

**U.S. Department of the Interior
Bureau of Land Management (BLM)
Determination of NEPA Adequacy (DNA)**

Office: Marys Peak Field Office - Salem District Office

Tracking Number: DOI-BLM-ORWA-S050-2016-0015-DNA

Case file/Project Number: N/A

Proposed Action Title/Type: Wolf Creek Restoration Project

Location/Legal Description: T. 9 S., R. 7 W., section 19, Willamette Meridian.

Applicant (if any): N/A

A. Description of the DNA Proposed Action and any applicable mitigation measures

The primary objectives of the project are to provide for fish passage and improve habitat within Wolf Creek. The project includes placing large wood to trap and store spawning gravel and creating deep pool habitat with protective cover for local fish species including cutthroat trout, Coho salmon and listed Upper Willamette Threatened Winter Steelhead in Wolf Creek a tributary to the Luckiamute River. Wolf Creek has high water quality, but compromised fish passage and the lack of deep pools with wood cover is a significant limiting factor for juvenile fish survival and steelhead production in the stream. This project will improve fish passage by constructing a porous boulder constructed rock riffle below the existing culvert and construct pool habitat by placing large wood structures at locations where stream processes would naturally create it if fish passage, wood supply, and transport processes were functioning normally.

Approximately 70 trees for the large wood structures will come from BLM-managed lands located along the 9-7-34.4 road (T. 9 S., R. 7 W., section 29). The hazard trees were cut and decked along the road during winter 2016. Additional trees, boulders, and rock for the constructed riffle will be provided by Starker Forests, Inc.

Approximately 20 Douglas-fir trees will be tipped or cut in the riparian zone of the adjacent forest in the lower reach of Wolf Creek on Starker Forests Inc. ownership from the confluence of the Luckiamute River upstream to the culvert on BLM road 9-7-35.1 (Figure 1). This will provide equipment access for constructing the porous boulder rock riffle and large wood structures.

Treatment of the adjacent forest in the lower reach of Wolf Creek from the confluence of the Luckiamute River upstream to the culvert on BLM road 9-7-35.1 will improve stand conditions by providing small gaps in the forest canopy adjacent to and in the riparian area, allowing the crowns of the dominant Douglas-fir to receive additional light. Primary issues include disturbance of the forest canopy in the riparian zone along Wolf Creek in the lower reach, disturbance of ground vegetation for rock and wood placement, with potential local effects to bank stability, floodplain inundation, sediment transport and aquatic habitat; and the potential for short term water quality degradation due to temporary increases in turbidity levels during structure construction.

The project is located within the Luckiamute River 5th-field watershed, T. 9 S., R. 7 W., Section 19, Willamette Meridian, in Polk County, Oregon. The project is proposed within the lower one-half mile of Wolf Creek on property owned by Starker Forests, Inc. Wolf Creek is a tributary to the Luckiamute River. The lower reach of the Wolf Creek project area from the Luckiamute River up to the culvert on BLM road 9-7-35.1 is an entrenched, bedrock channel with lack of floodplain connectivity, spawning gravels, pool habitat, and large wood cover. The adjacent forest consist of young, single age class, predominant Douglas fir plantations. The upper reach from BLM road 9-7-35.1 up to the property boundary located at the section line T. 9 S., R. 7 W., sections 18-19, spawning material here is in good supply, and is regularly utilized by resident cutthroat trout and threatened Upper Willamette Winter Steelhead.

