

## MEMORANDUM FOR RECORD

### **SUBJECT: Department of the Army Environmental Assessment and Statement of Findings for the Above-Referenced Standard Individual Permit Application**

This document constitutes the Environmental Assessment, 404(b)(1) Guidelines Evaluation, as applicable, Public Interest Review, and Statement of Findings for the subject application.

**1.0 Introduction and Overview:** Information about the proposal subject to one or more of the U.S. Army Corps of Engineers' (Corps) regulatory authorities is provided in Section 1, detailed evaluation of the activity is found in Sections 2 through 11 and findings are documented in Section 12 of this memorandum. Further, summary information about the activity including administrative history of actions taken during project evaluation is attached (ORM2 Summary) and incorporated in this memorandum.

1.1 Applicant: U.S. Department of Agriculture (USDA), Forest Service (USFS), Pacific Northwest Region and co-applicant U.S. Department of the Interior (USDI), Bureau of Land Management (BLM), Oregon office.

1.2 Activity location: Statewide (Oregon)

1.3 Description of activity requiring permit:

The USFS and BLM are requesting the reissuance of Regional General Permit-(RGP) 4 with modifications that would include the addition of six new activities, five of which expand upon two existing activity categories, and one new activity category. Proposed are eleven aquatic restoration activities that would be conducted within waters of the United States (U.S.). The restoration activities would maintain, enhance, and/or restore watershed functions to benefit fish and other aquatic organisms, water quality, riparian areas, floodplains, and wetlands.

USFS/BLM must notify the Corps of each individual action prior to construction. Upon receipt of the notification, the Corps conducts a review of the action to determine if it complies with the terms and conditions of RGP-4 and if so, provides a letter verifying the project fits the terms and conditions of RGP-4.

Activities shown in **bold** font are the proposed modifications from previous RGP-4 authorizations.

1. Fish Passage Restoration
  - a) Stream Simulation Culvert and Bridge Projects
  - b) Headcut and Grade Stabilization

- c) Irrigation Diversion Replacement or Relocation and Screen Installation or Replacement**
- 2. Large Wood (LW), Boulder, and Gravel Placement
  - a) Large Wood and Boulder Projects
  - b) Porous Boulder Weirs and Vanes
  - c) Engineered Log Jams (ELJ)**
  - d) Constructed Riffles**
  - e) Gravel Augmentation**
  - f) Tree Removal for Large Wood (LW) Projects**
- 3. Legacy Structure Removal
- 4. Off- and Side-Channel Habitat Restoration
- 5. Streambank Restoration
- 6. Set-back or Removal of Existing Berms, Dikes, and Levees
- 7. Reduction/Relocation of Recreation Impacts
- 8. Livestock Fencing, Stream Crossings, and Off-Channel Livestock Watering
- 9. Road and Trail Erosion Control and Decommissioning
- 10. Riparian Vegetative Planting
- 11. **Beaver Habitat Restoration**

For all activities identified below, this RGP authorizes work within Navigable waters of the U.S. pursuant to Section 10 of the Rivers and Harbors Act and discharges of dredged or fill material in waters of the U.S. under Section 404 of the Clean Water Act.

1. Fish Passage Restoration: activities related to the removal of culverts or bridges, replacement of culverts or bridges with properly sized culverts and bridges, replacement of damaged culverts or bridges, resetting existing culverts that were improperly installed or damaged, stabilizing and providing passage over headcuts, irrigation diversion replacement or relocation, and irrigation intake screen installation or replacement. Such projects will take place where fish passage has been partially blocked or eliminated through road construction, stream degradation, and outdated diversion or screening methods.

(a) Stream Simulation Culverts and Bridges: Activities associated with the replacement of culverts and bridges with properly sized culverts and bridges for aquatic organism passage, or activities associated with the resetting of existing passable culverts or bridges that were improperly installed or damaged. All road-stream crossing structures shall simulate stream channel conditions per *Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road- Stream Crossings (USDA-Forest Service 2008a)*, located at: [http://stream.fs.fed.us/fishxing/aop\\_pdfs.html](http://stream.fs.fed.us/fishxing/aop_pdfs.html).

(b) Headcut and Grade Stabilization: Activities associated with armoring headcuts to prevent the continued upstream migration of the headcut. Stabilization efforts should focus on the plunge pool, the headcut, and immediately upstream of the headcut. Armor headcuts with sufficiently

sized and amounts of material to prevent continued upstream migration of the headcut. Materials can include both rock and organic materials which are native to the area and shall not contain gabion baskets, sheet pile, concrete, articulated concrete block, and cable anchors. Discharged material required to armor the headcut may extend into wetlands located beside the tributary and immediately above the headcut. Short-term stabilization efforts, including response to emergency stabilization efforts, may occur without associated fish passage measures where fish passage did not exist prior to the stabilization efforts. However, fish passage must be incorporated into the final headcut stabilization action and be completed during the first subsequent in-water work period.

**(c) Irrigation Diversion Replacement or Relocation and Screen Installation or Replacement:** The permittees will ensure that the action is individually reviewed and approved by National Marine Fisheries Service (NMFS) for consistency with the criteria found in *Anadromous Salmonid Passage Facility Design* (NMFS 2011e). Activities associated with the replacement or relocation of small irrigation diversion structures that are aquatic species passage barriers, and discharges associated with placement of screens on unscreened or improperly screened irrigation diversion structures. The relocation of existing irrigation diversion structures must allow for more natural stream dynamism and evolution with design considerations to reduce attraction by aquatic species.

2. Large Wood (LW), Boulder, and Gravel Placement: Activities related to LW and boulder placement, porous boulder structures and vanes, ELJ, constructed riffles, gravel augmentation, and tree removal for LW projects. Such activities will occur in areas where channel structure is lacking due to historic removal of large wood, riparian timber harvest, and in areas where gravel supplies are low due to anthropogenic disruptions. These projects will occur in stream channels and adjacent floodplains to increase channel stability, rearing habitat, pool formation, spawning gravel deposition, channel complexity, hiding cover, low velocity areas, and/or floodplain function.

(a) LW and Boulder Projects: LW and boulders shall be placed in areas where they would naturally occur and in a manner that closely mimics natural accumulations for that particular stream type. Boulder placement may not be appropriate in low gradient meadow streams. Structure types shall simulate disturbance events to the greatest degree possible and include, but are not limited to, log jams, debris flows, windthrow, and tree breakage.

(b) Porous Boulder Structures and Vanes: Activities associated with the construction of porous boulder structures and vanes. Included are low-profile structures comprised of boulders that partially span the channel, unless installed in bedrock-dominated channels. These structures and

vanes can be utilized to redirect the channel thalweg, control channel alignment, alter and maintain the width to depth ratio of the channel, and/or concentrate low flow into a deeper, narrower channel thereby improving fish passage in otherwise flat-bottomed channels.

(c) **Engineered Log Jams (ELJ):** Activities associated with the construction of ELJ. ELJ are a type of LW structure that include an anchoring system, such as rebar pinning, ballast rock, or vertical posts to create an interlocking mass for restoring physical and biological conditions critical to aquatic process and organisms. ELJ shall be designed to provide resistance from expected hydraulic forces. To the extent practical, ELJ should be designed to simulate stable natural log jams and can be either naturally stable due to LW size and/or stream width or anchored in place using rock or piles (driven into a dewatered area or the streambank, but not in water).

NMFS fish passage review and approval: For ELJs that occupy >25% of the bankfull area, the USFS or BLM will ensure that the action is individually reviewed and approved by NMFS for consistency with criteria found in *Anadromous Salmonid Passage Facility Design* (NMFS 2011e). NMFS approval shall be included with project notification to the Corps.

(d) **Constructed Riffles:** Activities associated with the construction of riffles that can be used as grade control features, improve floodplain connectivity or repair discontinuities in stream gradient. Construction techniques can vary, but typically include an appropriately graded mix of gravels, cobbles with fines washed in to maintain surface flow.

(e) **Gravel Augmentation:** Activities associated with the placement of gravel into stream channels and at tributary junctions in a manner that mimics natural debris flows and erosion to support spawning habitat for fish. Gravel augmentation typically occurs in areas where natural gravel supply has been limited by past land use practices.

(f) **Tree Removal for LW Projects:** Activities associated with the removal of trees that would be used for LW projects where trees may be felled and/or pushed/pulled directly into a stream and/or floodplain and may be stockpiled in upland for future instream restoration projects.

3. **Legacy Structure Removal:** Activities associated with the removal of channel-spanning weirs, legacy habitat structures, earthen embankments, subsurface drainage features, spillway systems, outfalls, pipes, instream flow redirection structures (e.g., drop structure, gabion, groin), or similar devices used to control, discharge, or maintain water levels. Legacy structures may include past projects, such as LW, boulder, rock gabions, and other in-channel and floodplain

structures. Removal projects will be implemented to reconnect stream corridors, floodplains, estuaries, reestablish wetlands, improve aquatic organism passage, and/or restore more natural channel and flow conditions. Removal of instream water control structures that impound contaminated sediment are not authorized by this RGP. Dam removal projects shall be individually reviewed and approved by NMFS for consistency with the criteria found in NMFS (2011e) and shall be individually reviewed by a Restoration Review Team. These approvals shall be provided with pre-construction notification to the Corps.

4. Off and Side Channel Habitat Restoration: Activities associated with reconnecting historic side channels with floodplains by removing off-channel historic fill and channel plugs. New side channels and alcoves can be constructed in geomorphic settings that will accommodate such features. This activity category typically applies to areas where side channels, alcoves, and other backwater habitats have been filled or blocked from the main channel, disconnecting them from most if not all flow events.

5. Streambank Restoration: Activities associated with bank shaping and installation of coir logs or other soil reinforcements as necessary to support streambank restoration and riparian vegetation. Activities include installing LW, planting trees, shrubs, and herbaceous cover as necessary to restore ecological function in riparian and floodplain habitats; or a combination of these methods. Such actions are intended to restore streambanks that have been altered through road construction, improper grazing, invasive plants, and other anthropogenic activities.

6. Set-Back or Removal of Existing Berms, Dikes, and Levees: Activities designed to reconnect historic fresh-water deltas to inundated stream channels with floodplains, and historic estuaries to tidal influence. Such projects will take place where estuaries and floodplains have been disconnected from adjacent rivers through drainpipes and anthropogenic fill. Individual projects must be reviewed by the U.S. Army Corps of Engineers Portland District's Section 408 Team for potential alterations to Corps Civil Works projects prior to the start of any construction activity. See General Condition 4: Activities Affecting Structures or Works Built by the United States.

7. Reduction/Relocation of Recreation Impacts: Activities intended to close, better control, or relocate recreation infrastructure and use along streams and within riparian areas, where these activities are themselves located in waters of the U.S. to include navigable waters U.S. Projects include those activities that result in discharges of dredged or fill into waters of the United States related to the removal, improvement, or relocation of infrastructure associated with designated campgrounds, dispersed camp sites, day-use sites, foot trails, and off-road vehicle (ORV) roads/trails. The primary purpose is to eliminate or reduce recreational impacts to aquatic resources, to restore riparian areas and

vegetation, improve streambank stability, and/or reduce sedimentation into adjacent streams.

8. **Livestock Fencing, Livestock Stream Crossings, and Off-Channel Livestock Watering:** Work in navigable waters of the U.S. and the discharge of dredged or fill material into waters of the U.S. related to the construction of livestock fences and livestock stream crossings to prevent riparian grazing, provide controlled livestock access in areas where waters of the United States would be impaired by these activities. Such projects promote a balanced approach to livestock use in riparian areas, reducing livestock impacts to streambanks, channel substrates, and water quality.

