

# Salmon River Habitat Restoration Project

## Decision Record

Environmental Assessment Number DOI-BLM-OR-SO40-2010-0002-EA

June 2010



T. 2S, R. 6E, Section 25 and T. 2S, R. 7E, Sections 30 and 31

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Clackamas County, Oregon

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BLM/OR/WA/AE10/058+1792

## 1.0 Introduction

The Bureau of Land Management (BLM) has conducted an environmental analysis for the Salmon River Habitat Restoration project (SRH Restoration project), which is documented in the *Salmon River Habitat Restoration Project Environmental Assessment and Finding of No Significant Impact* (EA) and the associated project file. This EA is incorporated here by reference in this Decision Record (DR). The proposed action is to restore aquatic and fisheries habitats on about 3 miles of the lower Salmon River. The project is located on BLM lands in T. 2S, R. 6E, Section 25, and T. 2S, R. 7E, Sections 30 and 31; W.M. in Clackamas County, Oregon.

I signed a Finding of No Significant Impact on May 18, 2010 and made the EA available for public review from May 19, 2010 to June 4, 2010 (*DR section 6.0*). I received one comment letter during the public review period. The letter was in support of the project.

## 2.0 Decision

I have decided to implement action alternative 1 for the 2010 project actions as described in the EA (*EA section 2.0*, pp. 15-27), with the exception that medium-sized pieces of large wood (LW) will be delivered to side-channel sites by helicopter as described in the proposed action (*EA section 2.0*, pp. 15-26). I have also decided to implement a combination of action alternative 1 and the proposed action for 2011-2015 project actions as described below.

This decision is based on site-specific analyses in the EA described above, the supporting project record, public comment; as well as the management direction contained in the *Salem District Resource Management Plan* (May 1995), which are incorporated here by reference and in the EA. This Decision is summarized in this section of the DR and is hereafter referred to as the “selected action”. The selected action will:

### 2.1 All SRH Restoration Project Actions

The BLM in cooperation with the Sandy River Basin Partners (SRBP; [www.sandyriverpartners.org](http://www.sandyriverpartners.org)) will implement the following habitat restoration actions on BLM land on the lower Salmon River (Map 1) in 2010-2015:

- restore year-round flows to three side channels (>0.5 mile of side channel habitat) by increasing the elevation of the river bed at the side channel entrances when restoring main channel riffle-pool-riffle habitat sequences, and by excavating depositional materials and placing large wood (LW) at the side-channel entrances,
- increase pool habitat and spawning areas at pool tail-outs by restoring three additional main channel riffle-pool-riffle habitat sequences,
- construct engineered log jams (ELJs) or LW structures at six restored riffle-pool sites to maintain scouring of the newly created pools,
- restore year-round flows to another three side channels (>0.3 mile of side channel habitat) by excavating depositional materials at the channel entrance and placing LW at the channel openings to create scouring flows to maintain the opening,
- add LW structures or ELJs to 35 additional main channel sites (primarily pool or backwater areas) to improve fish cover and habitat complexity for both adult and juvenile salmonids,
- add LW to six side channels to provide high quality spawning and rearing habitat, and

- plant riparian tree seedlings to stabilize floodplains and provide long-term wood supplies.

River Design Group Inc. (RDG) will design all channel and LW structures to withstand 100-year flood events and supervise their construction (*EA section 2.0*, p. 17).

Projects will be implemented similarly to that described in detail below for the 2010 project actions. One exception is that if delivery of large-sized logs by ground-based equipment to 2011-2015 project sites is not feasible because of topography (ie. steep terrace banks) or other factors (i.e. distance from existing roads, ownership, etc.), then large-sized logs will be delivered to project sites by helicopter as described in the proposed action (*EA section 2.0*, pp. 15-26).

## **2.2 2010 Project Actions**

The 2010 project actions include restoring riffle and pool habitat features, reactivating flows to side channels of the Salmon River, placing large wood (LW) in the Salmon River and within its floodplain, and planting tree seedlings.

Most 2010 project actions will be implemented on about 3,000 feet long reach of the lower Salmon River on BLM managed land in T.2S, R.6E, Section 25, starting at approximately RM 1.1 (Map 2). These actions are located in T.2S, R.7E, Section 31, at approximately RM 3.8 (Map 2).

### Riffle-Pool Restoration

A riffle-pool-riffle habitat sequence in the main channel of the Salmon River will be restored by excavating a pool (approximately 325' long by 40' wide) in a glide habitat unit located between two riffles adjacent to the entrance to side channel 1 (Map 2; EA Appendix B – Drawing Numbers 3.0 and 4.0).

Boulders and engineered log jams (ELJs) will be placed at the lower end of the upstream riffle and along the pool to direct river flows into the excavated pool area, and to maintain scouring flows through the pool (prevent gravel and bedload deposition in the pool; EA Appendix B – Drawing Number 3.0).

Boulders and river rock fill will be used to create a riffle at the tail-out of the pool to increase the residual depth of the pool by about 1 foot, and to dissipate energy of river flows and increase the water surface elevation to increase floodplain connection and stream flows to side channel 1 (EA Appendix B – Drawing Numbers 3.0 and 6.0).

Approximately, 700 cubic yards of fill will be removed from pool area, and approximately 100 cubic yards of fill added to construct the pool tail out riffle (EA Appendix B – Drawing Numbers 2.0, and 6.0). If useable, the excavated material from the pool will be used to construct the riffle at the pool tail-out (EA Appendix B – Drawing Number 6.0), and ballast ELJs. River bed materials excavated from the pool and not needed for riffle or ELJ construction will be hauled to and stockpiled on BLM land at Miller Quarry (Map 3).

An excavator will be used to excavate the pool, and place the river rock and boulder fill used to construct the riffle at the pool tail-out.

A small rubber-tracked dump truck (8 cubic yard capacity) will be used to bring in boulder or rock fill needed in addition to the materials available onsite from the excavated areas. Any river bed materials used in the construction of the riffle from offsite areas will be free of weed seed and be similar in appearance to Salmon River river rock. A contractor under RDG supervision will conduct the riffle-pool work (EA Appendix B – Drawing Number 2.0).

#### Restore Side Channel Flows

The restoration of the riffle habitat unit at the opening to side channel 1 will raise the bed elevation of the river 1.2 feet, increasing connectivity of the Salmon River to its floodplain and side channel 1 (Appendix B – Drawing Number 3.0). To restore year-round flows in side-channel 1, about 1,500 cubic yards of river bed sand, gravels, cobbles and soil will be removed at the entrance and first 800 feet of side channel 1 (EA Appendix B – Drawing Numbers 2.0 and 4.0). All topsoil and channel materials excavated from side-channel 1 will be hauled with a rubber-tracked dump truck to BLM land at Miller Quarry and stockpiled for future use in restoration projects (Map 3). This stockpile location (at the start of the renovated road) was previously used to store gravel from Miller Quarry.