The Proposed Action includes the following activities:

1. Starker Forests Inc. will hire a contractor to load and transport by truck approximately 16-24 cubic yards of 12"-24" angular rock and 30 cubic yards of 12" minus pitrun rock material to the staging site below the culvert on the 9-7-35.1 road.
2. Starker Forests Inc. will hire a contractor to use an excavator to construct three porous boulder weirs in the Wolf Creek channel spaced about 10 feet apart below the culvert. The contractor will then place the 12' minus pitrun rock material upstream, downstream and between the boulder structures to create a constructed riffle. The constructed riffle with porous boulders will be located approximately 40 feet downstream from the culvert outlet and be 30 feet long and 22 feet wide. To prevent potential increases in turbidity construction will be conducted during periods of low flow and the contractor will dewater the project area during construction activities.
3. After construction the site will be slowly rewatered using 25 percent of the streamflow, increasing to 50 percent flow then 75 percent flow until 100 percent streamflow has rewatered the site minimizing downstream turbidity effects. Disturbed surfaces in the project area will be smoothed and replanted with native grass-forb species adapted to local conditions and mulched with certified weed free straw for erosion control.
4. Load and transport by truck up to 70 tipped and cut trees from the East ½ of the NW ¼ section 29, R. 7 W., T. 9 S., BLM road 9-7-34.4. Deliver these for storage at the staging sites adjacent to the structures locations.
5. Starker Forests Inc. will hire a contractor to fell, buck, load and transport by truck up to an additional 50 tipped and cut logs from lands owned by Starker Forests Inc. and deliver these for storage at the staging sites adjacent to the structures locations. To prevent potential increases in turbidity all log, tree placement will be conducted during periods of low flow minimizing downstream turbidity effects.
6. The Luckimute Watershed Council will hire a contractor to load and transport approximately 70 Christmas trees and deliver these for storage at the staging sites adjacent to the structures locations. The Christmas trees will be placed as small woody material into constructed large wood structures to help create the appearance of "natural log jams".
7. Tip or cut up to 15 Douglas fir trees in the riparian zone of the adjacent forest in the lower reach of Wolf Creek on Starker Forests Inc. ownership from the confluence of the

Luckiamute River upstream to the culvert on BLM road 9-7-35.1 to allow for equipment access for constructing the porous boulder rock riffle and large wood structures. All tipped or felled Douglass Fir in this area will be stored at staging sites and incorporated into the constructed large wood structures in the lower reach of Wolf Creek to help create the appearance of “natural log jams”.

8. Remove the tipped and cut trees and logs from storage areas and transport for storage at the staging sites adjacent to the large wood structure sites to be constructed in the Wolf Creek channel.

Construct approximately 9-12 large wood structures at the proposed locations in the Wolf Creek channel (see Figure 1 – site map) utilizing the stored logs. Construction will begin by placing 10-12 logs for each large wood structure in the Wolf Creek channel. To prevent potential increases in turbidity all log, tree placement will be conducted during periods of low flow minimizing downstream turbidity effects. Logs will then be placed individually into each large wood structure by the excavator operator under the direction of BLM project leads. As logs are placed the structure will be stabilized by ballasting with additional logs and trees. Small woody material will be placed to help create the appearance of a “natural log jam” and disturbed surfaces in the project area will be smoothed and replanted with native grass-forb species adapted to local conditions and mulched with certified weed free straw for erosion control.

To implement the Project, the BLM will flag the log, tree, and rock staging sites and the structure locations. Starker Forests, Inc. will hire a qualified contractor to construct the porous boulder constructed rock riffle and large wood structures. The BLM will provide appropriate designs and be the project leads for the constructed rock and log structures placement.

The Proposed Action will adhere to the project design features outlined for in-stream structure projects in EA Sections 2.3.2, 8.0, 9.0, and 10.0 of the Salem District Office Aquatic and Riparian Habitat Restoration Revised Environmental Assessment (EA) (DOI-BLM-ORWA-S000-2012-0001-EA) and Finding of No Significant Impact (FONSI). EA Sections 8.0, 9.0, and 10.0 of the EA outline the NMFS ARBO II, NMFS WOP, and USFWS ARBO II project design features and criteria, respectively, that each restoration project will be adhered during project activities.