9. **Road and Trail Erosion Control and Decommissioning and Relocation:** Activities associated with hydrologically closing or decommissioning roads and trails, including culvert removal in streams; removing, installing or upgrading cross-drainage culverts; upgrading culverts on non-fish-bearing streams; constructing water bars and dips; reshaping road prisms; vegetating fill and cut slopes; removing and stabilizing of side-cast materials; grading or resurfacing roads that have been improved for aquatic restoration with gravel, bark chips, or other permeable materials; contour-shaping of the road or trail base; removing road fill to native soil levels; soil stabilization; and tilling compacted surfaces to reestablish native vegetation. This category includes road relocation, which can be considered when a road is decommissioned in a floodplain and future vehicle access through the area is still required. In these situations, the road will be relocated as far as practical away from the stream. The relocation will not increase the drainage network and will be constructed to hydrologically disconnect it from the stream network to the extent practical. New cross drains shall discharge to stable areas where the outflow will quickly infiltrate the soil and not develop a channel to a stream. This permit does not allow new road construction (not associated with road relocation) or routine maintenance within riparian areas or wetlands. Individual projects involving culvert removal, installation, or upgrades or actions where work would occur on a levee, must be reviewed by the U.S. Army Corps of Engineers Portland District's Section 408 Team for potential alterations to Corps Civil Works projects prior to the start of any construction activities. See General Condition 4: Activities Affecting Structures or Works Built by the United States.

10. **Riparian Vegetative Planting:** Activities where there would be discharges of dredged material or fill into waters of the United States associated with the planting of native riparian species that would occur under natural disturbance regimes. In addition, this category includes work in navigable waters of the U.S.

11. **Beaver Habitat Restoration:** Activities associated with the construction of Beaver Dam Analogs (BDA), Vertical Post Structures (VPS) and Post Assisted Log Structures (PALS). BDA are permeable, channel-spanning structures with a

constant crest elevation, constructed with a mixture of woody debris and fill material to form a pond upstream of the structure and mimic a natural beaver dam. PALS and VPS consist of woody materials of various sizes pinned together with untreated wooden posts driven into the substrate to mimic natural wood accumulations.

**NMFS and/or USFWS Fish Passage Review and Approval:** See General Condition 26.

1.3.1 Proposed avoidance and minimization measures:

General Conditions that will be included as part of the RGP are intended to minimize effects to the aquatic environment, relevant to all aquatic restoration activity categories. Best Management Practices (BMP) will be required to reduce and/or prevent temporary impacts to aquatic resources during construction, to reduce the overall adverse effects related to permanent impacts, and to prevent the introduction and/or spread of invasive species. Temporary impacts to aquatic resources will be required to be restored to pre-construction conditions including restoring soils that may have been compacted by equipment, restoring the grading of the site, and replanting disturbed areas with native species.

The General Aquatic Conservation Measures and Project Design Criteria (PDC) of the programmatic biological opinions from the NMFS titled *National Oceanic and Atmospheric Administration (NOAA) Biological Opinion (BO): Reinitiation of the Endangered Species Act Section 7 Formal Programmatic Conference and Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Aquatic Restoration Activities in the States of Oregon and Washington*, and the U.S. Fish and Wildlife Service (USFWS) titled *Endangered Species Act - Section 7 Consultation and Programmatic Biological Opinion for Aquatic Restoration Activities in the States of Oregon, Washington, and portions of California, Idaho and Nevada*, have been designed to reduce adverse impacts to the aquatic ecosystem, both temporarily and permanently. The biological opinions will be jointly referred to as “ARBO II BOs” throughout the rest of the document and will be included as General Conditions 6 and 7 of the RGP.

General Condition 6 requires for the permittees to construct in-water projects during the Oregon Department of Fish and Wildlife’s (ODFW) *Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Species* to minimize effects to aquatic species. Time periods were established to avoid the vulnerable life stages of fish including migration, spawning, and rearing.

General Condition 26 requires the permittees to adhere to the terms and conditions of the ARBO II BOs if more restrictive than the General Conditions of the RGP to further minimize impacts to the aquatic environment and species.

1.3.2 Proposed compensatory mitigation: Mitigation was not proposed by USFS and BLM as part of the request for reauthorization of RGP-4. The projects to be authorized under RGP-4 are habitat restoration activities with the intent of providing a net environmental benefit to the aquatic ecosystem.

1.4 Existing conditions and any applicable project history:

Projects authorized under this RGP will occur statewide, and in each of Oregon's ten ecoregions. Existing conditions are summarized below by ecoregion.

Basin and Range. The Basin and Range ecoregion includes a large portion of southeastern Oregon and is the least populated area of the State. This ecoregion consists of Oregon's high desert and contains numerous flat basins separated by isolated, generally north-south mountain ranges. Malheur Lake is the major drainage basin in this arid ecoregion. Runoff from precipitation, mountain snowpack, and water-filled basins often flow into flat alkaline playas, where it forms seasonal shallow lakes and marshes. The terrestrial landscape is open and treeless, plants are widely spaced, and soils are exposed to the elements. The Basin and Range ecoregion contains many diverse habitats. The most significant are the sagebrush steppe, salt desert scrub, and riparian wetlands, as well as mountain mahogany and aspen woodlands.

Blue Mountains. The Blue Mountains ecoregion occupies most of northeastern Oregon and encompasses three major ranges: the Ochoco, Blue, and Wallowa Mountains. There are deep, rock-walled canyons, glacially cut gorges, dissected plateaus, and broad alluvial river valleys characterize the landscape. Extreme changes in elevation across the ecoregion result in broad temperature and precipitation ranges, supporting habitat diversity second only to the Klamath Mountains ecoregion. Vegetation in the lowland areas consists of bunchgrasses, sagebrush, and juniper. Ponderosa pine and juniper woodlands are characteristic of mid-elevation areas; mixed coniferous forests dominating higher altitudes and north-facing slopes at mid-elevations. Extensive grasslands occur in and north of the Wallowa Mountains.

Coast Range. The Coast Range ecoregion extends the entire length of the Oregon coastline as a narrow, mountain range from the edge of the Pacific Ocean to the Willamette Valley and Klamath Mountains. Along the north coast, cliffs and grassy headlands are separated by stretches of flat coastal plain and estuaries. A broad coastal terrace characterizes much of the south coast,



punctuated by steep headlands, inland lakes, and rocky offshore islands. The region's marine climate causes the wettest habitats in the State, including temperate rainforests, which are some of the most productive forests in the world.

Columbia Basin. The Columbia Basin ecoregion is semi-arid, with cold winters and hot summers. Farther from the Columbia River, annual precipitation decreases and soil changes from sandy deposits to windblown silts. Most of the ecoregion receives less than 15 inches of precipitation per year, mostly in the form of snow. Much of the ecoregion's natural vegetation is native bunchgrass prairie. Sandy deposits along the big bend of the Columbia River have created open dunes and areas of shrub-steppe and western juniper. The rivers were once lined with intermountain riparian vegetation, such as black cottonwood, willows, chokecherry, and aspen, and wetlands were located throughout the plateau. Fire was a natural component of this ecoregion, though the fire recurrence interval is not as clear as in other ecoregions.

Overall, the Columbia River flows for more than 1,200 miles and is one of the largest rivers in North America. The Columbia River drains an area of approximately 260,000 square miles and is the most hydroelectrically developed river system in the world. There are 11 dams on the mainstem Columbia River and hundreds of other manmade structures located on tributaries that flow to the Columbia River, which are located in multiple ecoregions in Oregon, as shown on the map below.

East Cascades Slope and Foothills. The East Cascades ecoregion is geologically young, with lava flows, volcanic vents, and a mantle of pumice soil. Ponderosa pine forests predominate, with extensive stands of lodgepole pine on deep Mazama ash. The ecoregion is a transition zone that extends from below the crest of the Cascade Range east to where the pine forests intersect with sagebrush juniper steppe. The northern two-thirds of the East Cascades ecoregion is drained by the Deschutes River system, which includes a series of large lakes and reservoirs near its headwaters high in the Cascade Mountains. The southern third is drained by the Klamath River, which rises from a vast interior wetland before it flows south and west into California. Forests, mostly federally owned, cover most of the region's uplands, with privately owned agricultural land in the valleys.

Klamath Mountains. Many plant communities (Douglas-fir forests, oak woodlands, and ponderosa pine woodlands) have changed significantly since fire suppression was widely instituted in the early 20th century, although the plant communities of the Klamath Mountains continue to be among the most diverse in the world. There are pockets of plant communities that occur nowhere else,

endemic to a particular condition of the climate or soil type. Of the 4,000 kinds of native plants found in Oregon, about half are found in this ecoregion, and about a quarter of these are endemic to this ecoregion.

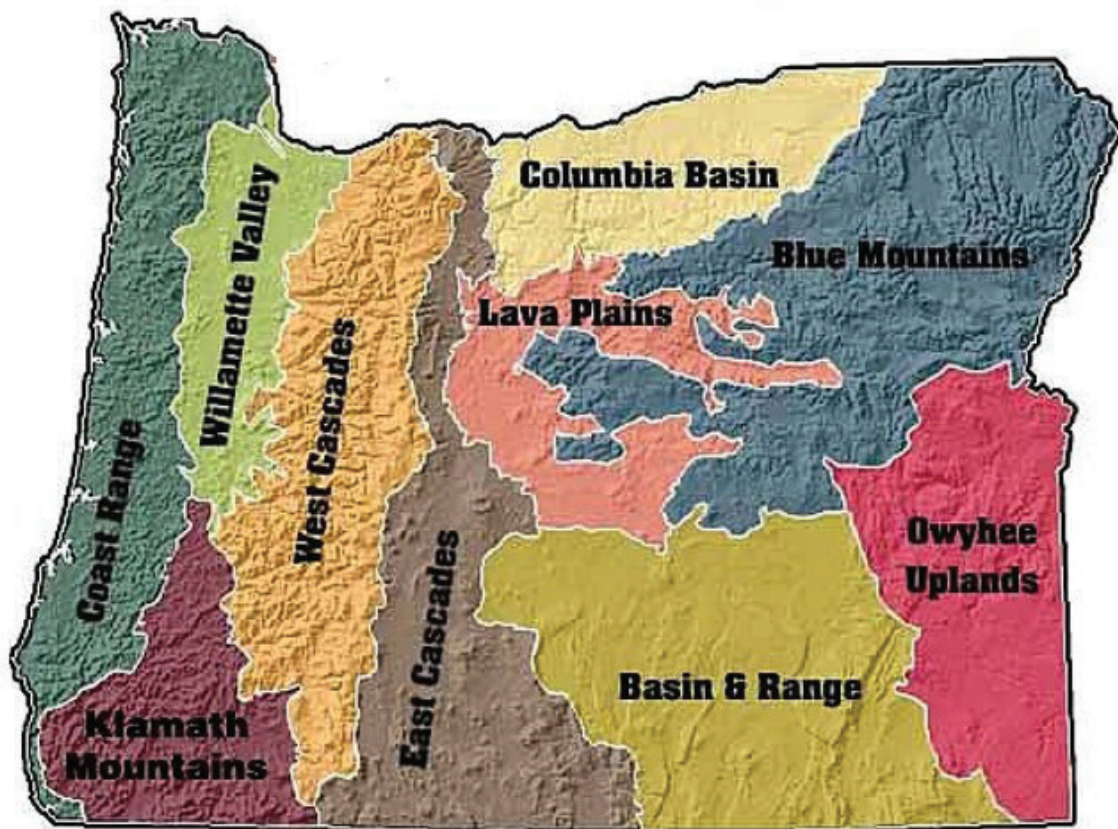
High Lava Plains. The High Lava Plains ecoregion is located in the dry foothills that surround the western perimeter of the Blue Mountains and separates the north-central Blue Mountains from the southern Blue Mountains and Ochoco Mountains. The drainage basins in this ecoregion are the John Day, the Goose and Summer Lakes, the Malheur Lakes, and the Deschutes. The land use in this ecoregion is primarily irrigated pasture, grazing, and recreation.

