No	N/A	No habitat present.	N/A	N/A
Funaria muhlenbergii Moss	**Yes**	No	N/A	No habitat present.	N/A	N/A
Pseudoleskeella serpentinensis Moss	**Yes**	No	N/A	No habitat present.	N/A	N/A
Schistostega pennata Moss	**Yes**	No	N/A	Outside of elevational range.	N/A	N/A
Tayloria serrata Moss	**Yes**	**Yes**	No	Surveys performed, not detected.	Feb. 2007	N/A
Tetraphis geniculata Moss	**Yes**	No	N/A	No Habitat present.	N/A	N/A
Tetraplodon mnioides Moss	**Yes**	**Yes**	No	Surveys performed, not detected.	Feb. 2007	N/A
Tripterocladium leucocladulum Moss	**Yes**	No	N/A	No habitat present.	N/A	N/A
Bryoria subcana Lichen	**No**	N/A	N/A	No habitat present, outside of current known range.	N/A	N/A

Species	Within species range?	Habitat Present?	Species Present?	Reason for concern or no concern[1]	Surveys Completed	Mitigation Measures
Calicium adspersum Lichen	**Yes**	No	N/A	Surveys Not Practical.[2]	N/A	N/A
Lobaria linita Lichen	**Yes**	No	N/A	No habitat present.	N/A	N/A
Pannaria rubiginosa Lichen	**Yes**	No	N/A	No habitat present.	N/A	N/A
Pilophorus nigricaulis Lichen	**Yes**	No	N/A	No habitat present.	N/A	N/A
Stereocaulon spathuliferum Lichen	**Yes**	No	N/A	No habitat present.	N/A	N/A
Sulcaria badia Lichen	**Yes**	**Yes**	No	Surveys performed, not detected	Feb. 2007	N/A
Adiantum jordanii California maiden-hair	**Yes**	No	N/A	No habitat present.	N/A	N/A
Asplenium septentrionale Grass-fern	**Yes**	No	N/A	No habitat present.	N/A	N/A
Carex brevicaulis Short stemmed sedge	**Yes**	No	N/A	No habitat present.	N/A	N/A
Carex comosa Bristly sedge	**Yes**	No	No	No habitat present.	N/A	N/A
Carex gynodynama Hairy sedge	**Yes**	**Yes**	No	Surveys performed, not detected.	Feb. 2007	N/A
Carex serratodens Saw-tooth sedge	**Yes**	No	No	No habitat present.	N/A	N/A
Cicendia quadrangularis Timwort	**Yes**	No	N/A	No habitat present.	N/A	N/A
Eschscholzia caespitosa Gold poppy	**Yes**	No	No	No habitat present	N/A	N/A
Festuca elmeri Elmer's fescue	**Yes**	No	No	No habitat present	N/A	N/A
Horkelia tridentata ssp. *tridentate* Three-toothed horkelia	**Yes**	No	N/A	No habitat present.	N/A	N/A
Iliamna latibracteata California globe-mallow	**Yes**	No	No	No habitat present	N/A	N/A
Pellaea andromedifolia Coffee fern	**Yes**	No	N/A	No habitat present.	N/A	N/A
Polystichum californicum California sword-fern	**Yes**	No	N/A	No habitat present.	N/A	N/A
Scirpus subterminalis Water clubrush	**Yes**	No	N/A	No habitat present.	N/A	N/A
Utricularia gibba Humped bladderwort	**Yes**	No	N/A	No habitat present.	N/A	N/A
Utricularia minor Lesser bladderwort	**Yes**	No	N/A	No habitat present.	N/A	N/A
Wolffia borealis Dotted water-meal	**Yes**	No	N/A	No habitat present.	N/A	N/A
Wolffia columbiana Columbia water-meal	**Yes**	No	N/A	No habitat present.	N/A	N/A

[1] *Botanical concerns and rationale are discussed more fully in the Decision Record.*

[2] *Surveys are considered not practical for these species (Category B) or their status is undetermined (Category E or F) based on the 2003 Annual Species Review (IM-OR-2004-034).*

Table B. Bureau Tracking Species. Surveys are conducted for Bureau Tracking species. To enable an early warning for species which may become threatened or endangered in the future, Districts are encouraged to collect occurrence data on species for which more information is needed to determine status within the state. Until status of such species changes, Bureau Tracking species will not be considered as Special Status Species for management purposes (IM-OR-2003-054).

Scientific Name	ONHP Rank[1]	Roseburg Occurrence?	Occurrence in the Project Area?
Bryophytes			
Cephaloziella spinigera	3	Suspected	None Observed
Fissidens grandifrons	3	Suspected	None Observed
Grimmia anomala	3	Suspected	None Observed
Scouleria marginata	3	Suspected	None Observed
Tortula mucronifolia	3	Suspected	None Observed
Fungi			
Albatrellus ellisii	4	Documented	None Observed
Cazia flexiascus	3	Suspected	None Observed
Choiromyces alveolatus	3	Suspected	None Observed
Clavariadelphus sachalinensis	3	Suspected	None Observed
Clavariadelphus subfastigiatus	3	Documented	None Observed
Cudonia monticola	3	Documented	None Observed
Endogone oregonensis	3	Documented	None Observed
Glomus pubescens	3	Suspected	None Observed
Gomphus bonarii	3	Documented	None Observed
Gomphus kauffmanii	3	Documented	None Observed
Gymnomyces monosporus	3	Documented	None Observed
Gyromitra californica	2	Suspected	None Observed
Helvella crassitunicata	2	Suspected	None Observed
Helvella elastica	3	Documented	None Observed
Helvella maculata	3	Suspected	None Observed
Hygrophorus albicarneus	3	Suspected	None Observed
Leucogaster citrinus	3	Documented	None Observed
Mycena quinaultensis	3	Suspected	None Observed
Nolanea verna var. *isodiametrica*	3	Suspected	None Observed
Otidea smithii	3	Documented	None Observed
Phaeocollybia attenuata	4	Documented	None Observed
Phaeocollybia dissiliens	3	Suspected	None Observed
Phaeocollybia piceae	4	Suspected	None Observed
Phaeocollybia pseudofestiva	3	Suspected	None Observed
Phaeocollybia scatesiae	3	Suspected	None Observed
Phaeocollybia sipei	3	Suspected	None Observed
Phaeocollybia spadicea	3	Documented	None Observed
Plectania milleri	3	Suspected	None Observed
Psathyrella quercicola	3	Suspected	None Observed
Ramaria abietina	3	Documented	None Observed
Ramaria amyloidea	2	Suspected	None Observed
Ramaria aurantiisiccescens	4	Suspected	None Observed
Ramaria botrytis var. *aurantiramosa*	3	Suspected	None Observed
Ramaria concolor f. *tsugina*	3	Suspected	None Observed
Ramaria conjunctipes var. *sparsiramosa*	3	Suspected	None Observed
Ramaria coulterae	3	Suspected	None Observed
Ramaria gelatinaurantia	3	Suspected	None Observed

