

**UNITED STATE DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT
EUGENE DISTRICT OFFICE
Finding of No Significant Impact
For the Halfway Mining Claim Occupancy Permit
Environmental Assessment
No. DOI-BLM-OR-E060-2010-0002-EA**

BACKGROUND

The Bureau of Land Management prepared an Environmental Assessment (OR060-EA-2010-02) which analyzed the effects of occupying Halfway Mining Claim for up to seven months annually. The claim is located at T22S, R1W, Willamette Meridian, Section 5, Lot 18.

The EA considered two alternatives: Alternative 1 which is the no action alternative; and Alternative 2, which is to issue an occupancy permit.

FINDING OF NO SIGNIFICANT IMPACT

On the basis of the information contained in the EA (OR060-EA-2010-02), and all other information available to me, it is my determination that the implementation of the proposed action is consistent with the objectives, land use allocations, and management direction of the 1995 ROD/RMP.

This finding is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR 1508.27), both with regard to the context and to the intensity of the impacts described in the EA.

Context

The action alternative would occur in Riparian Reserve Land Use Allocation (LUA) as designated by the 1995 Eugene District Resource Management Plan (RMP). The action alternative is in compliance with the 1995 Eugene District RMP. The action alternative is in compliance with 43 CFR 3715, regarding use and occupancy under the mining laws.

Under the action alternative, the proponent would occupy the Halfway mining claim from May 15 to November 30 annually. The proponent would construct a short spur road, gravel two pads for recreational vehicles, and temporarily place a portable toilet.

Intensity

I have considered the potential intensity/severity of the impacts anticipated from occupancy relative to each of the ten areas suggested for considered by the CEQ. With regard to each:

1. *Impacts that may be both beneficial and adverse.* The EA considered both potential beneficial and adverse effects especially for relevant resources such as wildlife. None of the effects are beyond the range of effects analyzed in the 2008 Final EIS.
2. *The degree to which the proposed action affects public health and safety.* No aspect of the proposed action would have an effect on public health and safety.
3. *Unique characteristics of the geographic area such as proximity of historic or cultural resources, park lands, prime farm lands, wetlands, wild and scenic rivers, or ecologically critical areas.* There are no known parks, prime farm lands, wilderness, or wild and scenic

rivers in the project area. The proposed project is not expected to affect cultural resources, and the project area has been surveyed by an archeologist.

4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial.* The effects of the actions planned and the proposed action are similar to many other dispersed camping sites, and are within the scope of the 1995 Eugene RMP. No unique or appreciable scientific controversy has been identified regarding the effects of the proposed action.
5. *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.* The analysis has not shown that there would be any unique or unknown risks to the human environment not previously considered and analyzed in the 1994 EIS, to which this decision is tiered. Dispersed camping has been conducted by members of the public for many years in the vegetation types typical of the project area.
6. *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.* The project neither establishes a precedent nor represents a decision in principle about future actions. The proposed action is consistent with action appropriate for the Riparian Reserve land use allocation, as designated by the 1995 Eugene District ROD/RMP.
7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.* The environmental analysis did not reveal any cumulative effects beyond those already in the EIS.
8. *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.* There are no features within the planning area that are listed or eligible for listing in the National Register of Historic Places or are significant scientific, cultural, or historic resources.
9. *The degree to which the action may adversely affect an endangered or threatened species of its habitat that has been determined to be critical under the Endangered Species Act of 1973.* The proposed project area may provide habitat for Northern Spotted Owl, a threatened species. The proposed occupancy site is considered spotted owl dispersal habitat with limited foraging opportunities. Less than ½ acre of dispersal-only habitat would be affected. Approximately 240 acres of suitable habitat exists within Section 5. The proposed occupancy site does not contain a spotted owl nest patch. The adjacent private lands are managed for industrial timber production, do not offer suitable nesting habitat, and any available dispersal habitat is not expected to remain long before harvest. Programmatic consultation has been completed for the project area. The proposed action would have no effect on any listed fish or botanic species. None of the effects to listed species would be beyond the range of effects analyzed in the 1994 EIS.
10. *Whether the action threatens a violation of Federal, State, or local laws or requirements imposed for the protection of the environment.* The proposed action does not threaten to violate any law. The proposed action is in compliance with the 1995 Eugene District RMP, which provides direction for the protection of the environment on public lands.

**Halfway Mining Claim Occupancy Permit Environmental Assessment
DOI-BLM-OR-E060-2010-0002-EA**

**United States Department of the Interior
Bureau of Land Management
Eugene District
Upper Willamette Resource Area**

T22S, R1W, Willamette Meridian, Section 5, Lot 18
Serial Number OROR 066232
Robert Arndell, Claimant; Eugene, OR

Background:

Robert Arndell filed a Notice describing mining operations for the Halfway Mining claim on February 2, 2010. The Notice included a request to occupy the site for more than 14 days annually. The Notice was evaluated and found to be complete according to the regulations (43 CFR §3809), and Mr. Arndell was notified of this determination by certified letter dated February 18, 2010. Occupancy of public lands under the mining laws for more than 14 days in any 90-day period within a 25-mile radius of the initially occupied site is subject to Bureau of Land Management (BLM) review and approval. The occupancy request is evaluated separately from the mining request, since different regulations apply to this activity. These regulations include a requirement to conduct environmental analysis. Such occupancy must be reasonably incident to the mining operation (as defined in 30 USC 612) without unnecessary or undue degradation (as defined in 43 CFR §3802.0-5 and §3715.2-1).