To restore year-round flows to side channel 2, about 15 cubic yards of depositional materials will be removed from the side channel entrance and 2 log jams constructed at the side channel entrance to maintain scouring flows to prevent deposition at the channel entrance (EA Appendix B – Drawing Numbers 5.0 and 6.1). Excavated materials from side channel 2 will be side-cast on the uphill slope from the side channel.

#### Large Wood Placement

Large wood (LW) will be placed at 5 project sites on a 3,000 feet long section of the river located at and near side channels 1 and 2, and 1 site at side channel 9 (Map 2).

LW proposed to be added to Salmon River channel and floodplain areas as part of the 2010 habitat restoration projects includes: 102 large-sized logs with minimum diameter at breast height (DBH) of 20” (averaging about 24”), 25-30’ long with attached roots, 130 medium-sized LW pieces (minimum 18” DBH, 25-30’ long without roots), and 185 small-sized pieces (minimum 6” DBH and 10’ long) that will be interwoven among the larger wood pieces in the engineered wood structures. If availability of 24” DBH LW is limited, additional LW pieces will be used over that shown in the plan drawings with at least 50% of the LW with 24” minimum DBH, 25% with a minimum 20” DBH, and 25% with an 18” minimum DBH. LW will be moved and placed by use of an excavator (see equipment specifications, EA Appendix B – Drawing Number 1.1).

For all main channel LW structures, RDG conducted buoyancy analyses, and hydraulic modeling of river velocities and shear stresses to determine the number and size of LW pieces, and amount of ballasting with boulders needed for LW to stay in place during flows up to 100 year flood events (EA Appendix B – Drawing Number 2.0; Sean Welch, RDG; personal communication, 2010).

Individual LW pieces will be pinned together (see EA Appendix B – Drawing Number 6.1), but LW structures will not be cabled or bolted to the river bank or bed. LW structures will be built by a contractor under RDG supervision.

### *Main Channel Pool*

A LW habitat structure will be added to the existing main channel pool near the lower end of side channel 2 (LW site, Map 2; EA Appendix B – Drawing Number 5.0). The structure will be constructed with 13 large logs with attached roots, and 15 small LW pieces (EA Appendix B – Drawing Number 6.2).

### *Log Jam Construction at Restored Pool*

Seven LW structures or log jams will be constructed on the margins of the river at the restored pool habitat unit (Appendix B – Drawing Number 3.0). Two log jams will be constructed on the right river bank, and 5 smaller log jams on the left river bank (Appendix B – Drawing Number 3.0). The log jams will constrict river flows at the pool, thereby maintaining river velocities needed to maintain pool scouring (i.e. prevent gravel and sediment deposition from filling in the pool). The log jams will be constructed with 43 large logs with attached roots and 60 small LW pieces (Appendix B – Drawing Numbers 6.3 and 6.4).

### *Entrances to Side-channels 1 and 2*

Two LW structures will be placed at the opening to side channel 1 to prevent sediment and bedload deposition from blocking the channel opening (EA Appendix B – Drawing Number 3.0). The LW structures at side channel 1 will be constructed with 30 large logs with attached roots and 55 small LW pieces (Appendix B – Drawing Number 2.0). Similarly, two LW structures will be built at the opening to side channel 2 (Appendix B – Drawing Number 5.0) using 16 large logs with attached roots and 40 small LW pieces (Appendix B – Drawing Number 6.1). The LW will also dissipate stream energy, and increase habitat complexity, and cover for fish.

### *Side Channels 1 and 9*

LW will be added to side channel 1 (100 medium-sized pieces and 30 small LW pieces) to increase habitat cover and complexity. Similarly, about 30 medium-sized pieces of LW will be added to side channel 9. Placement sites will be selected that have existing structural and geomorphic features determined most likely to retain the placed wood. LW added to side channels will not be artificially secured to the bed or banks of the stream. Medium-sized LW will be delivered to side channels 1 and 9 by helicopter.

### Riparian Tree Planting

Seedlings of native riparian trees (primarily western red cedar) will be hand planted in fall to winter 2010 or early spring 2011 on the Salmon River floodplain adjacent to side channels 1, 2, and 9. Trees will primarily be planted on 'islands' located between the mainstem channel and side channels.

### Temporary Access Roads

An existing old road, about 2600 ft long, will be renovated (trees and debris cleared with an excavator) and used as the access route to haul fill and excavation materials to and from project sites at side channels 1 and 2 (Map 3).

Road maintenance required to renovate the road includes: removal of about 30 small (<6" dbh) and about 10 larger (averaging 10" dbh) maple and alder trees, and replacement of cobble fill at an intermittent drainage crossing, and possibly grading steeper portions of the road surface.

Temporary access routes totaling about 1,000 feet in length will be established from the end of the renovated road to haul boulders and excavated river rock in and out from side channel 1 and side channel 2, and to haul boulders to the main channel pool located between side channel 1 and side channel 2 (Map 3). The number of new access paths will be minimized to limit impacts to riparian and forest vegetation, consistent with the aquatic restoration biological opinion (ARBO) covering restoration projects for threatened salmon and steelhead populations (NMFS 2008).

About 20 small (<8" dbh) alder, maple, or hemlock trees and one large (20-22" dbh) hemlock, and several groups of vine maple shrubs will be removed when clearing the temporary access routes. Rubber-tracked dump trucks will be driven on the existing soil surface of the temporary access routes.

A staging area will be located where the existing old road reaches level ground in the flood plain, approximately 200 feet from the edge of the river channel (Map 3). Consistent with the ARBO, this area will be the minimum size required for safe handling and stockpiling of boulders for later placement in log jams and providing a safe turning radius for equipment. Up to ten red alder and/or bigleaf maple trees, with <10 inches DBH, will be cleared from the staging area.

All trees removed as part of road renovation, clearing of temporary access routes, and staging areas will be stockpiled for later use in the LW structures. About 800 feet of the upstream end of side channel 1 will be disturbed when excavating fill from the side channel and hauling the excavated soil and channel materials to Miller Quarry. The dump truck will be driven down the side channel, with the side-channel bed and banks shaped to remove any sign of hauling of the excavated materials upon completing the excavation of the side channel. At completion of the project all temporary access routes will be obliterated and rehabilitated (see restoration plan section below). The renovated road will be decommissioned at the end of the project and a debris and earth berm barricade placed at the start of the road to prevent OHV and motorcycle use.

#### Large Wood Sources

Most trees needed for the large wood used in the 2010 project actions will be obtained from stands on BLM land located in T.2S, R.6E, Section 33 adjacent to the Alder Creek road (Map 4). Up to 70 live trees averaging 24-25" dbh (range of 20-29 inches), will be taken from the stands, which are located about 2.5 miles from the project sites on the Salmon River (Map 4).