Owyhee Uplands. The Owyhee Uplands ecoregion is located in the southeastern section of Oregon. This ecoregion is similar to the adjacent Basin and Range ecoregion in vegetation; however, it differs markedly in terrain, as the landscape is basically a broad, undulating plateau cut by deep riverine canyons. The Owyhee River and the lower basin of the Malheur River generally drain north through these canyons and to the Snake River Basin located at the border of Oregon and Idaho.

West Cascade Mountains. The West Cascade Mountains ecoregion is a mountainous spine of volcanic peaks and dense forests. Relatively few people live in the area, which is geologically composed of two parts. The older western Cascade Mountains feature long ridges with steep sides and wide, glaciated valleys-remnants of long-extinct volcanoes. The younger high Cascades to the east include more than a dozen major peaks formed from more recent volcanic activity. Most of the rivers draining the northern two-thirds of the ecoregion flow into the Willamette Valley and then to the Columbia River system; the southern third drains to the Pacific Ocean through the Umpqua and Rogue River systems. The lower Columbia River basin includes all watersheds that drain into the Columbia River from Bonneville Dam (river mile 146) to its confluence with the Pacific Ocean. The lower 46 miles of the Columbia River is considered estuary, portions of which have been channelized to facilitate land development. In general, water quality throughout the lower Columbia River basin has been significantly affected by human activities such as dams and diversion structures, water withdrawals, farming and grazing, road construction, mining activities, and urbanization. Increased stream temperatures have occurred throughout the basin and have a significant effect on salmonid metabolism, growth rate, disease resistance, timing of adult migrations, fry emergence, and smoltification. In addition, excess nutrients, low levels of dissolved oxygen, heavy metals, and changes in pH have directly affected water quality.

Willamette Valley. The Willamette Valley ecoregion is defined by the Willamette River and is Oregon's largest river valley. The river's upper reaches and much of

its watershed lie in the Cascade Mountains and Coast Range beyond the ecoregion borders. The ecoregion itself is characterized by broad alluvial flats and low basalt hills, with soils of deep alluvial silts from river deposits, and dense heavy clays from fluvial deposits in the valley bottom's numerous oxbow lakes and ponds. This ecoregion has 70% of the State's population, the majority of its industry, and almost half of its farmland. The Willamette Valley ecoregion is largely in private ownership; agriculture, urban areas, and forestland dominate the landscape. The Willamette Valley ecoregion has also been affected by human activities such as dams for the purpose of flood control, navigation, power generation, diversion structures for irrigation, water withdrawals, farming and grazing, road construction, mining activities, and urbanization. Increased stream temperatures have occurred throughout the basin and have a significant effect on salmonid metabolism, growth rate, disease resistance, timing of adult migrations, fry emergence, and smoltification. Excess nutrients, low levels of dissolved oxygen, heavy metals, and changes in pH have directly affected the water quality.



Oregon Ecoregions

RGP-4 was first authorized in May of 2009 with a five-year expiration date and has been reissued twice. The last RGP-4 issued in 2019 was valid for two years

during which the Corps would evaluate proposed changes to the activities authorized herein.

The modifications proposed for this reauthorization are activities that have been considered in the updated ARBO II BOs. Activities must meet the PDC of ARBO II BOs, unless individually reviewed and approved by the appropriate agency (NMFS/USFWS). Documentation of such approval by the appropriate agency must be provided to the Corps as part of the application.

RGP-4 has been designed so that individual actions proposed for authorization under the general permit would need minimal evaluation by the Corps since activities would be similar in nature and have no more than minimal individual and cumulative adverse environmental effect.

USFS and BLM planning teams prioritize watersheds to identify and target specific aquatic restoration projects. Considerations for determining priority watersheds may include recommendations from NMFS and USFWS, state fish recovery plans, aquatic conservation strategies, number of fish species, number of ESA-listed fish species, quality and quantity of habitat, a watershed's restoration potential, or availability of community-based partnerships (e.g., watershed councils and soil and water conservation districts).

Planning teams further identify and prioritize aquatic restoration projects within a chosen watershed and consider local watershed assessments, stream surveys, road analysis, number of fish species affected, presence of exotic fish species, funding restrictions, and more. Further, federal and state fish recovery plans and Northwest Power Planning Council Subbasin Plans list and prioritize aquatic restoration categories, helping to guide project identification.

Once a project type and location are selected, a USFS or BLM planning team applies the following process to develop site-specific project designs that tier to ecological conditions of an area:

- **Current Conditions:** Assess current stream, riparian, wetland, and upslope conditions and other landscape modifications that may impair natural stream processes and functions.
- **Desired Condition (Restoration Potential):** Conduct an environmental assessment to identify natural habitat conditions using field identifiers, stream reference reaches, early aerial photographs, Government Land Office surveys, and other historic records if available.
- **Proposed Conditions:** Identify target conditions based on differences between current and desired conditions that can be reasonably achieved through the activities included in RGP-4.

The previous RGP-4 authorizations were created in collaboration with Oregon Department of State Lands (DSL) (not a joint authorization) so that the terms and conditions of both agency's authorizations could be combined into a joint appendix, which both agencies could use as an attachment to their respective permit verifications. Inconsistencies with the Corps' Regulatory program were found in the joint appendices of past authorizations (most recent RGP-4: Appendix 2), which included activities the Corps would not regulate, placed limits on activities that would also qualify for verification under Nationwide Permit (NWP) 27 (Aquatic Habitat Restoration, Enhancement, and Establishment Activities) without such constraints, and included inconsistent definitions for regulated activities. This iteration of RGP-4 will not include a joint appendix with DSL to ensure the permit is specific to the Corps' Regulatory program and its authorities and to avoid confusion with DSL's Removal-Fill program.

1.5 Permit Authority: Section 10 of the Rivers and Harbors Act (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344).

**2.0 Scope of review for National Environmental Policy Act (i.e. scope of analysis), Section 7 of the Endangered Species Act (i.e. action area), and Section 106 of the National Historic Preservation Act (i.e. permit area)**

2.1 Determination of scope of analysis for National Environmental Policy Act (NEPA):

The scope of analysis includes the specific activity requiring a Department of the Army permit. Other portions of the entire project are included because the Corps does have sufficient control and responsibility to warrant federal review.

Final description of scope of analysis: The evaluation considered the overall construction of restoration projects throughout Oregon, including staging, site preparation, and temporary access, to determine the conservation measures necessary to ensure minimal impacts for project-specific actions. The scope of analysis, therefore, includes all activities necessary to complete the site-specific aquatic habitat restoration activities since each element is key to overall project success. Aside from the Corps Regulatory authority, USFS and BLM will have control over all projects to be verified by RGP-4 (including Wyden Amendment activities) either by way of project design, funding, or oversight. Therefore, all aspects of the projects are subject to federal control and responsibility.

2.2 Determination of the "Corps action area" for Section 7 of the Endangered Species Act (ESA):

The action area means all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action (50 CFR 402.02). "Action" is defined to mean all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by federal agencies in the United State or upon the high seas. In the context of this decision the federal action being contemplated is authorization of RGP-4 under the Corps' regulatory authorities.

The term "effects of the action" is defined at 50 CFR 402.02 as "all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (see 50 CFR 402.17).

Projects will occur in waters of the U.S., as defined in 33 CFR 328.3, navigable waters of the U.S. as defined by 33 CFR 322.2, and on lands administered by USFS and BLM in the state of Oregon. Work may also occur on non-federal lands under the Wyden Amendment if such projects assist USFS/BLM in meeting their restoration goals. The action area will be identified by USFS or BLM to include the entire federal action and the furthest reaching effects of the action. The USFS or BLM will make an effects determination based on the action area for each proposed project. Each project will be evaluated for the potential to affect protected species and/or their habitat including designated critical habitat.

### 2.3 Determination of permit area for Section 106 of the National Historic Preservation Act (NHPA):

The permit area includes those areas comprising waters of the United States that will be directly affected by the proposed work or structures.

Final description of the permit area: The permit area includes the aquatic restoration activities within waters of the U.S. and staging activities associated with the work within waters of the U.S. The USFS and BLM are the lead federal agencies responsible for each of the activities verified under RGP-4 and are responsible for compliance with Section 106 of the NHPA.

### 3.0 Purpose and Need

The proposed action is the issuance of this RGP to authorize discharges of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act and structures and work in navigable waters of the United

States under Section 10 of the Rivers and Harbors Act of 1899 for aquatic habitat restoration activities that would maintain, enhance, and/or restore watershed functions to benefit fish and other aquatic organisms, water quality, riparian areas, floodplains, and wetlands. The activities authorized would result in no more than minimal individual and cumulative adverse environmental effects. This proposed action is needed for effective implementation of the Corps' Regulatory Program, by authorizing with little, if any, delay or paperwork this category of activities, when those activities have no more than minimal individual and cumulative adverse environmental effects. This RGP also provides an incentive to project proponents to reduce impacts to jurisdictional waters and wetlands to receive the required authorization under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 in less time than it takes to obtain individual permits for those activities. Issuing an RGP to authorize activities that have no more than minimal adverse environmental effects instead of processing individual permit applications for these activities reduces regulatory burdens on the public, provides environmental benefits through avoidance and minimization of impacts to jurisdictional waters and wetlands in exchange for an expedited DA authorization for regulated activities. The issuance of this RGP also allows the Corps to allocate more of its resources towards evaluating proposed activities requiring Department of the Army authorization under that have the potential to cause more substantial adverse environmental effects.

#### **4.0 Coordination**

- 4.1 The results of coordinating the proposal on Public Notice (PN) are identified below, including a summary of issues raised, any applicant response and the Corps' evaluation of concerns.

Were comments received in response to the PN? No

- 4.1.1 Were additional issues raised by the Corps including any as a result of coordination with other Corps offices? No
- 4.1.2 Were comments raised that do not require further discussion because they address activities and/or effects outside of the Corps' purview? No

#### **4.2 Tribal Coordination**

- 4.2.1 In addition to the Public Notice, based on the project location the following Indian Tribes were notified by email of the proposed project on 30 August 2021:

|                                                                                                                 |                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Burns Paiute Tribe                                                          | <input checked="" type="checkbox"/> Confederated Tribes and Bands of the Yakama Nation                |
| <input checked="" type="checkbox"/> Confederated Tribes of Siletz Indians of Oregon                             | <input checked="" type="checkbox"/> Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians |
| <input checked="" type="checkbox"/> Confederated Tribes of the Grand Ronde Community of Oregon                  | <input checked="" type="checkbox"/> Confederated Tribes of the Umatilla Indian Reservation            |
| <input checked="" type="checkbox"/> Confederated Tribes of the Warm Springs Reservation of Oregon               | <input checked="" type="checkbox"/> Coquille Indian Tribe                                             |
| <input checked="" type="checkbox"/> Cow Creek Band of Umpqua Tribe of Indians                                   | <input checked="" type="checkbox"/> Cowlitz Indian Tribe                                              |
| <input checked="" type="checkbox"/> Fort Bidwell Indian Community of the Fort Bidwell Reservation of California | <input checked="" type="checkbox"/> Klamath Tribes                                                    |
| <input checked="" type="checkbox"/> Nez Perce Tribe                                                             | <input checked="" type="checkbox"/> Quinault Indian Nation                                            |
| <input checked="" type="checkbox"/> Shoalwater Bay Indian Tribe of the Shoalwater Bay Indian Reservation        | <input checked="" type="checkbox"/> Tolowa Dee-ni' Nation                                             |

Were comments received in response to the email notification? N/A

Corps Evaluation: Government-to-government consultation was initiated on 30 August 2021, see Section 9.4 below for additional information. All tribes were sent the public notice announcement and formal letters requesting government-to-government consultation. USFS and BLM will coordinate specific restoration actions with tribes as part of the development of their annual management plans.