The Area Manager determined that use and occupancy should be addressed in a NEPA document that considers the entire Mining Plan or Notice and the reasonably incident question of the activity as related to the §3800 activity. The EA will be completed for the surface use and occupancy as required by the 7/19/2007 Memorandum from DSD for Resource Planning, Use and Protection, Oregon State Office of BLM.

The proponent plans to:

- Occupy the site from mid-May to the end of November, placing a fully self-contained motor home, camper, and portable toilet on the site;
- Build a driveway from Sharps Creek Road to the site;
- Remove understory vegetation over about 2,000 square feet;
- Rock the driveway and two camping pads over about 1,500 square feet;
- Construct a trail to Sharps Creek; and
- Restore the site when annual occupancy ends, including rock removal and replanting native species, as secured by a bond.

To legally occupy a mining claim for more than 14 calendar days in any 90-day period within a 25-mile radius of the initially occupied site,

- Occupancy¹ must be 'reasonably incident' to mining;

¹ **Occupancy** = full or part-time residence on public lands, or activities that involve residence; the construction, presence or maintenance of temporary or permanent structures; or use of a watchman or caretaker.

- Constitute substantially regular work;
- Be reasonably calculated to lead to the extraction and beneficiation of minerals;
- Involve observable on-the-ground activity that BLM may verify;
- Use appropriate equipment that is operable;
- **Have written concurrence of BLM;**
- AND one or more of the following:
 - Protect exposed, concentrated, or otherwise accessible valuable minerals from theft or loss
 - Protect from theft or loss operable equipment that is regularly used, not readily portable, and cannot be protected by other means than occupancy;
 - Protect the public from such equipment if left unattended creates a hazard to public safety;
 - Protect the public from surface used, workings or improvement which if left unattended create a safety hazard;
 - Site is located in an area so isolated as to require the operator to remain on site in order to work a full shift, normally 8 hours.

Purpose and Need for the Proposed Action:

The purpose of the action is to permit or deny occupancy of the mining claim between May 10 and November 30. The need for the project is established by BLM's responsibility under 43 CFR §3715 (Use and Occupancy under the Mining Laws) to respond to a request for extended occupancy during the mining season on BLM lands.

Decision to be made:

The decision to be made is whether or not to issue an occupancy permit, based on whether occupancy of the mining claim during the mining season if it is reasonably incident to the mining operation (as defined in 30 USC 612) and without unnecessary or undue degradation (as defined in 43 CFR §3802.0-5 and §3715.2-1).

Scoping:

This project was scoped internally to identify issues and connected, similar, or cumulative actions associated with the proposal. The public will have the opportunity to respond to this project when this analysis is available for public review.

Resource Issues:

1. How will occupancy affect soil productivity in the site?
2. How will occupancy affect fish habitat in Sharps Creek, with regard to sediment factors such as turbidity and bank stability?

Issues Considered but Eliminated from Detailed Analysis:

1. *How will occupancy affect water quality in Sharps Creek, specifically potability and swimability of the water; and temperature?* Project design features protecting surface and subsurface water from human waste and chemicals will effectively protect the potability and swimability of Sharps Creek. No trees in the riparian area would be removed as part of the

Structures = barriers to access, fences, tents, motor homes, trailers, cabins, houses, buildings, and storage of equipment or supplies.

- proposed action, so there would be no effect to water temperature.
2. *How will occupancy affect vegetation, specifically rare or unusual native plant species and the spread of non-native, invasive plant species?* No rare or unusual native plant species were identified during a survey of the site. Invasive plant species were found during this survey; project design features prevent the spread of invasive species from or within the site. See Appendix F for a more detailed discussion of the plant survey.
 3. *How will occupancy affect habitat for the spotted owl, specifically with regard to activities such as nesting, dispersal, and foraging? How will occupancy affect other special status species?* The base level of human disturbance is pronounced in the project area, with close proximity to a garbage transfer station, numerous dispersed recreation sites, a heavily used campground, private residences, dredge mining, a rock quarry, an a popular swimming hole in Sharps Creek. Peak levels of human activity are late May to early September, with a relatively quiet period between November and early May. Occupancy of the site does not increase this level of disturbance, so there are no effects to special status species incurred by the proposed action. See Appendix F for a more detailed discussion of special status species.
 4. *How will occupancy affect recreational management in the Sharps Creek corridor, such as availability and quality of recreation?* The Sharps Creek Corridor is a very active recreational area. Existing activities include camping, dredge mining, gold panning, swimming, and picnicking. The proposed site is a little over 2 miles from Sharps Creek Recreation Site, and is not within a Special Recreation Management Area, Backcountry Byway or proposed Wild and Scenic River Corridor (RMP, pp. 78, 81). There are no existing trails through the site, and the proposed Sharps Creek trail does not intersect the site (RMP, pp. 76, 82). The project area is within VRM Class III area, and dispersed camping sites visible from the road are acceptable under this Visual Resource Management class. The proposed action would not change the availability or quality of these activities.