The trees will predominantly come from stands that were previously thinned and do not provide suitable nesting habitat for spotted owls. Some trees may be taken from unthinned stands, or stands in Riparian Reserves on intermittent stream channels, but tree removal and equipment use will be limited to >60 feet from stream channels. Trees removed from source area will be within approximately 100' of established rock roads and will be pushed over using an excavator so that the roots remain attached.

Once moved to the road, the trees will then be cut to length and loaded onto a self-loading log truck. After delivery to the log deck at Miller Quarry, the logs will then be moved to project sites via the same renovated and temporary access routes (Map 3) used to transport fill and excavation materials. Logs will be fully suspended (no dragging of any part of the log on the ground) when transported to project sites by use of a rubber tire or rubber-tracked vehicle.

About 20 LW pieces used in the project will come from logs that are currently stored at the Zig Zag Ranger District Office of the Mt. Hood National Forest. The logs will be hauled by truck to Miller Quarry or other staging areas adjacent to project sites (Map 4). Another three will come from trees which blew down during winter 2010 on BLM land immediately adjacent to Miller Quarry, and 9 logs will be donated by Portland General Electric. These logs will be moved to individual project sites similarly to that described above.

#### Pollution and Erosion Control Plan

Consistent with the ARBO (NMFS 2008), BLM will develop and implement a pollution and erosion control plan (PECP) to minimize erosion, sedimentation, and potential spills (fuel, hydraulic fluid, etc.) associated with the restoration project work. Key components of the PECP include: preparation and implementation of a spill control and containment plan, use of Oregon Department of Environmental Quality's (ODEQ) Best Management Practices (BMPs) for minimizing in-stream turbidity, minimizing site preparation and heavy equipment impacts, and a site restoration plan. Specific measures implemented to minimize impacts from turbidity, erosion, and potential spills are listed below in the turbidity monitoring, restoration plan, and project design features (*EA sections 2.2 and 2.2.1*).

#### Turbidity Monitoring

In-stream turbidity will be minimized by isolating individual work areas from river flows using a floating silt curtain that traps silt and sediment within the disturbed area (EA Appendix B – Drawing Number 8.0), and through the use of other BMPs outlined in Oregon Department of Environmental Quality's (ODEQ) 401 Water Quality Certification issued by ODEQ for all Nationwide Permits of in-water work. Turbidity levels and monitoring will comply with that identified in individual ACOE (Army Corps of Engineers)/DSL (Oregon Department of State Lands) in-water work permits obtained for the project by BLM, and with the 401 Water Quality Certification issued by ODEQ (see EA Appendix A).

#### Restoration Plan

Temporary access routes and other areas disturbed during construction will be rehabilitated to similar or better than pre-work conditions as outlined in ARBO (NMFS 2008) by: 1) decompacting and recontouring soil surfaces to the original topography of the site, and 2) planting sword fern, vine maple, and other native species so that plant species composition and densities in disturbed areas are similar to that pre-project (*EA section 3.5*).

Additionally, vine maple, red-osier dogwood, nine bark, Indian plum, and other native plant species will be planted where access routes terminate near the river to speed vegetation growth to visually screen the river corridor.

Stockpiled materials (i.e. trees, vegetation, sand, topsoil, and other excavated material from restoration project areas) will also be used to rehabilitate areas disturbed by equipment to pre-work conditions. Short-term stabilization measures will be implemented until permanent erosion control measures (plant restoration) are effective, and may include use of native grass seeding, weed-free certified straw, jute matting, or other similar techniques.

Restoration planting will be completed no later than spring planting season of the year following completion of construction. The renovated road and the temporary access route to side channel 1 will be used again to access planned project sites adjacent to side channel 1 in 2011.

The renovated road will be closed and barricaded to motorized vehicle use, and road surface roughened and water bars constructed to prevent soil erosion, both between the 2010 and 2011 project work, and following the completion of all restoration work in fall 2011. The temporary access route to side channel 1 will be restored following the completion of the 2011 restoration projects. The renovated road bed will not be rehabilitated-revegetated upon project completion; it is used by recreationists for hiking and mountain biking.

#### Contract Administration

The Project Design Features, turbidity monitoring, and restoration plan actions that constitute the pollution and erosion control plan will be incorporated into all construction contracts associated with the restoration project. BLM personnel (generally the project biologist and hydrologist) must regularly coordinate with the contracting officer's representative to ensure project design features and conservation and restoration measures are being followed. Authorized BLM personnel will have the authority to stop work if contract stipulations are not being met by the operator.

#### Project Timing For 2010 Project Actions

Project implementation will take place between July 2010 and August 2011. LW placement, riffle-pool restoration, and side-channel project work will be conducted during the in-stream work period (July 15 through August 31), and tree seedlings planted in late winter to early spring 2011.

### **2.3 Design Features**

Project Design Features described in the EA (*EA sections 2.2.1 and 2.3.1*; pp. 24-27) will be incorporated into all construction contracts associated with the restoration project.

### **3.0 Alternatives Considered**

1. No Action (EA p. 27): No habitat restoration would be implemented. Existing LW amounts and existing low habitat complexity in the Salmon River would remain at current levels. Access to side channel habitat would not be improved.
2. Proposed Action (EA pp. 15-26): Access to side channel habitats and main channel pool habitat of the lower Salmon River would be increased by restoring riffle-pool habitat sequences in main channels, and removing depositional materials from side channel entrances. Large wood would be added to main channel pools and side channels to improve habitat quality and complexity for Chinook and coho salmon, and steelhead trout, and maintain side channel openings. Riparian tree seedlings would be planted to provide long-term supplies of LW. Trees and logs would be moved to restoration sites by use of a helicopter.
3. Action Alternative 1 (EA pp. 15-27): This alternative is the same as the Proposed Action, with the exception that logs and trees would be moved to restoration sites by use of a rubber tire or rubber-tracked vehicle via the same roads and temporary access routes used to move excavation and fill materials for restoration projects.
4. Selected Action (*DR sections 2.0, 4.0, 9.0 – Maps 1-4*): This alternative is a combination of the two action alternatives – described in detail in *DR section 2.0*. Large-sized logs would be moved to restoration project sites by use of both ground-based equipment and a helicopter.

## 4.0 Decision Rationale

I used the Decision Criteria and Project Objectives listed in the EA (*section 1.2*, p.12) in selecting the alternative that best meets the purpose and need described in the EA (*section 1.2*, pp. 9-11). This section compares the alternatives with regard to the Decision Criteria and Project Objectives (*EA section 1.2*), (EA pp. 10-12).