B. Conformance with the Land Use Plan

Land Use Plan Name: Salem District Record of Decision and Resource Management Plan (1995 RMP). Date Approved: March 1995. As amended by the Record of Decision for Amendments to the Survey and Manage, Protection Buffer, and Other Mitigation Measures Standards and Guidelines, dated January 2001 (SM/ROD) with subsequent Annual Species Reviews. These actions comply with the SM/ROD as described above and utilize the December 2003 species list. This list incorporates species changes and removals made as a result of the 2001, 2002, and 2003 Annual Species Reviews (ASR) with the exception of the red tree vole. For the red tree vole, the Ninth Circuit Court of Appeals in *KSWC et al. v. Boody et al.*, 468 F.3d 549 (9th Cir. 2006) vacated the category change and removal of the red tree vole in the mesic zone, and returned the red tree vole to its status as existed in the 2001 ROD Standards and Guidelines, which makes the species Category C throughout its range.

The Project is in conformance with the land use plan, even though it is not specifically provided for, because it is clearly consistent with the following land use plan decisions (objectives, terms, and conditions) and, if applicable, implementation plan decisions:

- RMP Aquatic Conservation Strategy (RMP, pp. 5,7):
 - Maintain and restore the distribution, diversity, and complexity of watershed and landscape-scale features to ensure protection of the aquatic systems to which species, populations and communities are uniquely adapted.
 - Watershed restoration will be an integral part of a program to aid recovery of fish habitat, riparian habitat and water quality.
- RMP Fish Habitat Objectives (RMP, p. 27):
 - Design and implement fish habitat restoration and enhancement activities in a manner that contributes to attainment of Aquatic Conservation Strategy objectives.

C. Identify the applicable NEPA document(s) and other related documents that cover the Proposed Action.

NEPA Document(s) applicable to the Project

USDI Bureau of Land Management March 2016 Salem District Aquatic and Riparian Habitat Restoration Revised EA (DOI-BLM-ORWA-S000-2012-0001-EA), FONSI, and Decision Record (DR).

The DR for the Aquatic and Riparian Habitat Restoration Revised EA includes a table of ARBO II Potential Restoration Projects on Salem District (Table 2) that are slated for Decisions in Fiscal Year 2016, which includes the Wolf Creek Restoration Project.

Other documentation relative to the Project

- USDI Fish and Wildlife Service. July 2013. *Programmatic Consultation for Aquatic Habitat Restoration Activities in Oregon and Washington BO# 01E0FW00-2013-F-0090*
- National Marine Fisheries Service. April 2013. *Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Aquatic Restoration Activities in Oregon and Washington NMFS:2013/NWP-2013-9664*
- National Marine Fisheries Service. 2010. *Biological Opinion for Programmatic Activities of USDA Forest Service, USDI Bureau of Land Management, and Coquille Indian Tribe in Western Oregon NMFS No. 2010/02700*
- USDI Bureau of Land Management. 1998. *Rowell Creek/Mill Creek/Rickreall Creek/Luckiamute River Watershed Analysis*

D. NEPA Adequacy Criteria

1. Is the current Project substantially the same action (or is a part of that action) as previously analyzed?

Yes, the current Project is substantially the same action analyzed and selected in the Salem District Aquatic and Riparian Habitat Restoration EA (EA) and Decision Record (DR).

The Project is within the analysis area for the EA. The EA analyzed the effects to resources in the BLM Salem District from a range of watershed restoration actions, including in-stream structure placement utilizing excavators, to an annual maximum of work completed of 10 stream miles for the District or 4 stream miles for the 5th field watershed (EA, pp. 12-14).