Alternatives:

No action – The BLM would decide that occupancy of the mining claim is not reasonably incident to the mining operation and would deny the request for an occupancy permit for the mining claim. The proponent and a partner would likely occupy the site for 14 day period. No site alteration would be allowed, so no site restoration bond would be required for this action. Mining would continue, but occupancy would be limited to 14 days.

Proposed Action alternative – The BLM would decide that occupancy of the mining claim is reasonably incident to the mining operation and would issue an occupancy permit for May 15 to November 15 at the Halfway Mine (T22S, R1W, Willamette Meridian, Section 5, Lot 18), for up to ten years (2010 - 2019). The occupancy permit would also allow the proponent to construct 150 feet of spur road, about 15 feet wide on a grade from 0% to 6%; harden the road and two pads for recreational vehicles for the proponent and a partner, using about 60 cubic yards of material from the Sharps Creek Quarry nearby; and temporarily place a fully contained portable toilet. A site restoration bond would be required and applicable standards from the BLM mining management plan would be included. Project Design Features can be found in Appendix A.

Affected Environment and Environmental Effects

1) How will occupancy affect soil productivity in the site?

Proposed Action – Building a short road (about 30 feet long by 12 feet wide or 360 square feet) and a

pad for the recreational vehicle (about 40 feet by 15 feet or about 600 square feet) for about 960 square feet or 0.022 acres of disturbance. Develop a single user trail between the site and the stream.

Resource affected – The road and pad will be compacted and covered with angular rock greater than 3 inches in diameter. Soil productivity, or the ability of the soil to grow native vegetation, will be lost while the soil is covered with rock, and compaction of the soil beneath the road and pad will decrease soil porosity, which provides plants with water, gas exchange, and space for roots to grow.

Type of potential effect – Loss of soil productivity

Resource impact indicator – Acres of lost soil productivity, relative to the area of lost soil productivity in the Sharps Creek corridor.

Affected Environment:

The Sharps Creek corridor is a popular location for mining, and is home to about 25 active mining claims, as well as an existing campground. Disturbed, displaced, and compacted soil at these sites ranges from 600 square feet to 60,000 square feet (average 7,000 square feet), for a total of about 175,000 square feet (or 4.0 acres). Currently, the site is legally used for dispersed recreation, and about 600 square feet of soil has been compacted or displaced. Due to the steepness of the existing access road, the south end of the site has been heavily disturbed. Ruts and puddles formed plus vegetation and the organic soil layer has been displaced.

Environmental Consequences:

The **no action alternative** would maintain the current condition or expand the site due to continued use as a dispersed site. This activity is likely to continue and could expand, based on the creation and expansion of other dispersed sites associated with mining claims in the Sharps Creek corridor. The site is confined by Sharps Creek and the adjacent road to about 60,900 square feet (1.4 acres).

The **action alternative** would harden the site and soil productivity would be lost under the rock area. While it is possible that dispersed camping and other soil disturbing activities would occur when the site was unoccupied, the extended occupancy, improved access road, and hardened pad for recreational vehicles would serve to confine the extent of soil disturbance to the improved area.

2) How will occupancy affect fish habitat in Sharps Creek?

Proposed action – Consistent human presence on the stream bank, and user trail construction and use between the site and the stream

Resource affected – Fish presence, turbidity, sedimentation, and loss of potential large woody debris; see Issue (1) for a discussion of stream temperature.

Type of potential effect - Fish presence could be reduced in the vicinity of the site by human presence and disturbance. Erosion from the stream bank could increase turbidity and sedimentation from the stream bank.

Resource impact indicator – Scarcity of fish in the vicinity of the occupied site; turbidity and sediment plumes downstream of the user developed trail; and loss of riparian trees.

Affected environment: The project area is on the banks of Sharps Creek above Dorena Reservoir, approximately 4.5 miles downstream. No anadromous fish (salmon or steelhead) migrate above

Dorena Reservoir due to the passage barrier created by the dam. This stream provides habitat for fish species, including cutthroat trout, large scale sucker, sculpin, dace, and rainbow trout.

Stream habitat adjacent to the occupancy area is a split channel separated by an exposed gravel bar with a fast moving, shallow pool dominated by cobbles, gravel, sand and some areas of bedrock. On the far side of Sharps Creek of the gravel bar is a riffle dominated by cobbles and gravel.

Large wood is an important component of aquatic habitats, from headwater channels to estuaries in forested ecosystems (Dolloff and Warren 2003) and is delivered to stream channels from various processes (Naiman et al., 2000). Sharps Creek is limited in fish production due to low levels of large woody debris which provides cover for fish and increases habitat complexity.

Environmental consequences:

Under the **no action alternative**, the existing dispersed camp site would remain. The existing stream side vegetation would continue to prevent sediment from entering Sharps Creek from the site, and the existing trees would provide shade, detritus to the aquatic food chain, and eventually large wood to Sharp Creek.