- Meet the purpose and need of the project (*EA Section 1.2*);
  - *The No Action Alternative*: This alternative would not meet the purpose and need of restoring aquatic habitats of the Salmon River to increase production of threatened salmon and steelhead populations because no restoration actions would be implemented.
  - *The Proposed Action* meets the purpose and need by restoring main channel and side channel habitats for use by threatened salmon and steelhead with slightly less impacts predicted to riparian and forest resources (*EA sections 3.2 and 3.5*; pp. 28-29, 33-36) than that of action alternative 1 by using a helicopter to deliver LW to restoration project sites.
  - *Alternative 1* achieves similar level of habitat restoration as that of the proposed action at a lower cost, but with slightly higher impacts to riparian and forest resources, by using ground-based equipment to move logs rather than moving them by helicopter. Also, assures completion of 2010 project actions. The 2010 construction schedule overlaps with wildfire season, such that helicopters of the size needed to move large-sized logs may not be available to complete restoration work during the instream work period (July 15 to August 31).
  - *The Selected Action* meets the purpose and need (same level of habitat restoration as the proposed action), and minimizes both cost and predicted impacts to riparian and forest resources by using a combination of ground-based equipment and helicopter delivery of LW to restoration project sites. Also, assures the 2010 project actions will be completed, by moving large-sized logs with ground-based equipment during the 2010 fire season when a helicopter may not be available.
- Increase access to side channel habitats of Lower Salmon River and increase aquatic habitat complexity;
  - *The No Action Alternative*: This objective would not be met because no restoration actions would be implemented under this alternative.
  - *All Action Alternatives* meet this objective by restoring side channel flows and adding large wood to side and main channels of the Salmon River to increase habitat complexity.
- Provide high quality spawning and rearing habitat in main channel and side-channel habitats for anadromous fish;
  - *The No Action Alternative*: This objective would not be met because no restoration actions would be implemented under this alternative.
  - *All Action Alternatives* meet this objective by restoring side channel flows, increasing main channel pool and tail-out habitats for spawning and rearing, and adding large wood to side and main channels of the Salmon River to increase habitat complexity.
- Facilitate the development of riparian forest stands to shade stream channels and supply LW to Salmon River over the long term;
  - *The No Action Alternative*: This objective would not be met because no restoration actions would be implemented under this alternative.

- The *Proposed Action* meets this objective by planting riparian tree seedlings and has the lowest level of disturbance to riparian areas by using a helicopter to deliver LW to projects sites.
  - *Alternative 1* meets this objective by planting riparian tree seedlings and minimizing disturbance to riparian areas. Project costs are lower by using ground-based equipment to deliver large wood, but in the short-term slightly more trees would be removed on temporary access routes in riparian areas to allow ground-based delivery of LW.
  - The *Selected Action* meets this objective by planting riparian tree seedlings, and minimizes both project costs and predicted impacts to riparian and forest resources by using a combination of ground-based equipment and helicopter delivery of LW to restoration project sites.
- Improve channel and floodplain function to maintain complex aquatic habitat over time;
    - *The No Action Alternative*: This objective would not be met because no restoration actions would be implemented under this alternative.
    - *All Action Alternatives* meet this objective by restoring flows to side channels, restoring main channel riffle-pool habitat sequences, and adding LW to improve floodplain function and aquatic habitat complexity.
  - Minimize erosion and impacts to soil productivity.
    - *The No Action Alternative*: This objective would not be met because no restoration actions would be implemented under this alternative.
    - *All Action Alternatives* meet this objective by implementing project design features (*EA section 2.2.1*) to minimize disturbance to soils, and by restoring vegetation and controlling erosion on sites disturbed during construction (see description of Restoration and Pollution and Erosion Control Plans – *DR section 2.0*).

Considering public comment, the content of the Salmon River Habitat Restoration Project EA, the supporting project record, and the management direction contained in the RMP, I have decided to implement the selected action as described in DR section 2.0. The following is my rationale for this decision.

1. No Action Alternative: This alternative was not selected because none of the aquatic habitat restoration needed to increased production of threatened salmon and steelhead populations would be implemented under this alternative.
2. Proposed Action: This alternative was not selected because helicopters of the size needed to move large-sized logs may not be available to complete restoration work during the instream work period (July 15 to August 31), due to the overlap of the 2010 construction schedule with the wildfire season.
3. Alternative 1: This alternative was not selected because it may not be feasible to deliver large-sized logs to all 2011-2015 project sites because of topography (i.e. steep terrace banks) or other factors (i.e. distance from existing roads, ownership, etc.).
4. Selected Action: The selected action implements the Salmon River Habitat Restoration project described in the *DR section 2.0*. The Selected Action:

- Meets the purpose of and need for action and the decision criteria/ project objectives described in EA section 1.2 (EA pp. 9-12).
- Minimizes both cost and predicted impacts to riparian and forest resources by using a combination of ground-based equipment and helicopter delivery of LW to restoration project sites.
- Assures the 2010 project actions will be completed, by moving large-sized logs with ground-based equipment during the overlap of the construction period with 2010 fire season, when a helicopter may not be available.
- Allows for LW delivery by helicopter to 2011-2015 project sites where delivery by ground-based equipment may not be feasible because of topography (ie. steep terrace banks) or other factors.
- Is consistent with the Salem District Record of Decision and Resource Management Plan and related documents which direct and provide the legal framework for management of BLM lands within the Salem District (EA pp. 12-13, DR sections 5.0, 7.0).
- Complies with authorities described in EA section 1.3 (EA pp. 12-14) and 3.10 (EA pp. 46-48).
- Will not have significant impact on the affected elements of the environment beyond those already anticipated and addressed in the RMP EIS (EA FONSI, pp. 3-6, and DR section 7.0).

## 5.0 Compliance with Direction

The analysis documented in the Salmon River Habitat Restoration Project EA is site-specific and supplements analyses found in the Salem District Proposed Resource Management Plan/Final Environmental Impact Statement, September 1994 (RMP/FEIS). This project was designed under the Salem District Record of Decision and Resource Management Plan, May 1995 (RMP) and related documents which direct and provide the legal framework for management of BLM lands within the Salem District (EA pp. 4-8). All of these documents may be reviewed at the Cascades Resource Area office.

The project also complies with authorities described in *EA sections 1.3* (EA pp. 12-14) and 3.10 (EA pp. 46-48).

*Survey and Manage Review* (EA pp. 13-14): Following the Court's December 17, 2009 ruling, the Pechman exemptions are still in place. Judge Coughenour deferred issuing a remedy in his December 17, 2009 order until further proceedings, and did not enjoin the BLM from proceeding with projects. Nevertheless, I have reviewed the SRH Restoration project in consideration of both the December 17, 2009 and October 11, 2006 order.