Scientific Name	ONHP Rank[1]	Roseburg Occurrence?	Occurrence in the Project Area?
Ramaria largentii	3	Documented	None Observed
Ramaria rubribrunnescens	3	Suspected	None Observed
Ramaria suecica	3	Documented	None Observed
Ramaria thiersii	3	Suspected	None Observed
Rhizopogon brunneiniger	3	Suspected	None Observed
Rhizopogon clavitisporus	3	Suspected	None Observed
Rhizopogon flavofibrillosus	3	Documented	None Observed
Rhizopogon truncatus	4	Documented	None Observed
Rhizopogon variabilisporus	3	Suspected	None Observed
Sarcodon fuscoindicus	3	Documented	None Observed
Sarcosoma latahense	3	Suspected	None Observed
Sowerbyella rhenana	3	Documented	None Observed
Lichens			
Buellia oidalea	3	Suspected	None Observed
Calicium abietinum	4	Documented	None Observed
Cetrelia cetrarioides	3	Suspected	None Observed
Chaenotheca ferruginea	3	Documented	None Observed
Chaenotheca furfuracea	4	Documented	None Observed
Chaenothecopsis pusilla	3	Documented	None Observed
Dermatocarpon luridum	3	Documented	None Observed
Hypogymnia duplicata	3	Suspected	None Observed
Lecanora pringlei	3	Suspected	None Observed
Lecidea dolodes	3	Suspected	None Observed
Leptogium cyanescens	3	Documented	None Observed
Leptogium rivale	4	Documented	None Observed
Leptogium teretiusculum	3	Documented	None Observed
Nephroma occultum	4	Documented	None Observed
Parmelina quercina	3	Suspected	None Observed
Peltula euploca	3	Suspected	None Observed
Platismatia lacunosa	3	Documented	None Observed
Pseudocyphellaria perpetua	3	Suspected	None Observed
Pseudocyphellaria rainierensis	4	Documented	None Observed
Pseudocyphellaria sp. 1	3	Suspected	None Observed
Usnea hesperina	3	Suspected	None Observed
Usnea longissima	3	Documented	None Observed
Vezdaea stipitata	3	Documented	None Observed
Vascular Plants			
Ammannia robusta	3	Suspected	None Observed
Astragalus umbraticus	4	Documented	None Observed
Botrychium minganense	4	Suspected	None Observed
Camissonia ovata	3	Suspected	None Observed
Carex barbarae	3	Documented	None Observed
Carex leptalea ssp. *leptalea*	4	Suspected	None Observed
Cypripedium californicum	4	Documented	None Observed
Cypripedium montanum	4	Documented	None Observed
Dichelostemma ida-maia	4	Documented	None Observed

Scientific Name	ONHP Rank[1]	Roseburg Occurrence?	Occurrence in the Project Area?
Enemion stipitatum	4	Documented	None Observed
Epilobium luteum	3	Suspected	None Observed
Epilobium palustre	3	Suspected	None Observed
Erigeron cascadensis	4	Suspected	None Observed
Euonymus occidentalis	4	Documented	None Observed
Hazardia whitneyi var. *discoidea*	4	Suspected	None Observed
Helianthella californica var. *nevadensis*	3	Suspected	None Observed
Lewisia cotyledon var. *howellii*	4	Documented	None Observed
Linanthus bakeri	3	Suspected	None Observed
Lycopodium annotinum	4	Suspected	None Observed
Mimulus douglasii	4	Documented	None Observed
Mimulus kelloggii	4	Documented	None Observed
Minuartia californica	4	Suspected	None Observed
Montia howellii [2]	4	Documented	None Observed
Navarretia tagetina	3	Suspected	None Observed
Phacelia verna	4	Documented	None Observed
Sedum laxum ssp. *heckneri*	4	Suspected	None Observed
Sedum spathulifolium ssp. *purdyi*	4	Documented	None Observed
Sidalcea cusickii	4	Documented	None Observed
Vaccinium oxycoccos	4	Suspected	None Observed
Verbena hastata	3	Suspected	None Observed

[1] ONHP = Oregon Natural Heritage Program Lists; List 3 = taxa for which more information is needed before status can be determined, but which may be threatened or endangered in Oregon or throughout their range; List 4 = taxa of concern which are not currently threatened or endangered (Bureau Tracking are generally ONHP Lists 3 and 4)

[2] *Montia howelli* is a candidate species for listing under the Oregon state threatened and endangered program.