Under **the proposed action**, occupancy along Sharps Creek foot print of disturbance would remain, even after the site was restored. Project design features would limit the size of this disturbed area. A user trail to the creek would be constructed, leaving exposed soil and increasing sediment delivery 0.5%. See Appendix G for a discussion of sediment production estimates. The existing stream side vegetation would continue to prevent sediment from entering Sharps Creek from the site, except at the user trail, and the existing trees would provide shade, detritus to the aquatic food chain, and eventually large wood to Sharp Creek. .

This project is not expected to reduce fish production in Sharps Creek. Human activity is extensive in Sharps Creek and includes dispersed camping, a campground, swimming, fishing, and gold mining using motorized dredges and panning. The proposed action would not measurably increase fish disturbance or affect an area previously unused by humans.

Within Sharps Creek dredging and to a lesser extent, gold panning, disturb stream substrate. This disturbance does not add sediment, but does create plumes of turbidity downstream. Since mining activity is allowed regardless of occupancy, the cumulative effects of occupancy are limited to the 0.5% annual increase in sediment production from the user trail.

Tribes, Individuals, Organizations, or Agencies Consulted

No tribes, individuals (other than the proponent), organizations, or agencies were consulted during the preparation of this document.

List of Preparers

Jan Robbins – *Hydrology, Soils, Mineral Specialist, Team Leader*

Chris Langdon – *Wildlife Biology*

Cheshire Mayrsohn – *Botany*

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Appendix A: Project Design Features

Once Occupancy or Use Begins

- All facilities and equipment on a mining claim or mill site must be appropriate and reasonably incident to prospecting, mining or processing operation. All equipment and facilities must be presently operable, subject to the need for reasonable assembly, maintenance, repair, or fabrication of replacement parts.
- All structures used or occupied by a mining claimant or operator must be noted in the §3715 and §3809 filings.
- If at any time, reasonably incident activities cease, inspections by BLM personnel reveal that observable on-the-ground activities have stopped, BLM may terminate the concurrence and order all or part of the use and occupancy to stop and be removed from public lands.
- All operations must have at least one (1) ABC type fire extinguisher per structure, on site at all times.
- All operations must be kept neat, clean and free of debris. The facilities must present a safe work environment for the employees and facilities must be constructed to meet all applicable electrical, mechanical, safety and public health codes or regulations.
- All automobiles and motor homes on mining claims must have current registration. In addition, the claimant or operator will allow no vehicle or piece of equipment to be parked or positioned in a way that impedes the normal flow of traffic.
- The exterior of all trailers on public land must be in good physical condition, well maintained, and kept clean and in good repair.
- All petroleum product storage tanks and barrels must be placed above ground and must be in a bermed area. The bermed area must be lined with an impervious lining and able to contain 110% of the capacity of the tanks or barrels.
- No permanent foundations will be erected for mobile homes. No mobile home will have an enclosed deck or add-on room. Porches may be installed, but any porch will be easily removable from the mobile home. Porches will not be enclosed with any material, except for screening or roll-up sun shades. There must be at least ten (10) feet between adjacent mobile homes.
- The mine operator will not exceed the number or type of structures specified in the approved §3715 and §3809 filing. All structures must be removed within the timeframes listed in the §3715 and §3809 filing. The claimant or operator must furnish the BLM with a copy of the Water Pollution Control Facility Permit before operations begin, whenever a WPCFP is required.
- BLM will coordinate with the claimant or operator to ensure that only the number of people required to perform the tasks of mining and to provide site security will be in residence on the claim at any time. Based on this consultation and the subsequent environmental analysis, BLM will specify the maximum number of people, including family members that can reside on the claim for more than 14 days in any 90-day period.
- Except evaporative coolers and air conditioner, no household appliance of any kind will be installed or stored outside the structure. Only furniture designed and constructed for exterior use is permitted outdoors. Tables, grills, and fire-containing devices will be repaired as necessary to assure proper function, rigidity, support and appearance.
- Consistent with all applicable laws and subject to reclamation, vegetation must be cleared for a minimum distance of 15 feet from any site in which a fire will be built and flammable ground litter must be cleared for at least a 5-foot radius around the fire.
- No tree will be allowed to be removed without prior written authorization from the BLM Field

Manager.