I have made the determination that the SRH Restoration project meets Exemption C of the Pechman Exemptions (October 11, 2006 Order) (Riparian and stream improvement projects where the riparian work is riparian planting, obtaining material for placing in-stream, and road or trail decommissioning; and where the stream improvement work is the placement large wood, channel and floodplain reconstruction, or removal of channel diversions). Therefore the SRH Restoration project may still proceed even if the District Court sets aside or otherwise enjoins use of the 2007 Survey and Manage Record of Decision since the Pechman exemptions would remain valid in such case.

## **6.0 Public Involvement/ Consultation/Coordination**

### **6.1 Scoping**

A scoping letter was sent on February 11, 2010 to federal, tribal, state and municipal government agencies, nearby landowners, and interested parties on the Cascades Resource Area mailing list. A second scoping letter was sent to 10 additional nearby landowners on April 13, 2010 (*EA section 1.4*). I received scoping comments from American Whitewater, Association of O&C Counties, Mt Hood Stewardship Council, Oregon Department of Transportation, and Oregon State Marine Board; and incorporated these comments into the development of the action alternatives and into the effects analysis.

### **6.2 Comment Period and Comments:**

BLM made the EA and FONSI available for public review from May 19, 2010 to June 4, 2010. I received one comment letter during the public review period from the Sandy River Basin Watershed Council. The letter was in support of the project.

### **6.3 ESA Section 7 Consultation**

#### **1. U.S. Fish and Wildlife Service (EA p. 51-52)**

Consultation for proposed fish habitat restoration projects such as this one are included in the Programmatic Biological Assessment for Aquatic Habitat Restoration Activities in Oregon and Washington, CY 2007 – CY 2012. A Programmatic Biological Opinion and Letter of Concurrence for Aquatic Restoration Activities (ARBO) was issued on June 14, 2007 (FWS Reference # 13420-2007-F-0055). The only threatened or endangered species which this project could affect would be the northern spotted owl. Due to the location, nature, duration and timing of this project, no adverse effects to northern spotted owls or their habitat are anticipated (no effect from habitat modification or disturbance). No suitable or dispersal habitat would be removed or downgraded, and the project would not reduce the overall function of any habitat for the spotted owl.

The project would have no disturbance effects to the spotted owl because the project would occur mostly outside of the critical nesting season for spotted owls (after July 1), and is not located within disturbance distance of any known spotted owl sites. The project would have no effects on Critical Habitat because the project sites and source stand are not located in Critical Habitat.

#### **2. National Marine Fisheries Service (NMFS) – Endangered Species Act Determination of Effect for Lower Columbia River (LCR) steelhead trout, LCR Chinook salmon, and LCR coho salmon (EA p. 52)**

NMFS (2008) concluded that restoration projects similar to this one may affect, but are not likely to jeopardize the continued existence of Lower Columbia River (LCR) steelhead trout, LCR coho salmon, and LCR Chinook salmon, nor are they likely to adversely modify their designated critical habitat.

Short-term adverse impacts of the habitat restoration projects include displacement of juvenile salmonids from near shore habitats and main channel project sites during project construction, and disruption of feeding (unable to see prey items) during short term increases in turbidity (see *EA section 3.3.1*). No long-term adverse effects of the restoration projects on ESA listed fish or their habitat are expected because turbidity levels would return to background levels soon after cessation of in-water work (*EA section 3.7*).

Additionally, no sediment is expected to move from access routes to the river because soils are sandy and well-drained (*EA section 3.6*) and the routes would be revegetated upon completion of the project (see Restoration Plan). Adult ESA listed fish would not be impacted because restoration work would be conducted during the in-water work period when adult fish are absent from the project reach. Habitat quantity and quality for ESA listed fish would improve over the short to long term as a result of the restoration actions (*EA sections 3.3.1 and 3.4.1*). Consultation for aquatic restoration projects such as this are included in the Programmatic Consultation Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Fish Habitat Restoration Activities in Oregon and Washington, CY2007-CY2012 issued by NMFS on June 27, 2008.

## **7.0 Conclusion**

I have reviewed the information in the EA, public comments, and this DR. I have determined that change to the Findings of No Significant Impact (SRH Restoration EA pp. 3-6) is not necessary because no new information was provided during the public comment period for the EA that led me to believe the analysis, data or conclusions related to environmental effects of the proposed action are in error or that the selected action needs to be altered.

The selected action would not have effects beyond those already anticipated and addressed in the RMP EIS. Supplemental or additional information to the analysis in the RMP/FEIS in the form of a new environmental impact statement is not needed for the reasons described in the Findings of No Significant Impact (SRH Restoration EA pp. 3-6).

## **8.0 Administrative Review Opportunities and Implementation**

This decision may be appealed to the Interior Board of Land Appeals in accordance with the regulations contained in 43 Code of Federal Regulations (CFR), Part 4 and Form 1842-1.

*If you appeal:* A *Notice of Appeal* must be filed in writing to the office which issued this decision – Cindy Enstrom, Cascades Field Manager, Bureau of Land Management, 1717 Fabry Road SE, Salem, OR, 97306. A copy of the *Notice of Appeal* must also be sent to the BLM Regional Solicitor. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition pursuant to regulation 43 CFR 4.21 (58 FR 4939, January 19, 1993) or 43 CFR 2804.1 for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your *Notice of Appeal*. A petition for a stay is required to show sufficient justification based on the standards listed below.

Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Board and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay: Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

The relative harm to the parties if the stay is granted or denied,  
The likelihood of the appellant's success on the merits,  
The likelihood of immediate and irreparable harm if the stay is not granted, and  
Whether the public interest favors granting the stay.

Statement of Reasons: Within 30 days of the filing of the *Notice of Appeal*, a complete statement of reasons why you are appealing must be filed with the Interior Board of Land Appeals (see Form 1842-1).

### 8.1 Implementation Date

Implementation of this decision may begin 30 calendar days after the public notice of the Decision Record appears in the *Sandy Post* newspaper. The public notice is scheduled to appear in the *Sandy Post* on June 9, 2010.