## 5.0 Alternatives

This evaluation includes an analysis of alternatives based on the requirements of NEPA, which requires a more expansive review than the Clean Water Act Section 404(b)(1) Guidelines. The alternatives discussed below are based on an analysis of the potential environmental impacts and impacts to the Corps, federal, tribal, and state resource agencies, general public, and prospective permittees. Since the consideration of off-site alternatives under the 404(b)(1) Guidelines does not apply to specific projects authorized by general permits, the alternatives analysis discussed below consists of a general NEPA alternatives analysis for the RGP.



### 5.1 No action alternative:

Under the no action alternative, RGP-4 would not be authorized, and the Corps would need to rely on other permitting processes (i.e. Nationwide Permits, other existing general permits, or standard individual permits) to evaluate aquatic habitat restoration projects proposed by USFS or BLM. While this option is a viable alternative, it does not meet one of the goals of providing a streamlined approach to the review of these types of projects, which result in project cost savings (in the form of person-hours and reduced permit evaluation timelines, and individual 401 Water Quality Certification).

### 5.2 Reissue RGP-4 with modifications

Modifications would include the addition of six new activities, five of which expand upon two existing activity categories, and one new activity category. The Fish Passage Restoration activity category would include the addition of Irrigation Diversion Replacement or Relocation and Screen Installation or Replacement activities; the Large Wood, Boulder, and Gravel Placement category would include four new activities consisting of Engineered Log Jams, Constructed Riffles, Gravel Augmentation, and Tree Removal for Large Wood Projects; and one new activity category for Beaver Habitat Restoration activities. There would be a total of eleven aquatic restoration activities that would maintain, enhance, and/or restore watershed functions to benefit fish and other aquatic organisms, water quality, riparian areas, floodplains, and wetlands.

The modifications would result in an RGP-4 that is consistent with both the USFWS and NMFS ARBO II BOs where effects to listed species and their designated critical habitat have already been considered. The modifications are activities that are commonly executed throughout aquatic ecosystems in Oregon, where all activities have predictable effects. This would result in more efficient review times for activities that are intended to benefit the aquatic ecosystem.

The addition of these activities would provide a net benefit to aquatic ecosystem functions and services that have been reduced or lost as a result of historic anthropogenic modifications.

### 5.3 Reissue RGP-4 without modifications

This alternative consists of reissuance of RGP-4 without modifications before it expires on 19 August 2022. This alternative would provide an expedited review for aquatic habitat restoration activities that are currently authorized; however, the activities proposed for a modified RGP-4 would require individual review and separate authorization. This alternative would result in additional review time for

the Corps, additional costs to the permittees, and the probability that additional aquatic habitat restoration activities may not be implemented due to the need for additional permitting.

#### 5.4 Evaluation of Alternatives

The no action alternative of not developing an RGP would not achieve the purpose and need of developing a streamlined permitting tool. In the absence of RGP-4, individual projects would need to be evaluated, which requires additional resources for the USFS, BLM, and the Corps.

The no-action by the Corps would not meet the purpose and need, as the projects could not be conducted in waters of the U.S. without DA permit authorization.

The alternative to reissue RGP-4 with modifications would provide streamlined reviews for additional activities that improve aquatic habitat functions and services. This alternative provides an incentive for the permittees to conduct additional aquatic restoration projects for activities that provide a net benefit to aquatic ecosystem functions and services and that result in minimal effects, both individually, and cumulatively.

The alternative to reissue RGP-4 without modifications may result in less adverse environmental impacts to aquatic resources, however; it would limit the streamlining of restoration opportunities that would provide beneficial effects to the aquatic ecosystem overall. Additionally, the actions would likely be approved under NWP 27 and therefore, any regulated activities in waters of the U.S. would likely still occur.

#### 6.0 Evaluation for Compliance with the Section 404(b)(1) Guidelines. The following sequence of evaluation is consistent with 40 CFR 230.5.

As required under 40 CFR 230.7(a): Conditions for the issuance of General permits. A General permit for a category of activities involving the discharge of dredged or fill material complies with the Guidelines if it meets the applicable restrictions on the discharge in 40 CFR § 230.10 and if the permitting authority determines that:

(a)(1) The activities in such category are similar in nature and similar in their impact upon water quality and the aquatic environment:

Corps Evaluation: Impacts of one specific activity type may differ from another (e.g., the placement of wood has different impact considerations than culvert

removal); however, the goals of each of the activities authorized herein are individually and cumulatively designed to improve overall aquatic resource functions. The ARBO II BOs identified a specific set of limitations and terms and conditions for each activity type. These criteria specify how individual actions are to be designed so that impacts are predictable, no matter where the action occurs, and result in no more than minimal individual and cumulative adverse effects on the aquatic environment. To ensure impacts are minimal, RGP-4 verifications are limited to only those activities that are included in the ARBO II BOs. The ARBO II BOs include PDC, activity-specific conditions and BMP to ensure projects are designed and constructed to minimize adverse effects to aquatic resources. For those activities where the PDC require individual project review and approval by NMFS and/or USFWS, documentation of such approval must be provided to the Corps as part of the pre-construction notification (PCN). The PCN provides project-specific information that allows the Corps to verify the project complies with the requirements of the RGP and determine if further review is warranted.

In addition, to help ensure that no more than minimal individual and cumulative adverse effects occur, USFWS or BLM must provide documentation of compliance with Section 106 of the NHPA as discussed in section 9.3 of this document. The incorporated General Conditions, as discussed in section 10.1 will also ensure that projects authorized by this RGP will have no more than minimal individual and cumulative adverse effects.

The activities authorized by RGP-4 are sufficiently similar in nature and environmental impact to warrant authorization by a general permit. The terms of RGP-4 will authorize a specific category of activities (i.e., discharges of dredged or fill material for aquatic habitat restoration activities conducted on lands administered by USFS/BLM) in a specific category of waters (i.e., waters of the U.S.). The limitation on the scopes of activities covered, and the restrictions imposed by the terms and conditions of this RGP, will result in the authorization of activities that have similar impacts on the aquatic environment, namely aquatic habitat restoration activities. If a situation arises in which a specific action requires further review or is more appropriately reviewed under the Individual Permit process, provisions of RGP-4 allow the Corps to take such action.

The Oregon Department of Environmental Quality (DEQ) has issued a Water Quality Certification (WQC) for RGP-4 (21 January 2022) and determined that implementation of the project will be consistent with applicable provisions of the CWA, state water quality standards (OAR Chapter 340 Division 41), and other appropriate requirements of state law provided the water quality certification conditions are incorporated into RGP-4 and adhered to by USFS and BLM.

(a)(2) The activities in such category will have only minimal adverse effects when performed separately.

Corps Evaluation: General Conditions of the RGP include PCN requirements, BMP and specific conditions designed to minimize adverse impacts to the environment. General Conditions will ensure protection of endangered species and their habitat, protection of wetland and aquatic vegetation, prevention of the introduction or spread of invasive species, prevention of toxins from entering the waterway, and provide for fish passage and aquatic life movements. See Section 10.

In June of 2007, NMFS and USFWS issued the ARBO to the USFS, BLM, and BIA (Bureau of Indian Affairs) on the effects of funding or carrying out aquatic restoration activities in Oregon and Washington until the end of 2012. In 2013 the USFS, BLM, and BIA initiated consultation with the NMFS and USFWS for a similar programmatic action with additional categories of activities (ARBO II).

ARBO II currently includes 20 activity categories:

1. Fish Passage Restoration (Stream Simulation Culvert and Bridge Projects; Headcut and Grade Stabilization; Fish Ladders; Irrigation Diversion Replacement/Relocation and Screen Installation/Replacement).
2. Large Wood (LW), Boulder, and Gravel Placement (LW and Boulder Projects; Engineered Logjams; Porous Boulder Weirs and Vanes, Gravel Augmentation; Tree Removal for LW Projects).
3. Dam, Tide gate, and Legacy Structure Removal.
4. Channel Reconstruction/Relocation.
5. Off- and Side-Channel Habitat Restoration.
6. Streambank Restoration.
7. Set-back or Removal of Existing Berms, Dikes, and Levees.
8. Reduction/Relocation of Recreation Impacts.
9. Livestock Fencing, Stream Crossings and Off-Channel Livestock Watering.
10. Piling and other Structure Removal.
11. In-channel Nutrient Enhancement.
12. Road and Trail Erosion Control and Decommissioning.
13. Non-native Invasive Plant Control.
14. Juniper Removal.
15. Riparian Vegetation Treatment (controlled burning).
16. Riparian Vegetative Planting.
17. Bull Trout Protection.
18. Beaver Habitat Restoration.
19. Sudden Oak Death (SOD) Treatments.
20. Fisheries, Hydrology, Geomorphology Wildlife, Botany, and Cultural Surveys in Support of Aquatic Restoration.

General Aquatic Conservation Measures, which are conditions of the ARBO II BOs and the 401 WQC (General Conditions 6, 7, 8 and 12) have been developed that will apply to all activity types, which further minimize adverse effects to the aquatic environment. Additionally, the BOs prescribe activity-specific PDC, and exclusions for project types that are known to be more complex, could potentially have greater adverse effects, or would be located in environmentally sensitive areas (e.g., estuaries). General Condition 26 would require the permittee to adhere to the more restrictive terms and conditions of the ARBO II BOs if more restrictive than those contained within RGP-4. General Condition 13 includes additional requirements for activities located in the state's coastal zone that may further reduce impacts in estuaries.

To ensure minimal adverse effects, General Condition 1 requires the USFS and BLM to notify the Corps prior to project implementation through the submittal of a PCN. The PCN gives the Corps the opportunity to evaluate RGP-4 activities on a case-by-case basis to ensure that they will cause no more than minimal adverse environmental effects, individually and cumulatively.

(a)(3) The activities in such category will have only minimal cumulative adverse effects on water quality and the aquatic environment.

Corps Evaluation: On a statewide basis, USFS and BLM propose to conduct no more than 100 projects (cumulative total for both agencies) each year under the RGP-4. The total number of projects that could be implemented during the construction seasons of the five-year authorization would be no more than 500. The actual number of projects completed in any given year or during the five-year life of RGP-4 is subject to funding and may be less than the upper limits. During the construction period of 2015 through 2019 for example, only 414 projects statewide were implemented under the 2015 authorization of RGP-4. The Corps has determined the activities proposed to be authorized by RGP-4 will result in no more than minimal cumulative adverse effects to the aquatic environment given that individual projects (i) are constructed in waters of the U.S. throughout the state, (ii) are conducted in watersheds determined to have a priority need for aquatic restoration (based on Federal/State fish recovery plans, USFS or BLM aquatic conservation strategies, a watershed's restoration potential, and other factors), (iii) include General Aquatic Conservation Measures, PDC, and activity-specific exclusions (General Conditions 6, 7, 8 and 26), and (iv) will have an overall net environmental benefit.