- Grounds will be well maintained, safe, uncluttered, and free of litter and debris and trash. All operation will provide a clean and maintain appearance for the public from any roadways, thoroughfares or trails by which the public may approach or pass mining operations on BLM lands.
- Non-essential animals or free-roaming pets or animals are not allowed.
- Waste is defined as all discarded matter, including but limited to human waste, trash, garbage, refuse, petroleum products, ashes and equipment. Refuse will be stored in receptacles that have covers and lids, are painted, undented, waterproof, and both vermin and raven proof. Wastes will be properly disposed of in accordance with local laws. This should be an ongoing effort and unused equipment, materials, trash, refuse, and litter should be removed periodically to maintain the highest aesthetic standards achievable during mining operation. The min operator will provide an effective system for the collection and disposal of garbage and trash. This will be done by contracting with a trash removal firm, or with appropriate public entities, or through self efforts of the operator or any combination of these methods as directed by the Field Manager. Wastes will be disposed of in a sanitary landfill unless otherwise approved by the Field Manager.
- All sewage treatment facilities will be constructed and operated in accordance with all necessary permits using accepted engineering practice and procedures. The operator or claimant must have a septic permit from the county in which the septic system is located before the system can be operated. This permit includes nonwater-carried sewage disposal facilities.
- Public signs, if authorized by the BLM, for which the operator is responsible must be appropriately located, accurate, attractive and well maintained. Permanent signs will be prepared in a professional manner, consistent with BLM standards and must be approved by BLM before installation.
- BLM will keep the public lands open to public entry at all times. Where public health and safety are a primary concern or it is essential that access be limited to protect valuable mining equipment or supplies from theft or loss, BLM will authorize the placing on public lands fences, gated, and signs to limit public access. Where public safety is of paramount concern, BLM may, at the discretion of the Field Manager, use administrative procedures to formally close the lands to public entry using procedures specified for 43 CFR §8364.
- Whenever fences, gates, or signs are placed on public lands, BLM will require the claimant or operator to post public directions on the fence or gate showing routes to public lands around or behind the fenced enclosure. The exact nature of the posting to be used will be decided on a case by case basis by the Field Manager. Whenever locked gates are used, BLM will require the claimant or operator to provide BLM a key or use a system of double locks.
- Regulations at 43 CFR §3809.1-1 require that all operation will be reclaimed. Occupancy site reclamation will include, but is not limited to, complete removal of all structures, regarding, replacement of topsoil or growth medium and establishing native vegetation to establish a diverse, effective, and permanent vegetative cover to reflect the post mining land use. All reclamation operations will be conducted in accordance with the BLM Solid Mineral Reclamation Handbook (H-3042-1).
- Only non-permanent structures which are not affixed to the ground, non-water carried waste disposal systems (outhouses, above ground composting toilets, chemical toilets and other “dry” toilets), may be allowed associated with a Mining Notice with the appropriate state or local permits. Chemical toilets must be pumped on a regular basis and receipts must be provided upon demand. (7/19/2007 Memorandum from DSD for Resource Planning, Use and Protection, Oregon State Office of BLM)

- Block access to the site during the off-season to prevent dumping trash, which could be accomplished by placing a log or boulders at the entrance to the site from the road.
- Limit site disturbance by using a single trail to the stream, a single route between the site and the county road, and minimizing ground disturbance within the site. Water bar or mulch the route to the stream annually.
- Minimize the area cleared of vegetation to retain as much native vegetation as possible. Provide an opportunity to salvage plants prior to excavation.
- Annual issuance of the permit will be based on performance the previous year.
- Keep the occupied site clear of non-native blackberries, herb Robert, and other invasive plants. The botanist will help with plant identification.
- Bring in firewood rather than gathering firewood on site.
- Site restoration will include removing the gravel pad, tilling and seeding compacted areas, and planting native vegetation from container stock.
- Protect trees on site by using inner tubes or rags to protect the bark from the cable when securing the dredge.

1. Appendix F: Special Status Species

Affected environment: Most of the project area has been partially cleared of understory vegetation, otherwise the vegetation is similar to other mid-seral riparian stands in the Upper Willamette Resource Area (see Botany section). This riparian area has been impacted for decades, and is bisected by a two-lane paved road that receives moderate traffic. The site is lacking snags and coarse woody debris compared to typical unmanaged stands and contains no special habitat features except Sharps Creek, a large tributary of the Row River. Special Status wildlife species and habitats that may be impacted by the proposed alternatives are discussed below. Species eliminated from consideration are listed in Appendix D.

SPECIAL STATUS SPECIES - THREATENED AND ENDANGERED SPECIES

Northern Spotted Owl

The Northern Spotted Owl (*Strix occidentalis caurina*; spotted owl) is a long-lived owl species that ranges from northern California to British Columbia. Spotted Owls prey on a variety of small mammals and typically nest and forage in older forest stands (Forsman et al. 1984).

The Halfway site is characterized by relatively small tree sizes, high tree density, and low amounts of useful large CWD and snags; the site also lacks nesting structure and multiple canopy layers. Therefore the site is considered spotted owl dispersal habitat with limited foraging opportunities. The Halfway site is adjacent to a heavily-travelled paved road, human habitation, a waste transfer site, and a quarry subject the site to a high baseline level of noise and visual disruption.

Adjacent Habitat - There are approximately 240 acres of dispersal/foraging habitat on BLM-managed lands within section 5; the nearest suitable habitat occurs on BLM-managed land approximately a mile away in T21S-R01W-Sec31. The adjacent private lands are managed for industrial timber production, do not offer suitable nesting habitat, and any available dispersal habitat is not expected to remain long before harvest.