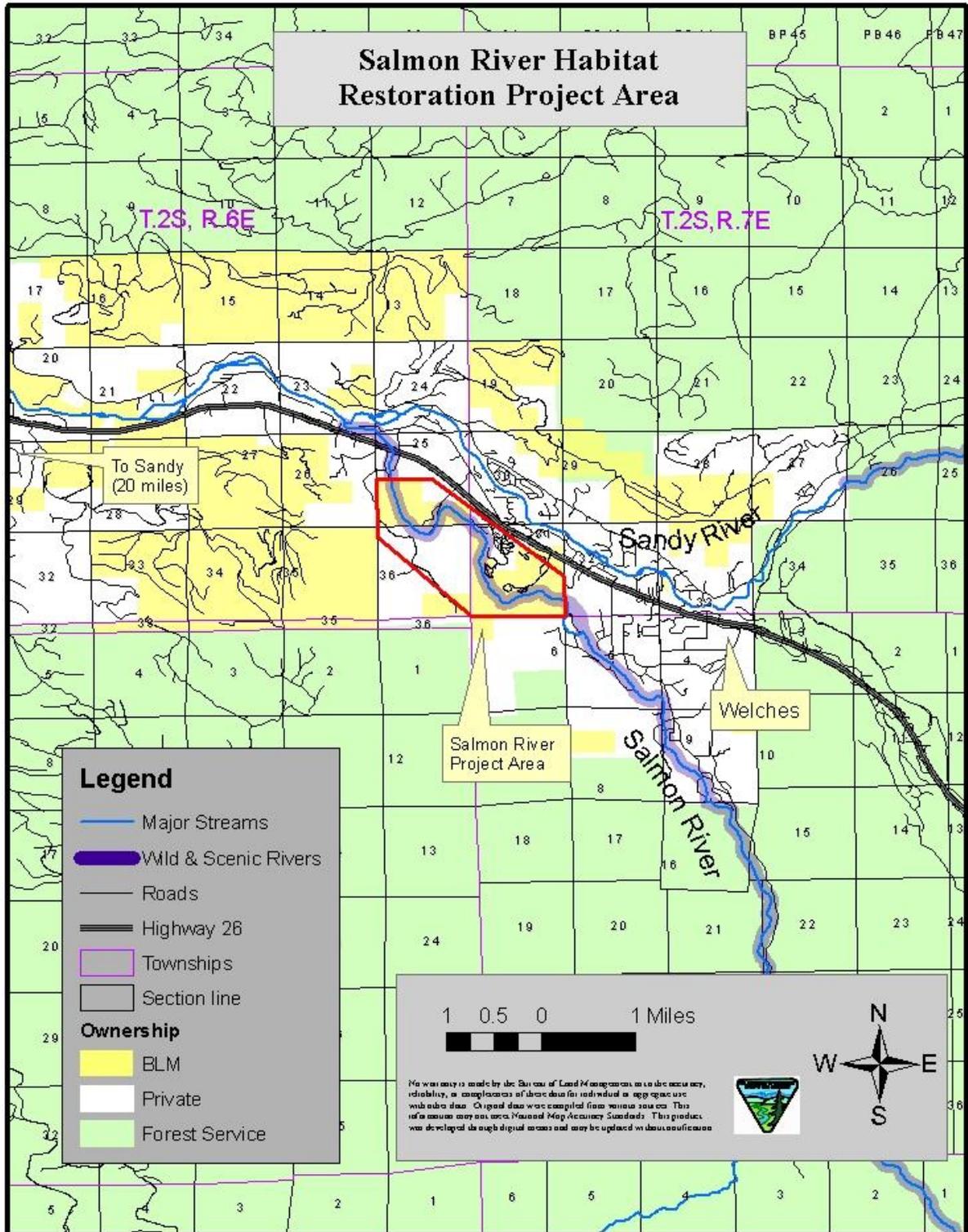
Agency contact: For additional information concerning this decision or the appeal process, contact Bruce Zoellick (503) 375-5672 or Carolyn Sands at (503) 315-5973, Cascades Resource Area, Salem District Office, 1717 Fabry Road SE Salem, OR 97306.

Approved by: Cindy Enstrom  
Cindy Enstrom, Field Manager  
Cascade Resource Area