The Project falls into the in-stream structure portion of Restoration Category 1 - In-Stream Structure and Gravel Placement, as shown in the Aquatic Restoration EA Section 2.3.1.1 and DR, pp. 4, 7. The Project also meets the site condition criteria outlined in the EA for selecting restoration projects because the location is lacking in deep pool habitat with wood cover significant to juvenile fish survival and steelhead production (EA, pp. 14, 32). This project falls into the in-stream structure portion of Restoration Activity Category 1 - In-Stream Structure and Gravel Placement as shown in the DR (pp. 4, 7). The Project also fits the conditions for project selection (DR p. 4) – low levels of structure, lack of pool habitat, low levels of wood.

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the current Project, given current environmental concerns, interests, resource values, and circumstances?

Yes, the range of alternatives analyzed in the EA is appropriate with respect to the current Project. During the internal and external scoping process for the EA, no additional alternatives were identified that would meet the purpose and need of the EA project and have meaningful differences in effects from the EA Proposed Action (EA, p. 12). Since no additional alternatives were identified, the EA analyzes the effects of the Proposed Action and the No Action Alternative. The EA Proposed Action encompasses the Project described in this DNA (EA, pp. 12-16), making the range of alternatives considered appropriate. The environmental analysis was completed in March 2016 and is still appropriate given the current environmental concerns, interests, resource values, and circumstances, which are substantially the same as those analyzed in the EA. There would be no known other or additional concerns, interests, or resource values associated with the Project that were not previously addressed in the EA.

3. Is the existing analysis adequate and are the conclusions adequate in light of any new information or circumstances? Can you reasonably conclude that all new information and all new circumstances are insignificant with regard to analysis of the Project?

Yes, the EA revision was completed in March of 2016 and utilized the most current information and circumstances for the analysis area. The existing analysis and conclusions are adequate and there is no new information that is significant with regard to the analysis of the current Project.

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new Project similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?

Yes, the direct, indirect, and cumulative impacts of the Project are similar to those identified and analyzed in the EA. The Project is substantially similar to the selected action in the DR and analyzed in the EA (EA Proposed Action). Although the Project location was not specifically defined in the EA, conditions similar to those found at Wolf Creek were used to determine effects to resources.

Potential adverse direct and indirect effects to water quality due to increased sediment in rivers and streams because of the placement of structures with excavators are the most relevant to the Project.

The effects to water quality will be short term increases in fine and coarse sediment due to placement operations, and an increase in turbidity occurring during the placement of structures, which would decrease to natural levels after the first winter after placement of the structures (EA, pp. 39-40). Effects to water quality from the current Project would be substantially similar to the above analyzed impacts, which would be minimized with the seasonal restrictions, project design features, and best management practices that will be adhered to by all projects implemented under the EA.

Cumulative effects of the Project would be substantially similar to those effects disclosed in the EA. The EA describes the cumulative effects of in-stream structure placement as follows:

EA, pp. 43-44

Since the past history and monitoring of these type of projects have shown a net improvement of the complexity and structure of the stream courses, and meet the designated DEQ Water Quality Management Plans, DEQ approved Water Quality Restoration Plans, and ARBO II requirements, there is no evidence that the type of projects included in the proposed action would result in an cumulative adverse effect to water quality

Cumulatively, these types of projects would add to the recovery of aquatic habitat, sediment transport regime and functional stream channels. These types projects are not likely to result in measurable direct or indirect effects to channel or wetland function, and all effects are within the range of those disclosed in the RMP, therefore the proposal would be unlikely to contribute to any potential cumulative effects in these watersheds.

No new or additional impacts are anticipated from the implementation of the Project other than those analyzed in the EA.

5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current Project?

Yes, public involvement and interagency review associated with both the 2012 EA and the revised EA is adequate for the current Project. Both the 2012 and revised EAs analyzed substantially similar projects to the Project. Project scoping and EA public review/comment periods were completed on both EAs.

A scoping letter describing the 2012 EA was sent to approximately 41 federal, state, and municipal government agencies, tribal authorities, and individuals on May 13, 2011. One scoping comment was received on the project (EA, p. 12 and DR, p. 12). The 2012 EA and FONSI were made available for public review from March 6, 2012 to March 20, 2012 and no comments were received during the comment period (DR, p. 12).