Spotted Owl Sites and Survey History - Information on the location and status of spotted owl sites in the area is available from surveys conducted beginning in the 1990s. All spotted owl sites in the vicinity are thought to have been identified, but survey efforts have been sporadic from year to year. The nearest spotted owl site, Culp Creek (#2115), is 0.75 miles from the Halfway site and has not been surveyed since 1999. No spotted owl nesting was ever detected at this site, and current use is unlikely because the BLM harvested the core use area and additional timber harvest has occurred on adjacent BLM and private lands.

SPECIAL STATUS SPECIES - BUREAU SENSITIVE SPECIES

Foothill Yellow-Legged Frog

This species uses moderate to large, relatively low-gradient rivers with rocky stretches, sand or gravel bars, and sun exposure; all these features are present in the project area (Corkran and Thoms 1996). Although yellow-legged frogs were once widespread and common, their numbers have drastically decreased in recent decades. A known site occurs nearby in the Row River at Disston but it is unknown if yellow-legged frogs inhabit the project area.

Western Pond Turtle

Pond turtles occur from Puget Sound to Baja California in many aquatic habitats, including ponds, lakes, and relatively slow portions of streams and rivers (Rosenberg et al. 2009). Habitat modification

in the Willamette Valley has greatly reduced pond turtle numbers over the past century. Important habitat features include basking structures, and open, south-facing nesting habitat. The project area does not offer nesting habitat, but is suitable western pond turtle aquatic habitat.

Harlequin Duck

This diving duck breeds along larger, fast-flowing inland streams before migrating to the Pacific coast to overwinter. Typical food items include terrestrial and aquatic invertebrates and fish eggs (Thompson et al. 1993, Robertson and Goudie 1999). Harlequin ducks nest on the ground, in tree cavities, on cliffs or on stumps, usually within 5 meters of water although distances of up to 150 feet have been recorded.

SPECIAL STATUS SPECIES - MIGRATORY BIRDS

Guidance for Federal agencies whose actions could impact migratory birds was issued in Executive Order 13186 (2001), which directs agencies to ensure that environmental analysis considers the effects of agency actions and plans on migratory birds, with emphasis on species of concern.

Additional guidance for migratory birds was issued in BLM Instruction Memoranda Nos. 2008-050, Migratory Bird Treaty Act – Interim Management Guidance (USDI 2008) and 2009-018, Migratory Bird Treaty Act—Clarification of WO IM 2008-050 for Western Oregon, and the 2010 Memorandum of Understanding between the U.S. Department of the Interior Bureau of Land Management and the U.S. Fish and Wildlife Service To Promote the Conservation of Migratory Birds. These memos identify “Birds of Conservation Concern” and “Game Birds Below Desired Condition,” as defined by the Service (2008), as species to be addressed in project-level NEPA documents. Of these species, the harlequin duck is addressed above; habitat for the bald eagle, marbled murrelet, northern goshawk, peregrine falcon, streaked horned lark, vesper sparrow, black swift, mourning dove, band-tailed pigeon, olive-sided flycatcher, purple finch, and rufous hummingbird would not be affected by the proposed action, and the remaining two species that could potentially be affected by the proposed action are discussed below.

The **willow flycatcher** is an aerial insectivore that uses shrubby riparian areas with multiple canopy layers. This species ranges over much of the United States and has suffered significant declines from habitat alteration, particularly in California and the southwest (Altman 2003). Generally the Halfway claim is suitable habitat for the species due to the presence of a shrub layer (willow, vine maple, hazel, blackberry) and proximity to water, although the proposed development site is too sparsely vegetated to be considered suitable habitat.

Wood ducks are cavity-nesting birds that inhabit many types of habitat near lakes, streams, or ponds. Their diet is varied, including vegetation, acorns, nuts, berries, and invertebrates (Poole and Gill 1992). The project area is potential wood duck habitat due to its proximity to Sharps Creek and the presence of suitable nest trees.

Environmental consequences:

Under the **No Action Alternative**, conditions would remain generally unchanged at the site and there would be no direct or indirect effects to wildlife or habitat on BLM-managed lands if the proposed occupancy permit were not granted.

Under the **Proposed Action**, site development would not affect overstory trees but would reduce habitat quality by removing shrubs, herbaceous vegetation, and coarse woody debris. However, because the affected area would be small, and the site is already impacted, effects would be

insignificant.

SPECIAL STATUS SPECIES - THREATENED AND ENDANGERED SPECIES

Northern Spotted Owl

The action alternative would have no effects to spotted owls from habitat modification or disruption. Current owl use of the site is unlikely given current habitat conditions, baseline disruption from Sharps Creek Road, little available nearby habitat, and the distance to known spotted owl sites. Additionally, the small size of the site development would have insignificant impacts to spotted owl habitat quality and disruption from human habitation and dredging noise would not exceed the baseline conditions at the site.

SPECIAL STATUS SPECIES - BUREAU SENSITIVE SPECIES

Foothill Yellow-Legged Frog

The section of Sharps Creek adjacent to the site is suitable habitat, but it is unknown if yellow-legged frogs inhabit it. Occupation and development of the site would have no direct effects to this species, but the connected dredging action could have negative impacts. Dredging could kill eggs, tadpoles and adults, unfavorably modify habitat by disturbing streambed substrates and increasing water turbidity, and disrupt frog life history functions through noise and vibration. Yellow-legged frog distribution and density on the District is unknown, so the effect of these negative impacts on local and range-wide populations would be uncertain.