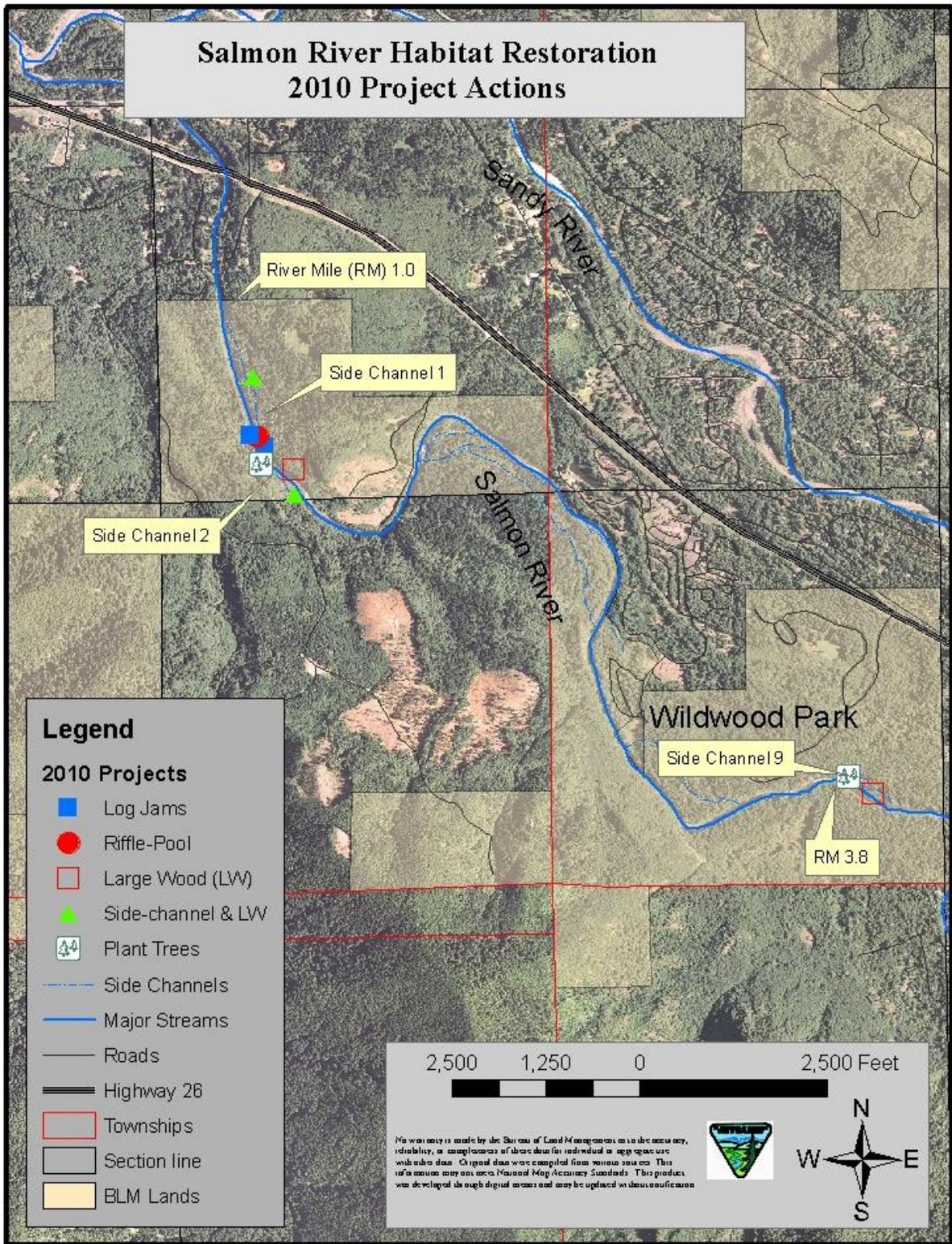
6/7/2010  
Date

## 9.0 Maps

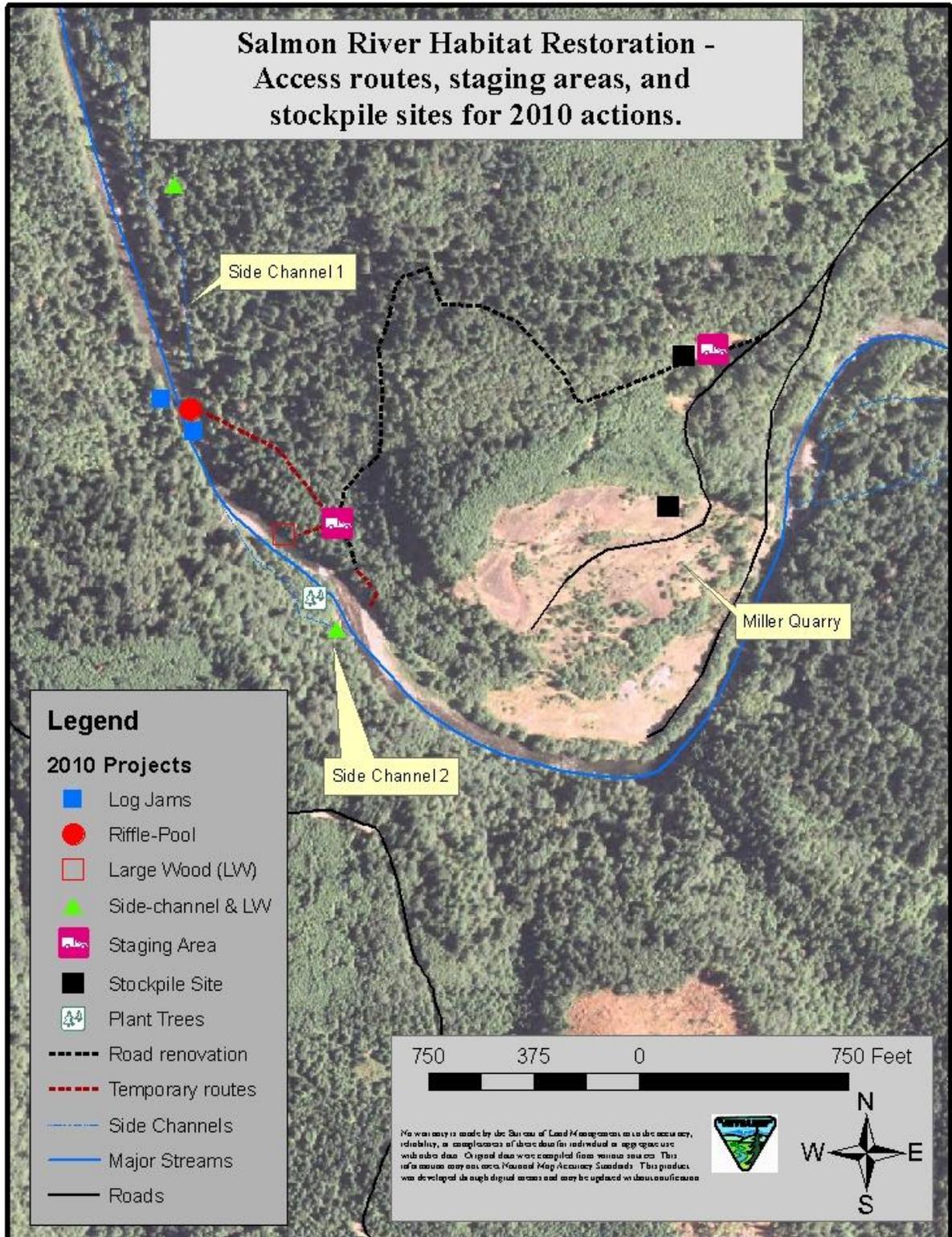
Map 1: Location of Project Area for 2010-2015 Actions



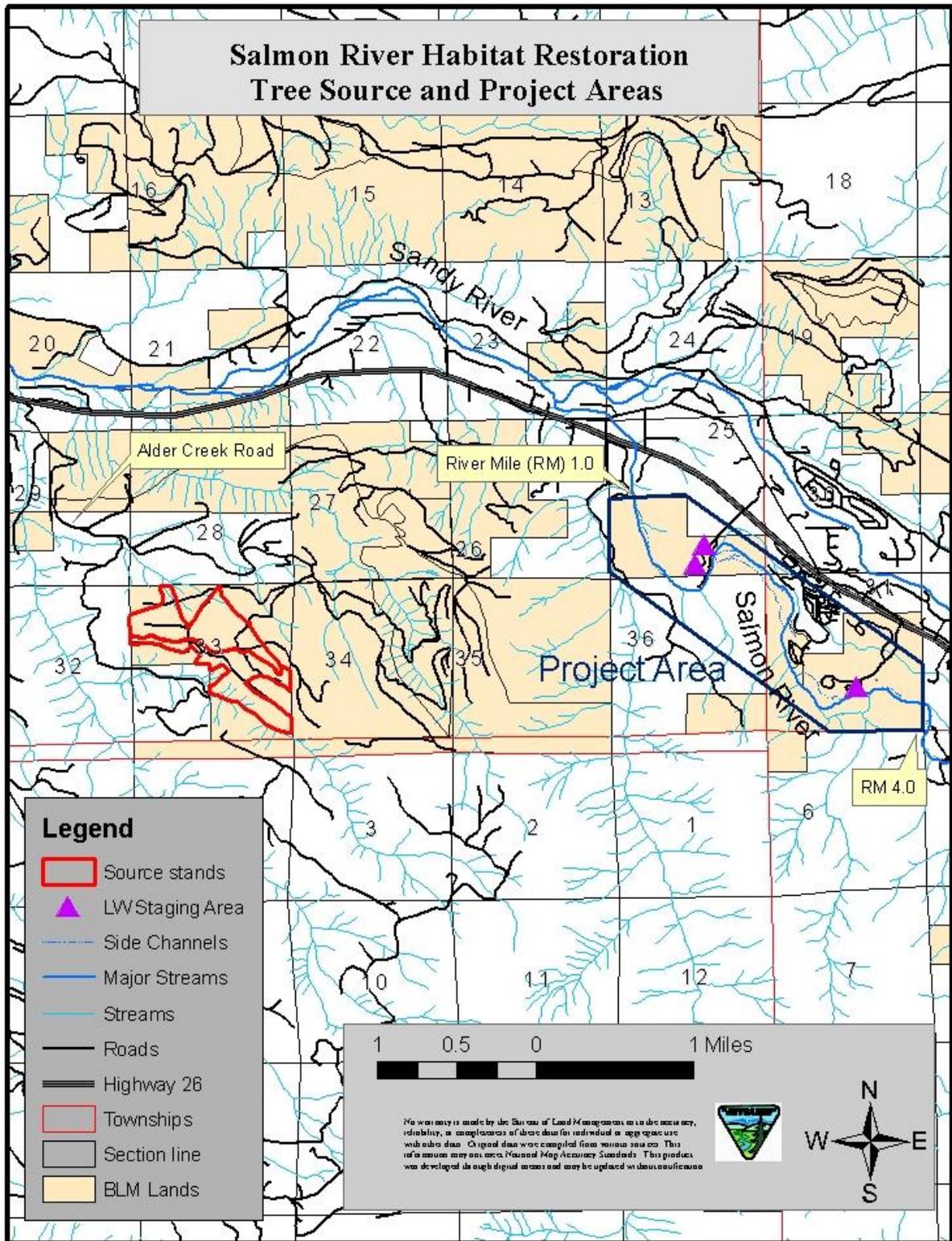
**Map 2: Locations of 2010 Project Actions**