The revised EA was scoped to the public in the Fall/Winter and Spring 2016 (September 2015 to April 2016) editions of the Salem District Project Update newsletter, which was sent by email or postal mail to 205 affected and/or interested agencies, tribes, individuals and groups. No comments were received during this scoping period. The Revised EA and FONSI were made available for public comment from March 24, 2016 to April 8, 2016. Notifications were sent to 110 affected and/or interested agencies, tribes, individuals and groups by email or postal mail informing the public of posting of the EA to the ePlanning website as well as the review period

timeframes (DR, p.12). One comment was received and is addressed in Section 10.0 of the DR for the EA.

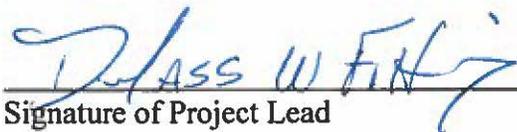
Along with project scoping and EA comment periods, the BLM will continue to provide information to the public on individual restoration projects' DR and implementation under the EA. The BLM will notify the public of individual restoration projects through the Salem District Quarterly Project Update newsletter and the ePlanning website where DNA's for the projects will be posted. BLM will also work with the U.S. Forest Service to update the list of individual projects to be implemented on the joint Aquatic Restoration Regulatory Reporting System website (DR, p. 14). The Project will follow the public information sharing process described above.

E. Person, Agencies, and BLM Staff Consulted

Name	Role or Resource Represented	Initials	Date
Ron Exeter	Botany	RE	July 25, 2016
Douglass Fitting	Hydrology, Water Quality, Soils	DWF	7/20/2016
Scott Hopkins	Wildlife	DSH	7/22/2016
Stefanie Larew	NEPA Review	SNL	7/27/2016
Scott Snedaker	Fisheries	SMS	7/20/2016
Fred Greatorex	Cultural Resources	EG	7/26/2016

CONCLUSION

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the existing NEPA documentation fully covers the Proposed Action and constitutes BLM's compliance with the requirements of NEPA.