Harlequin Duck

Although the action area is suitable harlequin duck habitat, effects from the proposed action are unlikely. Development of the already disturbed site would not remove any potential nesting habitat, and disruption from human habitation and dredging noise would not exceed baseline conditions.

Western Pond Turtle

This species is known to occupy the Sharps Creek drainage but surveys have not been conducted at the project site. The proposed action would not modify suitable terrestrial habitat for the species, but could cause disruption of life history functions through human presence and dredging noise/vibration. However, the likelihood of negative impacts is low because disruption from the proposed action would not exceed baseline conditions.

SPECIAL STATUS SPECIES - MIGRATORY BIRDS

The proposed site development would not affect either the willow flycatcher or wood duck through habitat modification, as no trees would be removed and the proposed development is in a previously-modified area and of insignificant size. Human occupancy at the site and the connected dredging action could impact these species through visual, noise, and vibration disruption. However, any birds using the project area would be habituated to such disruption from the existing road, facilities, and human activity. Therefore disruption causing negative impacts to breeding, feeding, or other life history functions is unlikely.

Special Status Species eliminated from further consideration:

Common Name	Scientific Name	Status ¹	Occurrence ²	Reason Eliminated	Habitat/Range	Citations
SPECIAL STATUS SPECIES						
FENDER'S BLUE BUTTERFLY	PLEBEJUS ICARIOIDES FENDERI	FE	D	No Habitat	Associated strongly with Kincaid's Lupine. Meadow/prairie habitat	Applegarth 1995
CALIFORNIA BROWN PELICAN	PELECANUS OCCIDENTALIS CALIFORNICUS	FE	S	No Habitat	Coastal and estuarine habitats.	NatureServe 2008.
MARbled MURRELET	BRACHYRAMPHUS MARMORATUS	FT, BCC	D	Out of Range	Within 50 miles of coast.	U.S. Fish and Wildlife Service 1997
CRATER LAKE TIGHTCOIL	PRISTILOMA ARCTICUM CRATERIS	SEN	S	No Habitat	Wet habitats above 2000 feet.	Duncan et al. 2003
EVENING FIELDSLUG	DEROCERAS HESPERIUM	SEN	S	No Habitat	Perennially wet meadows or rock gardens	Burke and Duncan 2005
SALAMANDER SLUG	GLIABATES OREGONIUS	SEN	S	No Habitat	Moist mature forest with vegetation and large woody debris.	Duncan 2008a
SPOTTED TAIL-DROPPER	PROPHYSAON VANATTAE PARDALIS	SEN	S	Out of Range	Moist Coast Range forest with vegetation and large woody debris.	Frest and Johannes 2000, Duncan 2008b
TILLAMOOK WESTERN SLUG	HESPERARION MARIAE	SEN	D	Out of Range	Moist, mature coastal forest.	Duncan 2008c
HADDOCK'S RHYACOPHILAN CADDISFLY	RHYACOPHILA HADDOCKI	SEN	S	No Habitat	Small, cool mountain streams and adjacent riparian areas.	Brenner 2005a
HOARY ELFIN	CALLOPHRYS POLIOS MARITIMA	SEN	S	No Habitat	Ocean bluffs and dunes.	Ross et al. 2005
MARDON SKIPPER	POLITES MARDON	SEN	S	No Habitat	Grassland, prairie.	Kerwin and Huff 2007
OREGON PLANT BUG	LYGUS OREGONAE	SEN	S	No Habitat	Ocean dunes.	Scheurering 2006
ROTH'S BLIND GROUND BEETLE	PTEROSTICHUS ROTHII	SEN	S	Out of Range	Moist mature Coast Range forest.	Applegarth 1995, Brenner 2005b
SISKIYOU SHORT-HORNED GRASSHOPPER	CHLOEALTIS ASPASMA	SEN	S	No Habitat	Grassland, meadow, open areas. Associated with blue elderberry.	Brenner 2006
SIUSLAW SAND TIGER BEETLE	CICINDELA HIRTICOLLIS SIUSLAWENSIS	SEN	D	No Habitat	Sandy riverbanks and river mouths adjacent to the Pacific Ocean.	Black et al. 2007
TAYLOR'S CHECKERSPOTT	EUPHYDRYAS EDITHA TAYLORI	SEN	S	No Habitat	Grassland, prairie.	Black et al. 2005
OREGON SLENDER SALAMANDER	BATRACHOSEPS WRIGHTORUM	SEN	D	Out of Range	North of Hwy. 58 in cool, moist, shady habitat with large CWD; typically old-growth forest.	Corkran and Thoms 1996, Clayton and Olson 2007
PAINTED TURTLE	CHRYSEMYS PICTA	SEN	S	No Habitat	Slow water; rivers, marshes, ponds with abundant vegetation	Bury 1995.