**Map 3: Access Routes, Staging Areas, and Stockpile Sites for 2010 Project Actions**



**Map 4: Location of Tree Source Stands for the 2010 Project Actions**



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**INFORMATION ON TAKING APPEALS TO THE INTERIOR BOARD OF LAND APPEALS**

**DO NOT APPEAL UNLESS**

1. This decision is adverse to you,
- AND
2. You believe it is incorrect.

**IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED**

<b>1. NOTICE OF APPEAL</b> .....	A person served with the decision being appealed must transmit the notice of appeal in time for it to be filed in the office where it is required to be filed within 30 days after the date of service. If a decision is published in the FEDERAL REGISTER, a person not served with the decision must transmit a notice of appeal in time for it to be filed within 30 days after the date of publication (43 CFR 4.411 and 4.413).
<b>2. WHERE TO FILE NOTICE OF APPEAL</b> .....	<b>A. Cindy Enstrom, Cascades Resource Area Field Manager, Bureau of Land Management, 1717 Fabry Road SE, Salem, OR 97306</b>
<b>WITH COPY TO SOLICITOR</b> .....	<b>B. U.S. Department of the Interior, Office of the Regional Solicitor, 805 SW Broadway, Suite 600 Portland, OR 97205</b>
<b>3. STATEMENT OF REASONS</b> .....	Within 30 days after filing the Notice of Appeal, file a complete statement of the reasons why you are appealing. This must be filed with the <b>United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203</b> . If you fully stated your reasons for appealing when filing the Notice of Appeal, no additional statement is necessary (43 CFR 4.412 and 4.413).
<b>WITH COPY TO SOLICITOR</b> .....	Same as 2 B.
<b>4. ADVERSE PARTIES</b> .....	Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor or Field Solicitor having jurisdiction over the State in which the appeal arose must be served with a copy of: (a) the Notice of Appeal, (b) the Statement of Reasons, and (c) any other documents filed (43 CFR 4.413). If the decision concerns the use and disposition of public lands, including land selections under the Alaska Native Claims Settlement Act, as amended, service will be made upon the Associated Solicitor, Division of Land and Water Resources, Office of the Solicitor, U.S. Department of the Interior, Washington, D.C. 20240. If the decision concerns the use and disposition of mineral resources, service will be made upon the Associated Solicitor, Division of Mineral Resources, Office of the Solicitor, U.S. Department of the Interior, Washington, D.C. 20240.
<b>5. PROOF OF SERVICE</b> .....	Within 15 days after any document is served on an adverse party, file proof of that service with the <b>United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203</b> . This may consist of a certified or registered mail "Return Receipt Card" signed by the adverse party (43 CFR 4.401(c)).
<b>6. REQUEST FOR STAY</b> .....	Except where program-specific regulations place this decision in full force and effect or provide for an automatic stay, the decision becomes effective upon the expiration of the time allowed for filing an appeal unless a petition for a stay is timely filed together with a <i>Notice of Appeal</i> (43 CFR 4.21). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany your notice of appeal (43 CFR 4.21 or 43 CFR 2804.1). A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the <i>Notice of Appeal</i> and <i>Petition for a Stay</i> must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.  Standards for Obtaining a Stay. Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards: (1) the relative harm to the parties if the stay is granted or denied, (2) the likelihood of the appellant's success on the merits, (3) the likelihood of immediate and irreparable harm if the stay is not granted, and (4) whether the public interest favors granting the stay.

Unless these procedures are followed your appeal will be subject to dismissal (43 CFR 4.402). Be certain that all communications are identified by serial number of the case being appealed.

**NOTE:** A document is not filed until it is actually received in the proper office (43 CFR 4.401(a)). See 43 CFR Part 4, subpart b for general rules relating to procedures and practice involving appeals.

(Continued on page 2)

#### 43 CFR SUBPART 1821—GENERAL INFORMATION

Sec. 1821.10 Where are BLM offices located? (a) In addition to the Headquarters Office in Washington, D.C. and seven national level support and service centers, BLM operates 12 State Offices each having several subsidiary offices called Field Offices. The addresses of the State Offices can be found in the most recent edition of 43 CFR 1821.10. The State Office geographical areas of jurisdiction are as follows:

##### STATE OFFICES AND AREAS OF JURISDICTION:

Alaska State Office ----- Alaska  
Arizona State Office ----- Arizona  
California State Office ----- California  
Colorado State Office ----- Colorado  
Eastern States Office ----- Arkansas, Iowa, Louisiana, Minnesota, Missouri,  
and, all States east of the Mississippi River  
Idaho State Office ----- Idaho  
Montana State Office ----- Montana, North Dakota and South Dakota  
Nevada State Office ----- Nevada  
New Mexico State Office --- New Mexico, Kansas, Oklahoma and Texas  
Oregon State Office ----- Oregon and Washington  
Utah State Office ----- Utah  
Wyoming State Office ----- Wyoming and Nebraska

(b) A list of the names, addresses, and geographical areas of jurisdiction of all Field Offices of the Bureau of Land Management can be obtained at the above addresses or any office of the Bureau of Land Management, including the Washington Office, Bureau of Land Management, 1849 C Street, NW, Washington, DC 20240.

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(Form 1847-1, September 2005)