 Signature of Project Lead



 Signature of NEPA Coordinator



 Signature of the Authorized Officer



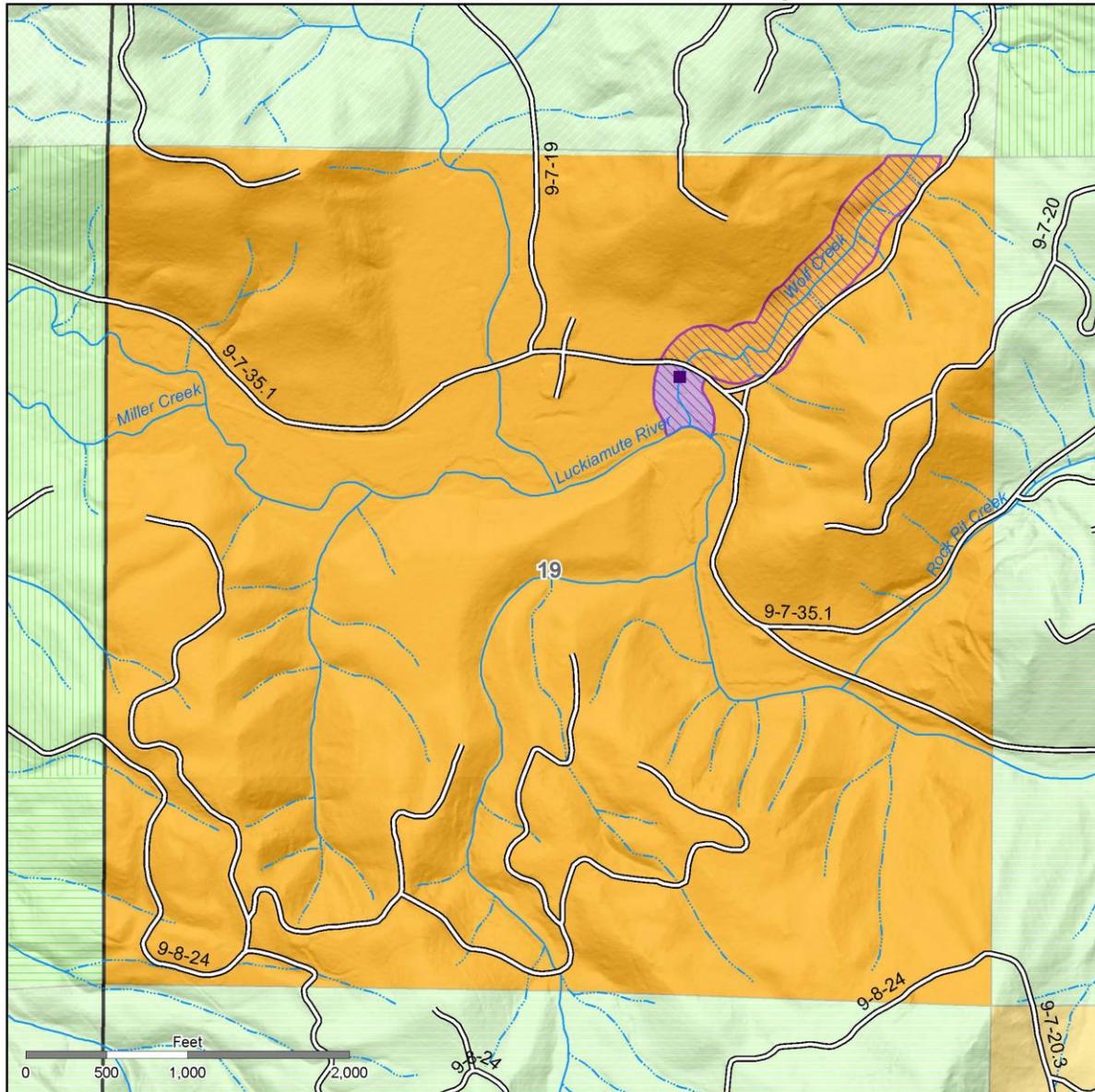
 Date

Note: The signed Conclusion on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program-specific regulations. The record for the appealable Project Decision is attached to Wolf Creek Restoration Project DNA.

Figure 1: Wolf Creek Restoration Project

7/18/2016

United States Department of the Interior - Bureau of Land Management
Wolf Creek Restoration Project
 T9S, R7W, Section 19, W. M. - Salem District - Oregon



- | | | |
|-------------------------------|------------------------------|-----------------------------------------|
| Constructed Rock Riffle | Perennial Waterbody | Hancock Timberlands XI Inc. |
| Conifer Tree Tipping | Bureau of Land Management | John Hancock Life Insurance Company USA |
| Wolf Creek LWD Placement Area | Private/Unknown | System Global Timberlands, LLC |
| Existing Road | AP Timber, LLC | Starker Forests Inc |
| Minor Stream | Golden Pond Timberlands Inc. | |
| Major Stream | | |

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification. Salem District GIS 7/18/2016



**United States Department of the Interior
Bureau of Land Management – Salem District Office
Decision Record
DOI-BLM-ORWA-S050-2016-0015-DNA
Wolf Creek Restoration Project**

Decision

It is my decision to implement the Wolf Creek Restoration (Project), as described in the attached Determination of NEPA Adequacy documentation. The Project would include the following activities:

1. Starker Forests Inc. will hire a contractor to load and transport by truck approximately 16-24 cubic yards of 12”-24 angular rock and 30 cubic yards of 12” minus pitrun rock material to the staging site below the culvert on the 9-7-34.4 road.
2. Starker Forests Inc. will hire a contractor to use an excavator to construct three porous boulder weirs in the Wolf Creek channel spaced about 10 feet apart below the culvert. The contractor will then place the 12’ minus pitrun rock material upstream, downstream and between the boulder structures to create a constructed riffle. The constructed riffle with porous boulders will be located approximately 40 feet downstream from the culvert outlet and be 30 feet long and 22 feet wide. To prevent potential increases in turbidity construction will be conducted during periods of low flow and the contractor will dewater the project area during construction activities.
3. After construction the site will be slowly rewatered using 25 percent of the streamflow, increasing to 50 percent flow then 75 percent flow until 100 percent streamflow has rewatered the site minimizing downstream turbidity effects. Disturbed surfaces in the project area will be smoothed and replanted with native grass-forb species adapted to local conditions and mulched with certified weed free straw for erosion control.
4. Load and transport by truck up to 70 tipped and cut trees from the East ½ of the NW ¼ section 29, R7W, T9S, BLM road 0-7-34.4. Deliver these for storage at the staging sites adjacent to the structures locations.
5. Starker Forests Inc. will hire a contractor to fell, buck, load and transport by truck up to an additional 50 tipped and cut logs from lands owned by Starker Forests Inc. and deliver these for storage at the staging sites adjacent to the structures locations. To prevent potential increases in turbidity all log, tree placement will be conducted during periods of low flow minimizing downstream turbidity effects.
6. The Luckimute Watershed Council will hire a contractor to load and transport approximately 70 Christmas trees and deliver these for storage at the staging sites adjacent to the structures locations. The Christmas trees will be placed as small woody material into constructed large wood structures to help create the appearance of “natural log jams”.
7. Tip or cut up to 15 Douglas fir trees in the riparian zone of the adjacent forest in the lower reach of Wolf Creek on Starker Forests Inc. ownership from the confluence of the Luckiamute River upstream to the culvert on BLM road 9-7-35.1 to allow for equipment

access for constructing the porous boulder rock riffle and large wood structures. All tipped or felled Douglass Fir in this area will be stored at staging sites and incorporated into the constructed large wood structures in the lower reach of Wolf Creek to help create the appearance of "natural log jams".

8. Remove the tipped and cut trees and logs from storage areas and transport for storage at the staging sites adjacent to the large wood structure sites to be constructed in the Wolf Creek channel.

Construct approximately 9-12 large wood structures at the proposed locations in the Wolf Creek channel (Figure 1) utilizing the stored logs. Construction will begin by placing 10-12 logs for each large wood structure in the Wolf Creek channel. To prevent potential increases in turbidity all log, tree placement will be conducted during periods of low flow minimizing downstream turbidity effects. Logs will then be placed individually into each large wood structure by the excavator operator under the direction of BLM project leads. As logs are placed the structure will be stabilized by ballasting with additional logs and trees. Small woody material will be placed to help create the appearance of a "natural log jam" and disturbed surfaces in the project area will be smoothed and replanted with native grass-forb species adapted to local conditions and mulched with certified weed free straw for erosion control.

Decision Rationale

The Project has been reviewed by BLM staff. The Project is in conformance with the 1995 Salem District Record of Decision and Resource Management Plan (as amended). Based on the Determination of NEPA Adequacy, I have determined that the existing NEPA documentation fully covers the Project and constitutes BLM's compliance with the requirements of the NEPA. (DNA section B)

Administrative Review or Appeal Opportunities

This decision may be appealed to the Interior Board of Land Appeals (Board or IBLA) according to 43 CFR Part 4 – Department of Interior Hearings and Appeals Procedures.

Contact Person

For additional information concerning this decision, contact Stefanie Larew, Planning and Environmental Coordinator, Marys Peak Field Office, at (503) 315-5601.

Implementation: This project will be implemented Summer 2016.

Authorized Officer



Paul Tigan
Field Manager, Marys Peak Field Office

7/27/16

Date