If a situation arises in which a specific action requires further Corps review (such as 408 alteration determinations) or is more appropriately reviewed under the Standard Individual Permit process such as the anticipated effects are likely to be more than minimal, provisions of RGP-4 allow the Corps to take such action.

Based on the evaluation of the applicable restrictions on the discharge and the activities proposed for authorization under this general permit, as required by 40 CFR 230.7, the Corps has determined the reauthorization of RGP-4 complies with the 404(b)(1) Guidelines' conditions for the issuance of General permits.

- 6.1 Candidate disposal site delineation (Subpart B, 40 CFR 230.11(f)). Each disposal site shall be specified through the application of these Guidelines:

Discussion:

Project-specific discharges would generally occur in non-tidal streams and wetlands and may also occur in larger river systems farther down in the watershed. Overall, the discharges would result in long-term beneficial effects. The proposed project is the LEDPA and demonstrates compliance with the Guidelines as detailed in Sections 6.2 through 6.8 below.

- 6.2 Potential impacts on physical and chemical characteristics of the aquatic ecosystem (Subpart C 40 CFR 230.20). See Table 1:

| Table 1 – Potential Impacts on Physical and Chemical Characteristics |     |           |                   |                           |                          |              |
|----------------------------------------------------------------------|-----|-----------|-------------------|---------------------------|--------------------------|--------------|
| Physical and Chemical Characteristics                                | N/A | No Effect | Negligible Effect | Minor Effect (Short-term) | Minor Effect (Long Term) | Major Effect |
| Substrate                                                            |     |           |                   |                           | X                        |              |
| Suspended particulates/ turbidity                                    |     |           |                   | X                         |                          |              |
| Water                                                                |     |           |                   |                           | X                        |              |
| Current patterns and water circulation                               |     |           |                   |                           | X                        |              |
| Normal water fluctuations                                            |     |           | X                 |                           |                          |              |
| Salinity gradients                                                   |     |           | X                 |                           |                          |              |

Discussion:

a. Substrate: Activities authorized by RGP-4 would result in short- and long-term minor effects to substrate. Aquatic restoration activities may result in substrate being moved, removed, or replaced with materials suitable for the site. RGP-4 activities will result in a net environmental benefit to the physical and chemical characteristics of the substrate. Activities will restore functions or allow for natural processes to occur and thereby restore functions over a longer period of time. Earth moving equipment may temporarily alter the native substrate; however, restoring temporary impacts back to original conditions will minimize these

adverse effects to the substrate. General Condition 17 (BMP) requires restoring temporarily disturbed areas back to pre-construction contours. For activities such as removal of floodplain overburden, reduction of recreation impacts, and road and trail decommissioning, the intent is to remove existing structures (roads, camp sites and foot trails, and mine tailings) and restore natural stream and riparian substrate. New activities proposed such as constructed riffles and gravel augmentation would result in the movement of existing substrate and/or discharges of additional substrate to restore stream gradients to more natural conditions, affecting the velocity, channel morphology, and transportation of sediment loads. Beaver Habitat Restoration activities would reconnect the floodplain to waterways, resulting in substrate accrual and retention. General Condition 26 requires that projects conform to the General Aquatic Conservation Measures and activity specific PDC of the BOs, particularly if more restrictive than what is allowed in the RGP. Adhering to the General Conditions of the RGP will ensure natural or near-natural conditions are in place at the time of project completion.

b. Suspended particulates/turbidity: All projects would result in short-term stream turbidity to varying degrees; however, the effects are expected to dissipate shortly after construction activities in waters cease. Projects under the Fish Passage Restoration and Set-Back or Removal of Existing Berms, Dikes, and Levees categories would likely result in the highest volume of sediments released into stream channels during project implementation. In these cases, large amounts of sediment may have accumulated upstream of the in-water anthropogenic structure. The stream would be diverted to allow for in-channel construction activities, and the subsequent reintroduction of stream flow into the channel may lead to the most sediment releases compared to other restoration projects. Beaver Habitat Restoration activities would result in overall reductions in turbidity long-term as habitat structures slow and trap the movement of suspended material. Riparian Vegetation Planting activities would further aid in trapping sediment before entering a waterway. General Conditions 17 (BMP), 23 (Operation of Equipment), and 24 (Minimization of Environmental Impact) would ensure minimal disturbances and prevent material from inadvertently entering the waterway. The conditions of the 401 WQC would address turbidity allowances and include BMP to minimize impacts.

c. Water: The projects would have both short- and long-term impacts on water temperature and quality. Stream temperature may be directly affected by Tree Removal for LW activities. Trees, such as juniper, would be removed in riparian areas where it has become invasive and displaces more desired riparian plants, such as sedge, rush, willow, alder, aspen, and cottonwood. As a result, stream temperatures may increase slightly after juniper removal from the resulting decrease in shade. However, stream temperatures are expected to return to pre-project values with establishment of desired riparian plants and associated shade. This may take years for the planted trees to grow large enough to return the area to pre-construction conditions. Beaver Habitat Restoration activities

would reconnect streams with floodplains, improving water quality over the long term by allowing natural filtration processes to occur. Riparian Vegetation Planting activities are expected to be located in wetlands and upland areas adjacent to streams, which would improve water quality by trapping sediments, pollutants and nutrients and transforming chemical compounds; provide habitat for microorganisms that remove nutrients and pollutants; and through the accumulation of organic matter, act as sinks for some nutrient and other chemical compounds that help to reduce these substances in the water column. Wetlands and riparian areas also decrease the velocity of flood waters, removing suspended sediments from the water column and reducing turbidity.

Petroleum based fuels or lubricants may leak or spill into stream channels from heavy machinery used to conduct aquatic restoration projects. To minimize such occurrences, General Conditions 12 (Water Quality Certification), 17 (BMP), and 26 (General Aquatic Conservation Measures and Project Design Criteria) include procedures to reduce the risk of spills along with containment plans if spills do occur. Staging areas where heavy equipment is stored, fueled, and cleaned are required to occur outside of the riparian zone and daily inspection is required before leaving the staging area. The water quality performance standards in the 401 WQC are designed to avoid and minimize general project effects to water quality during construction.

d. Current patterns and water circulation: RGP-4 activities would have both short- and long-term effects on water patterns and circulation. The aquatic restoration projects would be designed and implemented in such a manner as to enhance or restore natural hydrologic regimes or patterns. Projects are not intended to restrict stream flows or increase velocities in such a manner as to result in adverse flood impacts to downstream landowners. This RGP authorizes the removal of culverts and the set-back or removal of existing berms and levees. Removal of these barriers may alter the existing currents, circulation, and drainage patterns of the channel through the restoration of baseflows downstream of the structures. Where structures have flattened the hydrograph, the complete removal of the structure would restore the hydrograph. Activities that modify anthropogenic structures without complete removal would not restore the hydrograph but would increase fluctuation and minimize the effects of the structures. Overall, removing these barriers would result in a net benefit to the aquatic environment by reducing scouring and other detrimental effects that these barriers may have on the aquatic environment.

The addition of Beaver Habitat Restoration, ELJs, Constructed Riffle and Gravel Augmentation activities are intended to restore the dynamic nature of streams. These activities have been designed to alter current and circulation patterns by changing water velocities, creating pool and riffle habitat, scour holes, and replacing gravel supplies where past anthropogenic activities have altered natural processes.



e. Normal water fluctuations: RGP-4 focuses on restoration activities; therefore, the Corps anticipates the authorized activities would not adversely affect normal patterns of water level fluctuations due to tides and flooding. As described above, activity categories such as Set-back or Removal of Existing Berms, Dikes, and Levees or Off- and Side-Channel Habitat Restoration can be expected to beneficially effect normal water fluctuations by reconnecting streams with adjacent floodplains, allowing historic overland flows to occur again, and restoration of the hydrograph. The addition of ELJs, Constructed Riffles, and Gravel Augmentation activities and Irrigation Diversion Replacement/Relocation & Screen Installation/Replacement activities would not restrict or reduce flows, resulting in negligible effects to normal water fluctuations. Beaver Habitat Restoration activities would alter normal water fluctuations but would only be placed in those areas where beaver would have historically occurred and would have altered water fluctuations.

f. Salinity gradients: The activities authorized by this RGP are unlikely to adversely affect salinity gradients. The project-specific actions authorized under RGP-4 would have a negligible effect on salinity gradients because they generally would occur in non-tidal waters. General Condition 13 (Coastal Zone Management Act Consistency Determination) requires the USFS and BLM to comply to the maximum extent practicable with an approved state coastal zone management program, which places restrictions on impacts to estuarine waters.

6.3 Potential impacts on the living communities or human uses (Subparts D, E and F):

6.3.1 Potential impacts on the biological characteristics of the aquatic ecosystem (Subpart D 40 CFR 230.30). See Table 2:

| Table 2 – Potential Impacts on Biological Characteristics |     |           |                   |                           |                          |              |
|-----------------------------------------------------------|-----|-----------|-------------------|---------------------------|--------------------------|--------------|
| Biological characteristics                                | N/A | No Effect | Negligible Effect | Minor Effect (Short-term) | Minor Effect (Long Term) | Major Effect |
| Threatened and endangered species                         |     |           |                   |                           | X                        |              |
| Fish, crustaceans, mollusk, and other aquatic organisms   |     |           |                   |                           | X                        |              |
| Other wildlife                                            |     |           |                   |                           | X                        |              |

Discussion:

a. Threatened and endangered species: Under General Condition 7, no activity is authorized under this RGP which is likely to directly or indirectly jeopardize the

continued existence of threatened or endangered species, or a species proposed for such designation under the ESA, or which will directly or indirectly destroy or modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under this RGP which "may affect" a listed species or critical habitat unless ESA Section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. Activities authorized by this RGP will not jeopardize the continued existence or any listed threatened and endangered species or result in the destruction or adverse modification of critical habitat. Procedures for ensuring compliance with ESA are included in the NMFS and USFWS ARBO II BOs. Additionally, General Condition 1 requires the permittees to submit a PCN in advance of the project and the permittees must wait until the Corps verifies the project is consistent with the terms and conditions of the RGP before proceeding. If an activity requires fish passage review or additional reviews by NMFS and/or USFWS, General Condition 1(b)(21) requires copies of those approvals be provided with the PCN. General Conditions 6 (Fish Passage and Aquatic Life Movements), 8 (Essential Fish Habitat), and 26 (General Aquatic Conservation Measures and Project Design Criteria) further require the permittees to design and implement projects in a manner that would ensure compliance with the ESA.

b. Fish, crustaceans, mollusk, and other aquatic organisms: The projects would cause both short- and long-term effects to aquatic organisms. The proposed activities may alter habitat characteristics of stream and wetlands, temporarily decreasing quantity and quality of habitat during construction activities. Construction activities could smother non-mobile species and is expected to reduce populations of mobile species through both smothering and temporary habitat loss. Populations of benthic invertebrates are expected to recover quickly and return to baseline levels shortly after construction activities are completed, although population densities may shift in response to the improved aquatic functions. Root wads and boulders may be used to restore the stream channels back to the original contours. Riparian habitat may be impacted during clearing and grubbing activities that remove vegetation. Off- and Side-channel Restoration projects are expected to increase habitat diversity and complexity, improve flow heterogeneity, provide long-term nutrient storage and substrate for aquatic macroinvertebrates, moderate flow regimes, increase retention of leaf litter, and provide refuge for fish during high flows.