					and basking sites	
ALEUTIAN CANADA GOOSE	BRANTA HUTCHINSII LEUCOPAREIA	SEN	S	No Habitat	Pasture, harvested agricultural fields, marshes.	U.S. Fish and Wildlife Service 1991
AMERICAN PEREGRINE FALCON	FALCO PEREGRINUS ANATUM	SEN	D	No Habitat	Cliffs and other sheer vertical structure.	White et al. 2002
BALD EAGLE	HALIAEETUS LEUCOCEPHALUS	SEN, BCC	D	No Habitat	Large nest trees and snags near large water bodies.	Buehler 2000, Isaacs and Anthony 2004
DUSKY CANADA GOOSE	BRANTA CANADENSIS OCCIDENTALIS	SEN, GBBDC	D	No Habitat	Willamette Valley agricultural fields and wetlands.	Bromley and Rothe 2003
GRASSHOPPER SPARROW	AMMODRAMUS SAVANNARUM	SEN	D	No Habitat	Grassland, prairie.	NaureServe 2008
LEWIS' WOODPECKER	MELANERPES LEWIS	SEN	D	No Habitat	Open woodlands with ground cover and snags	Tobalske 1997
OREGON VESPER SPARROW	POOECETES GRAMINEUS AFFINIS	SEN, BCC	D	No Habitat	Grassland, farmland, sage. Dry, open habitat with moderate herb and shrub cover	Jones and Cornely 2002
PURPLE MARTIN	PROGNE SUBIS	SEN	D	No Habitat	Snags and trees with suitable nest cavities, typically open areas near water.	Brown 1997, Horvath 2003
STREAKED HORNED LARK	EREMOPHILA ALPESTRIS STRIGATA	SEN, BCC	S	No Habitat	Prairies, dunes, beaches, pastures; areas with low grassy vegetation.	Pearson and Altman 2005
WHITE-TAILED KITE	ELANUS LEUCURUS	SEN	D	No Habitat	Low-elevation grassland, farmland or savannah and nearby riparian areas	Dunk 1995
FISHER	MARTES PENNANTI	SEN	D	No Habitat	Large contiguous blocks of mature forest with structural complexity	Verts and Carraway 1998
FRINGED MYOTIS	MYOTIS THYSANODES	SEN	S	No Habitat	Known hibernacula and roosts include caves, mines, buildings, large snags. Forages in variety of habitats.	Weller and Zabel 2001
PALLID BAT	ANTROZOUS PALLIDUS	SEN	S	No Habitat	Arid or semi-arid habitat with rock, brush, or forest edge; Roosts in caves, mines, bridges, buildings, and hollow trees or snags	Lewis 1994
TOWNSEND'S BIG-EARED BAT	CORYNORHINUS TOWNSENDII	SEN	D	No Habitat	Roosts in mines and caves, forages in variety of habitats	Verts and Carraway 1998, Fellers and Pierson 2002
MIGRATORY BIRDS						
BLACK SWIFT	CYPSELOIDES NIGER	BCC	S	No Habitat	Nest near waterfalls.	
NORTHERN GOSHAWK	ACCIPTER GENTILIS	BCC	D	No Habitat	Mature and late-successional forest.	
OLIVE-SIDED FLYCATCHER	CONTOPUS COOPERI	BCC	D	No Habitat	Edge habitats, tall snags and trees important	
PURPLE FINCH	CARPODACUS PURPUREUS	BCC	D	No Habitat	Moist conifer forest, conifer woodlands	
RUFIOUS HUMMINGBIRD	SELASPHORUS RUFUS	BCC	D	No Habitat	Shrubby, early-successional habitat. Nectar-producing plants important	

BAND-TAILED PIGEON	COLUMBA FASCIATA	GBBDC	D	No Habitat	Nests in mature forest	
MOURNING DOVE	ZENAIDA MACROURA	GBBDC	D	No Habitat	Forest, woodland, shrub habitats.	
1: FE = Federal Endangered, FT = Federal Threatened, SEN = BLM Sensitive Species, BCC = Bird of Conservation Concern, GBBDC = Game Bird Below Desired Condition 2: D = Detected on District, S = Suspected on District						

PLANTS

Affected environment: The site was surveyed for special status plants and invasive plant species on April 15, 2010. No special status species were found. The site is typical of riparian areas along Sharps Creek, and can be described as Douglas fir overstory with vine maple understory. Understory vegetation is typical of moist shady areas, with no wetland obligate species found in the site. Non-native blackberries and herb Robert, invasive plant species, were found in the site.

Environmental consequences:

Under the **no action alternative**, the current level of vegetative disturbance would be maintained or expanded due to use of the site for dispersed camping. This use could inadvertently spread seeds or cuttings from invasive species to other venues.

Under **the proposed action**, the gravel pad, driveway, and user trail to the stream will destroy a small area of vegetation along Sharps Creek. Occupancy and use of the area will likely trample and kill plants in frequently used areas. Since no special status plant species were identified on site, there are no effects to these species. The project design features that minimize disturbance and treat the existing invasive plant species will prevent the spread of these species in the site. Non-native or invasive species may be inadvertently be introduced by the proponent, though treatment will help to prevent spread of these species from the site. Damage to native species can be mitigated, once occupancy ceases, by restoration actions that restore soil productivity and replant native species.

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