This authorization includes Irrigation Diversion Replacement/Relocation and Screen Installation/Replacement activities. Structures would be relocated to areas that would allow for more natural stream dynamism and designed to reduce attraction to the diversion by aquatic species. Improving passage allows full life history expression of native species and access to spawning and rearing habitats. Unscreened or improperly screened irrigation diversion structures can trap fish, which could cause harm or be lethal. Negative impacts would be temporary and would result in a net gain of aquatic habitat functions, including protection from entrainment and possible mortality at or near irrigation structures.

c. Other wildlife: The proposed activities would cause both short- and long-term effects to terrestrial wildlife. The majority of projects have the potential to impact riparian vegetation. LW, Boulder and Gravel Placement (when placed with ground-based machinery), Set-back or Removal of Existing Berms, Dikes, and Levees, and Beaver Habitat Restoration projects would likely lead to the greatest amount of adverse impacts relative to other project types. Within riparian areas, impacts from these projects are expected to be limited to access paths while impacts to stream bank vegetation will be localized and scattered along a project area, wherever structures are placed or removed or at stream crossing sites. The remaining project types would impact riparian vegetation to a lesser degree because project areas would be more limited in scope and/or in areas where riparian vegetation is limited or lacking due to degraded conditions. General Conditions of the RGP would require BMP to isolate in-water work, which would require a fish salvage and would allow other mobile aquatic species and wildlife to leave the area prior to construction. General Conditions 7 and 8 (ESA and Essential Fish Habitat) require the USFS and BLM to adhere to the terms and conditions of the ARBO II BOs, which contain General Aquatic Conservation Measures and PDC that would further minimize project impacts to wildlife. General Conditions of the RGP also require that temporary impacts be restored to pre-construction contours and that riparian vegetation be protected and replanted if damaged. Any wildlife that is in the project area is expected to leave during construction and return once construction has ceased. Any vegetation that was damaged as part of the project would be replaced, although there may be a temporal lag in growth that may affect food availability to wildlife, such as berries or seeds. The projects are of a magnitude and located in areas with large tracts of uninhabited land that it is expected there would be other forage areas available.

6.3.2 Potential impacts on special aquatic sites (Subpart E 40 CFR 230.40). See Table 3:

| Table 3 – Potential Impacts on Special Aquatic Sites |     |           |                   |                           |                          |              |
|------------------------------------------------------|-----|-----------|-------------------|---------------------------|--------------------------|--------------|
| Special Aquatic Sites                                | N/A | No Effect | Negligible Effect | Minor Effect (Short-term) | Minor Effect (Long Term) | Major Effect |
| Sanctuaries and refuges                              | X   |           |                   |                           |                          |              |
| Wetlands                                             |     |           |                   |                           | X                        |              |
| Mud flats                                            |     |           |                   | X                         |                          |              |
| Vegetated shallows                                   |     |           |                   | X                         |                          |              |
| Coral reefs                                          | X   |           |                   |                           |                          |              |

| Table 3 – Potential Impacts on Special Aquatic Sites |     |           |                   |                           |                          |              |
|------------------------------------------------------|-----|-----------|-------------------|---------------------------|--------------------------|--------------|
| Special Aquatic Sites                                | N/A | No Effect | Negligible Effect | Minor Effect (Short-term) | Minor Effect (Long Term) | Major Effect |
| Riffle and pool complexes                            |     |           |                   |                           | X                        |              |

Discussion:

a. Sanctuaries and refuges: The proposed discharge in this evaluation would not occur in or affect sanctuaries or refuges.

b. Wetlands: The projects would cause both short- and long-term effects to wetlands. Wetlands may be encountered during project implementation given the general nature and location of the work. The General Conditions 17, 23, and 24 of the RGP require specific measures to be taken if wetlands occur within the project site. In summary, wetlands are to be flagged and avoided by construction equipment to the extent possible. If wetlands cannot be avoided for access, then equipment must cross wetlands only in the dry or over removable mats or pads. Any compaction that does occur would be restored to preconstruction conditions and vegetation restored through planting or seeding.

Activities associated with reconnecting historic side-channels with floodplains and the creation of new side-channels and alcoves that typically apply to areas where side channels, alcoves, and other backwater habitats have been filled or blocked from the main channel may result in aquatic habitat conversion. Although some aquatic habitat conversion may occur, the result would be more ecological diversity and complexity, improvement of flow heterogeneity, provide for long-term nutrient storage and substrate for aquatic macroinvertebrates, moderate flow regimes, increase retention of leaf litter, and/or provide refuge for fish during high flows.

The addition of Beaver Habitat Restoration activities could result in additional hydrology inputs to existing wetlands and may result in the development of new wetland areas by reconnecting streams to floodplains.

c. Mudflats: Impacts to mudflats by activities authorized by RGP-4 would be short-term and temporary. General Conditions 7 and 8 of the RGP require the permittees adhere to the terms and conditions of the ARBO II BOs, which include General Aquatic Conservation Measures and activity specific PDC for all actions. Overall, projects authorized under RGP-4 would have long-term beneficial effects.

d. Vegetated shallows: Impacts to vegetated shallows by activities authorized by RGP-4 would be short-term and temporary. The USFS or BLM will be required to adhere to the RGP-4 General Conditions that include the terms and conditions of the ARBO II BOs (General Conditions 7 and 8). Overall, projects authorized under RGP-4 would have long-term beneficial effects.

e. Coral reefs: The proposed discharge in this evaluation would not occur in or affect coral reefs. No coral reefs are located in Oregon.

f. Riffle and pool complexes: Restoration projects, such as the placement of large wood and boulders, would be designed to mimic natural stream occurrences and may be placed to improve stream complexity as found in riffle and pool complexes. The projects would cause long-term effects to riffle and pool complexes through the creation of these complexes, and through the restoration of complexes affected by anthropogenic activities within the tributary. General Conditions of the RGP would ensure activities are designed to result in the least adverse impacts to the aquatic environment, both temporarily and permanently. General Condition 6 (Fish Passage and Aquatic Life Movements) ensures that riffle and pool complexes are designed to allow for fish passage.

6.3.3 Potential impacts on human use characteristics (Subpart F 40 CFR 230.50). See Table 4:

| Table 4 – Potential Impacts on Human Use Characteristics                                                              |     |           |                   |                           |                          |              |
|-----------------------------------------------------------------------------------------------------------------------|-----|-----------|-------------------|---------------------------|--------------------------|--------------|
| Human Use Characteristics                                                                                             | N/A | No Effect | Negligible Effect | Minor Effect (Short-term) | Minor Effect (Long Term) | Major Effect |
| Municipal and private water supplies                                                                                  |     |           |                   | X                         |                          |              |
| Recreational and commercial fisheries                                                                                 |     |           |                   |                           | X                        |              |
| Water-related recreation                                                                                              |     |           |                   |                           | X                        |              |
| Aesthetics                                                                                                            |     |           |                   | X                         |                          |              |
| Parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves |     |           | X                 |                           |                          |              |

Discussion:

a. Municipal and private water supplies: See paragraph (n) of section 7.1 of this document for a discussion on potential impacts to water supplies.

b. Recreational and commercial fisheries: The projects would cause both short- and long-term effects to fisheries. Restoration activities are expected to improve habitat for aquatic species; therefore, the Corps does not anticipate any adverse impacts to recreational or commercial fisheries. Benefits are expected to occur in response to fish passage restoration and other activities that could increase the quantity and availability of fish for recreational and commercial fishing. Activities may improve the riparian habitat by blocking direct vehicle access or limiting foot traffic along the stream. Reduction/Relocation of Recreation Impacts activities may eliminate access to areas once available to recreationists and could affect those commercial fisheries that are dependent upon current access routes. Activities may include removal, improvement, or relocation of infrastructure associated with designated campgrounds, dispersed camp sites, day-use sites, foot trails, and off-road vehicle roads and/or trails in riparian areas. Short- and long-term effects may include road and recreational facility closures; however, it is expected that access would be provided in other areas, or that there are additional access points/recreational facilities available, resulting in minimal long-term effects.

c. Water-related recreation: See paragraph (m) of section 7.1 of this document.

d. Aesthetics: See paragraph (c) of section 7.1 of this document.

e. Parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves: For any activity that may occur in a component of the National Wild and Scenic River system, or in an officially designated study river, USFS and BLM must coordinate with and obtain a written determination from the Federal agency with direct management responsibility for such river that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. When located in these areas, the projects would cause negligible effects since the purpose of the activities is to benefit the aquatic environment by restoring or enhancing natural conditions and processes.

6.4 Pre-testing evaluation (Subpart G, 40 CFR 230.60):

The following has been considered in evaluating the biological availability of possible contaminants in dredged or fill material. See Table 5:

|                                                                         |   |
|-------------------------------------------------------------------------|---|
| Physical characteristics                                                | X |
| Hydrography in relation to known or anticipated sources of contaminants | X |

| Table 5 – Possible Contaminants in Dredged/Fill Material                                                                                                                    |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| Results from previous testing of the material or similar material in the vicinity of the project                                                                            | X |
| Known, significant sources of persistent pesticides from land runoff or percolation                                                                                         |   |
| Spill records for petroleum products or designated (Section 331 of CWA) hazardous substances                                                                                |   |
| Other public records or significant introduction of contaminants from industries, municipalities, or other sources                                                          |   |
| Known existence of substantial material deposits of substances which could be released in harmful quantities to the aquatic environment by man-induced discharge activities |   |

Discussion: Activities described in RGP-4 are not likely to cause the release of contaminants. The removal of instream water control structures that impound contaminated sediment are not authorized by this RGP. General Conditions 17 (BMP), 19 (Suitable Material) and 23 (Operation of Equipment) have been included to minimize the chance for releasing pollutants into the aquatic environment. General Condition 19 requires that all fill material placed within waters of the U.S. is suitable material free of contaminants. Testing would occur primarily in developed or previously developed sites, such as past dredge mines, or sites with known or suspected contamination. General Condition 7 requires that the General Aquatic Conservation Measures of the ARBO II BOs are adhered to and contain a requirement to conduct a site assessment for contaminants in certain situations. In these cases, USFS or BLM would complete a site assessment to identify the type, quantity, and extent of any potential contamination. The level of detail and resources committed to such an assessment would be commensurate with the level and type of past or current development at the site.

#### 6.5 Evaluation and testing (Subpart G, 40 CFR 230-61):

Discussion: Evaluation and testing for the presence of contaminants will normally not be required. However, testing will be conducted where activities are occurring in areas that are developed or have previously been developed, such as past dredge mines, or sites with known or suspected contamination.

It has been determined that testing is not required because the discharge and extraction sites are located near one another and are subject to the same sources of contaminants and have substantially similar materials. Although the discharge material may be a carrier of contaminants, it is not likely to degrade the disposal site.

The General Conditions of RGP-4 require that material placed into waters of the U.S. must be free from toxic pollutants in toxic amounts; therefore, individual evaluation and testing for the presence of contaminants will normally not be required.

- 6.6 Actions to minimize adverse impacts (Subpart H). The following actions, as appropriate, have been taken through application of 40 CFR 230.70-230.77 to ensure minimal adverse effects of the proposed discharge. See Table 6:

|                                                  |   |
|--------------------------------------------------|---|
| Actions concerning the location of the discharge | X |
| Actions concerning the material to be discharged | X |
| Actions controlling the material after discharge | X |
| Actions affecting the method of dispersion       | X |
| Actions affecting plant and animal populations   | X |
| Actions affecting human use                      | X |

Discussion: Actions to minimize adverse effects have been thoroughly considered and incorporated into RGP-4 and its General Conditions. Additionally, USFS and BLM must follow General Aquatic Conservation Measures and project-specific PDC, which are provided in the ARBO II BOs for each activity authorized under RGP-4.

- 6.7 Factual Determinations (Subpart B, 40 CFR 230.11). The following determinations are made based on the applicable information above, including actions to minimize effects and consideration for contaminants. See Table 7:

| Site                                        | N/A | No Effect | Negligible Effect | Minor Effect (Short-term) | Minor Effect (Long Term) | Major Effect |
|---------------------------------------------|-----|-----------|-------------------|---------------------------|--------------------------|--------------|
| Physical substrate                          |     |           |                   |                           | X                        |              |
| Water circulation, fluctuation and salinity |     |           |                   |                           | X                        |              |
| Suspended particulates/turbidity            |     |           |                   | X                         |                          |              |
| Contaminants                                |     |           | X                 |                           |                          |              |
| Aquatic ecosystem and organisms             |     |           |                   |                           | X                        |              |



| Table 7 – Factual Determinations of Potential Impacts |     |           |                   |                           |                          |              |
|-------------------------------------------------------|-----|-----------|-------------------|---------------------------|--------------------------|--------------|
| Site                                                  | N/A | No Effect | Negligible Effect | Minor Effect (Short-term) | Minor Effect (Long Term) | Major Effect |
| Proposed disposal site                                |     |           |                   |                           | X                        |              |
| Cumulative effects on the aquatic ecosystem           |     |           |                   | X                         |                          |              |
| Secondary effects on the aquatic ecosystem            |     |           |                   | X                         |                          |              |

Discussion:

a. Physical substrate: The projects would cause long term effects to substrate in aquatic resources. Substrate will be altered directly through the addition of gravels, boulders, and wood. Additionally, structures such as LW or BDA would alter the substrate through the natural deposit of autochthonous materials. The accumulation of material will be an indirect effect and will occur over time and would take place both upstream and downstream of the structures. The overall impact of this change to the substrate would result in a net environmental benefit. During construction activities, the native substrate may be temporarily impacted in the project work area. The earth moving equipment may temporarily alter the native substrate; however, restoring the site back to its original conditions would minimize these adverse effects to the substrate as required by General Condition 16. In the case of some activities, such as removal of floodplain overburden, reduction of recreation impacts, and road and trail decommissioning, the intent is to remove existing structures (roads, camp sites and foot trails, and mine tailings) and restore natural stream and riparian substrate. Activity-specific design criteria are in place to ensure natural or near-natural conditions are in place at the time of project completion.

b. Water circulation, fluctuation, and salinity: The projects would have both short- and long-term effects on circulation and fluctuation. The activities would have negligible effects on salinity. The aquatic restoration projects would be designed and implemented in such a manner as to enhance or restore natural hydrologic regimes or patterns. Projects are designed to avoid restricting stream flows or increasing velocities in such a manner as to result in adverse flood impacts to downstream landowners; however, some projects are designed to slow stream velocity or to impound water (i.e. BDA) to allow for accumulation of materials, creation of complexity and restoration of other functions. These activities would change the water circulation and fluctuation in a manner that would restore natural functions that have been affected as a result of anthropogenic activities.

RGP-4 authorizes the removal of culverts, which are currently acting as fish barriers. Removal of these barriers may alter the existing currents, circulation, and drainage patterns of the channel. General Condition 7 (ESA) requires the permittee to adhere to the PDC of the ARBO II BOs, which require restoring natural drainage patterns. Removing these barriers would result in a net aquatic environmental benefit by reducing scouring and other detrimental effects these barriers may have on the aquatic environment.

Removal of legacy structures is also expected to have a positive benefit on natural stream functions. During the 1980s and early 1990s, many habitat forming structures, such as log weirs, boulder weirs, and gabions, were placed in an effort to create pool habitat. Many of these structures were placed in a manner that interfered with natural stream function and have continually degraded stream habitat since their installation (USFWS 2007). These legacy structures typically led to widened stream channels, increased width/depth ratios, decreased sinuosity, and increased stream exposure to solar radiation.

c. Suspended particulates/turbidity: All projects would result in short-term increases in background turbidity to varying degrees. Projects under the Fish Passage Restoration (specifically culvert removals and replacements) and Set-Back or Removal of Existing Berms, Dikes, and Levees categories would likely result in the most sediment release into stream channels during project implementation. In these cases, large amounts of sediment may have accumulated above the blockage feature. Streams would be diverted to allow for in-channel construction activities, and the subsequent reintroduction of stream flow into the channel may lead to the increased sediment releases compared to other restoration projects. General Conditions 12 and 17 have been included (WQC and BMP) to minimize the amount and duration of such discharges.

d. Contaminants: No known contaminants. General Condition 19 (Suitable Materials) and 12 (WQC).

e. Aquatic ecosystem and organisms: The proposed activities may alter habitat characteristics of stream and wetlands, temporarily decreasing quantity and quality of habitat during construction activities. Root wads and boulders may be used to restore the stream channels back to the original contours. Riparian habitat may be impacted during clearing and grubbing activities that remove vegetation. Off and Side-Channel Habitat Restoration projects are expected to increase habitat diversity and complexity, improve flow heterogeneity, provide long-term nutrient storage and substrate for aquatic macroinvertebrates, moderate flow regimes, increase retention of leaf litter, and provide refuge for fish during high flows. Beaver Habitat Restoration activities may alter the habitat of a particular area by engaging streams to floodplains, which is expected to establish

natural processes that could expand or create new habitat for aquatic species and organisms. Irrigation Diversion Replacement/Relocation and Screen Installation/Replacement activities would provide long-term benefits to anadromous species by providing access to spawning and rearing habitats, and also prevent fish from being entrained into canals where they become trapped and die. Livestock fencing and off-channel livestock watering, and the reduction and relocation of recreational features will provide long term gains to aquatic resources by reducing ongoing degradation to the ecosystem and habitat for the aquatic organisms.

The overall purpose of RGP-4 is to conduct aquatic habitat restoration projects implemented, funded, or overseen by USFS and/or BLM within the state of Oregon. Although there would be impacts to the aquatic habitat, they would be temporary, and would result in a net gain of aquatic habitat for fish and other aquatic organisms. General Conditions of the RGP have been designed to minimize impacts to fish and other aquatic organisms by adhering to BMP, revegetating disturbed areas, preventing the introduction or spread of invasive species, minimizing direct impacts to waters of the U.S. from construction equipment by working from the top of bank where feasible, placing temporary structures to prevent soil compaction, adhering to the terms and conditions of the ARBO II BOs, and adhering to the terms and conditions of the 401 WQC. General Condition 26 requires that unless specified in the terms and conditions of RGP-4, the permittees shall ensure projects meet the terms and conditions of the ARBO II BOs. If the terms and conditions of the ARBO II BOs are more restrictive than those found in the General Conditions of the RGP, then those found in the ARBO II BOs shall take precedence.

f. Proposed disposal site: Project-specific discharges would generally occur in non-tidal streams and wetlands, and may also occur in larger river systems farther down in the watershed. Overall, the discharges would result in long-term beneficial effects.

g. Cumulative effects on the aquatic ecosystem: See Section 6 for cumulative effects.

h. Secondary effects on the aquatic ecosystem: See Section 7 for secondary (i.e., indirect) effects.

6.8 Findings of compliance or non-compliance with the restrictions on discharges (40 CFR 230.10(a-d) and 230.12). Based on the information above, including the factual determinations, the proposed discharge has been evaluated to determine whether any of the restrictions on discharge would occur. See Table 8:

| Table 8 – Compliance with Restrictions on Discharge                                                                                                                                                                                                                                         |     |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|
| Subject                                                                                                                                                                                                                                                                                     | Yes | No  |
| 1. Is there a practicable alternative to the proposed discharge that would be less damaging to the environment (any alternative with less aquatic resource effects, or an alternative with more aquatic resource effects that avoids other significant adverse environmental consequences?) |     | N/A |
| 2. Will the discharge cause or contribute to violations of any applicable water quality standards?                                                                                                                                                                                          |     | X   |
| 3. Will the discharge violate any toxic effluent standards (under Section 307 of the Act)?                                                                                                                                                                                                  |     | X   |
| 4. Will the discharge jeopardize the continued existence of endangered or threatened species or their critical habitat?                                                                                                                                                                     |     | X   |
| 5. Will the discharge violate standards set by the Department of Commerce to protect marine sanctuaries?                                                                                                                                                                                    |     | X   |
| 6. Will the discharge cause or contribute to significant degradation of waters of the U.S.?                                                                                                                                                                                                 |     | X   |
| 7. Have all appropriate and practicable steps (Subpart H, 40 CFR 230.70) been taken to minimize the potential adverse impacts of the discharge on the aquatic ecosystem?                                                                                                                    | X   |     |

Discussion: Discharges of fill or dredged material associated with projects authorized under RGP-4 would result in beneficial effects to impacted aquatic resources.

**7.0 General Public Interest Review (33 CFR 320.4)**

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest as stated at 33 CFR 320.4(a). To the extent appropriate, the public interest review below also includes consideration of additional policies as described in 33 CFR 320.4(b) through (r). The benefits which reasonably may be expected to accrue from the proposal are balanced against its reasonably foreseeable detriments.

7.1 All public interest factors have been reviewed and those that are relevant to the proposal are considered and discussed in additional detail. See discussion that follows.

a. Conservation: The activities authorized by RGP-4 are aquatic habitat restoration activities; therefore, beneficial effects on the natural resource characteristics of the project area are anticipated.

b. Economics: Projects may provide short-term benefits to local economy by the potential employment of local contractors and consultants and the purchase and/or rental of local construction materials and supplies. According to the USFS and BLM, the streamlined approach of the previous version of RGP-4 resulted in reduced project costs (person-hours), ranging from 10-25%. These funds were directed to additional planning, partnership development, project implementation, and monitoring of aquatic restoration projects for the USFS and BLM. During the next five years, from 2022-2027, the USFS and BLM anticipate spending more than \$15 million on aquatic habitat restoration projects across the state of Oregon.

c. Aesthetics: The aquatic habitat restoration activities authorized by RGP-4 may temporarily adversely affect aesthetics to the aquatic ecosystem during construction. However, these impacts are expected to be limited to the construction window and aesthetic effects to neighboring wetland and riparian areas will be offset through on-site restoration. The removal and relocation of recreational facilities may adversely affect the aesthetics of those locations where recreators using the facilities had previously had nearer access to tributaries; however, these effects are expected to be negligible as generally recreators are expected to enjoy the overall aesthetic environment and not just the waters.

d. General environmental concerns: The proposed activities may alter habitat characteristics of stream and wetlands, temporarily decreasing quantity and quality of habitat during construction activities. Root wads and boulders may be used to restore the stream channels back to the original contours. Riparian habitat may be impacted during clearing and grubbing activities that remove vegetation, but project sites would be restored to pre-construction conditions where practicable. For activities that would involve removal and restoration of riparian vegetation, there may be a temporal lag between removal of vegetation and the maturation of the established native vegetation, especially where trees are planted. While it would take years for trees to mature, other herbaceous and woody vegetation would establish and ecological succession would continue to occur, eventually resulting in an overstory that provides shade to the stream.

Although there may be adverse impacts to the habitat, they would be temporary, and would result in a net aquatic gain of fish habitat. The BMP of General Condition 17 would ensure temporary impacts are kept to a minimum and that disturbed areas are restored. General Condition 7 (ESA) includes General Conservation Measures that are conditions of the ARBO II BOs, which include working during appropriate in-water work periods and managing construction sites to avoid impacts to fish and other wildlife. Long-term benefits would occur from restoration activities by improving and/or providing new aquatic habitat for fish and wildlife, as well as other aquatic species.

e. Wetlands: The projects would have neutral effects on some wetlands and

beneficial effects on others. Wetlands may be encountered during project implementation given the general nature and location of the work. The General Conditions of the RGP require specific measures to be taken if wetlands occur within the project site. General Condition 17 (BMP) requires wetlands to be flagged and avoided by construction equipment. If wetlands cannot be avoided for access, then equipment must cross wetlands only in the dry or over removable mats or pads to minimize potential for compaction where wetlands may still have some standing or subsurface water present. Any compaction that does occur would be required to be restored to pre-construction conditions.

f. Historic properties: The projects would have a negligible effect on historic properties. USFS and BLM are the lead Federal agencies for compliance under Federal cultural resources and historic preservation laws and regulations. USFS or BLM would individually review projects to determine if activities may be located on property registered or eligible for registration in the latest published version of the National Register of Historic Places (NRHP) and undertake the necessarily coordination with the State Historic Preservation Office (SHPO) and Tribes as appropriate.

USFS or BLM coordination with the appropriate tribes shall occur as part of the planning process to ensure individual projects do not impact cultural resources, treaty fishing access sites, usual and accustomed areas, burial sites, Traditional Cultural Properties, or other tribal trusts. This process may occur through a locally established protocol between USFS or BLM and a Tribe. Coordination with the SHPO is required pursuant to Section 106 of the National Historic Preservation Act (NHPA). Both agencies have agreements with SHPO regarding cultural resources management. General Condition 9 states that an activity which may have the potential to cause effects to properties listed, or eligible for listing, in the NRHP, is not authorized until the requirements of Section 106 of the NHPA have been satisfied. General Condition 1 requires that a PCN include documentation of tribal coordination to include the tribe(s) coordination occurred with, date(s) initiated, concerns raised (if any), and a statement on how those concerns were resolved. A PCN must also include appropriate documentation of Section 106 compliance. If Section 106 compliance is via a Programmatic Agreement (PA), the USFS or BLM will provide a statement confirming use of the PA (e.g., a completed and signed USFS "green sheet"). A copy of the PA should be provided to the Corps for record keeping but does not need to be provided for each individual project. If a project specific Memorandum of Understanding or Memorandum of Agreement is developed, a copy of the fully executed document will be provided along with the application materials. Documentation of individual coordination with the Tribe(s) or SHPO will include the effects determination made by the USFS or BLM, response from SHPO and/or Tribe(s) and the date the process was complete. Consistent with 36 CFR Part 800 and 33 CFR Part 325, as found in Appendix C, Section 2(c), the Corps will review and generally accept USFS or BLM's compliance with the requirements of Section 106. Should concerns or questions arise with a specific action, Corps staff will coordinate with USFS or BLM staff to resolve the matter appropriately and expeditiously.

g. Fish and wildlife values: All projects have the potential to impact riparian vegetation but the projects would have a beneficial effect for fish and wildlife overall. Large Wood, Boulder and Gravel Placement (when placed with ground-based machinery) and Removal of Legacy Structures projects are expected to lead to the most impacts relative to other project types. Within riparian areas, impacts from these projects are expected to be limited to access paths while impacts to streambank vegetation would be localized and scattered along a project area, wherever structures are placed or removed or at stream crossing sites. The remaining project types would impact riparian vegetation to a lesser degree because project areas would be more limited in scope and/or in areas where riparian vegetation is limited or lacking due to degraded conditions. General Conditions 6 (Fish Passage and Aquatic Life Movements), 7 (Endangered Species Act), 8 (Essential Fish Habitat), 12 (WQC), 15 (Invasive Species), 16 (Vegetation Protection), 17 (BMP), 19 (Suitable Material), 22 (Contractor's Copy of Permit), 23 (Operation of Equipment), 24 (Minimization of Environmental Impact, and 26 (General Aquatic Conservation Measures and Project Design Criteria) have been designed to minimize such impacts.

h. Flood hazards: The overall intent of RGP-4 is to improve and restore the aquatic habitat. Activities include the removal of culverts, with restoration being either replacement with a bridge or complete restoration of the site to conditions found within the watershed. Activities would be engineered, designed, and constructed to ensure that they can withstand the hydrologic forces within the waters they are constructed within thereby preventing the creation of a flood hazard. The net result would be an increase in the flood control capability of the tributaries.

i. Floodplain values: Activities authorized by RGP-4 would have minor effects on the flood-holding capacity of the floodplain, as well as other floodplain values, since it is limited to restoration activities. The Corps anticipates the projects would have a beneficial effect on floodplain values as they improve habitat and restore natural systems. Activities authorized by the RGP may change plant communities, substrate and elevations. Some activities may be designed to increase the frequency of flooding to improve water quality and benefit aquatic organisms that depend on flood events as part of their life cycles. Disturbances during construction may occur that may affect fish and wildlife habitat values by temporarily displacing organisms, removing overstory for large wood removal projects, and blocking foraging, resting and reproduction areas during in-water work. The activities authorized by this RGP have been designed to improve fish and wildlife habitat. General Conditions 17 (BMP), 23 (Operation of Equipment) and 22 (Minimization of Environmental Impact) are designed to minimize impacts during construction.

j. Land use: No adverse impacts to land use classifications are expected. For projects occurring on private lands (under the Wyden Amendment), the USFS or BLM would only work with the landowner's permission and contact the appropriate county to request a Land Use Compatibility review. Activities located on private land in the state's coastal zone would be required to obtain a coastal zone consistency statement signature as required by General Condition 13 to ensure that federal agencies conducting activities affecting a state's coastal zone comply to the maximum extent practicable with the approved state coastal zone management program. Such reviews are not required on federal lands.

k. Navigation: The Corps anticipates negligible effects on navigation as a result of projects completed under the authority of this RGP due to limited projects located within navigable waterways. Activities authorized by this RGP must comply with General Condition 3. The pre-construction notification (General Condition 1) requirement will allow the Corps to review proposed activities and assess the potential adverse effects on navigation.

l. Shoreline erosion and accretion: RGP-4 would authorize projects that promote natural sediment transport patterns for the specific stream reach, provide unaltered fluvial debris movement, and allow for longitudinal continuity and connectivity of the stream-floodplain system. Benefits from Streambank Restoration projects, for example, would include increased amounts of riparian vegetation and associated shading, bank stability, and reduced sedimentation into stream channels and spawning gravels. The Corps anticipates long-term improvements to erosion and accretion patterns from existing conditions.

m. Recreation: The majority of streams where the proposed actions would be implemented occur in mid- to upper-elevation watersheds on USFS/BLM administered lands which are open to public access for multiple uses such as camping, hiking, fishing, swimming, and rafting. The USFS and BLM propose to close or better control recreational use along streams and within riparian areas by removing campground fill material or structures such as berms and fences; removing bank armoring and stream confining structures; and removing or relocating foot trails and off-road vehicle roads/trails in riparian areas. Such activities are intended to improve riparian areas and stream habitats, but should not have adverse impacts on water related recreational activities such as boating or swimming in designated recreational areas. See Section 6.3.3.

n. Water supply and conservation: Negligible effects are anticipated. Projects are not likely to be located near existing or future water supplies, although may be located at headwaters of rivers that may provide water supply further below in the watershed. Irrigation Diversion Replacement/Relocation and Screen



Installation/Replacement projects would not affect water supply and conservation since the intent is to screen and relocate intakes for fish passage purposes and would not affect water withdrawal rates. The USFS or BLM would evaluate each potential restoration site as part of their NEPA review process and take appropriate steps to avoid municipal/private water supplies that may be in the project vicinity or minimize impacts to these resources where avoidance is not possible.

o. Water quality: Stream temperature may be directly affected by the Tree Removal for LW activity. Tree species such as juniper would be removed in riparian areas where that species has displaced more desired riparian plants, such as sedge, rush, willow, alder, aspen, and cottonwood. As a result, stream temperatures may increase slightly after juniper removal from the resulting decrease in shade. However, stream temperatures are expected to return to pre-project values with establishment of desired riparian plants and associated shade. This recovery may take a few years while trees grow and mature. There is the potential for petroleum-based fuels or lubricants to leak or spill into waterways as a result of heavy machinery used to conduct aquatic restoration projects.

General Condition 17 (BMP) requires that staging areas where heavy equipment is stored, fueled, and cleaned to occur outside of the riparian zone and be inspected daily, and that proper erosion and sediment controls are in place and in proper working order. In-water construction activities shall be isolated from the active channel. Temporary fills must be removed, and the area restored to pre-construction contours and replanted with native species. General Condition 12 (WQC) includes performance standards to ensure avoidance and minimization of general project effects to water quality during construction. General Conditions 19 (Suitable Material) and 23 (Operation of Equipment) are designed to prevent direct discharges of contaminants into waterways.

p. Energy needs: During construction, the activities authorized by this RGP will temporarily increase energy consumption in the area, but adverse effects to energy needs will be negligible.

q. Safety: The activities authorized by RGP-4 may temporarily create unsafe conditions during construction; however, the activities authorized by this RGP will be subject to applicable Federal, state, and local safety laws and regulations. USFS and BLM will ensure appropriate safety precautions are in place to ensure safe conditions for construction crews and the public.

r. Food and fiber production: Activities authorized by this RGP may adversely affect food and fiber production, especially where wetland restoration,

establishment, or enhancement projects are conducted on land used for agricultural production. Stream restoration and enhancement activities may also decrease the amount of farmland, if, for example, a riparian zone is established along a stream that runs through cropland. The loss of farmland is more appropriately addressed through the land use planning and zoning authority held by state and local governments. Some aquatic habitat restoration, establishment, and enhancement activities may increase populations of economically important game species, which provide food for some citizens.

s. Mineral needs: Activities authorized by this RGP may increase demand for aggregates and stone, which may be used to construct the aquatic resource restoration, establishment, or enhancement project. The activities authorized by this RGP will have negligible adverse effects on the demand for other building materials, such as steel, aluminum, and copper, which are made from mineral ores.

t. Consideration of property ownership: USFS and BLM coordinate with adjoining landowners as part of the NEPA process through a Statement of Proposed Actions by which all proposed actions are made public. The majority of the projects are located on federal lands but will benefit aquatic resources that are considered trusts of the public.

u. Needs and welfare of the people: The Corps does not anticipate impacts to needs and welfare of the people.

7.1.1 Climate Change. The proposed activities within the Corps federal control and responsibility likely will result in a negligible release of greenhouse gases into the atmosphere when compared to global greenhouse gas emissions. Greenhouse gas emissions have been shown to contribute to climate change. Aquatic resources can be sources and/or sinks of greenhouse gases. For instance, some aquatic resources sequester carbon dioxide whereas others release methane; therefore, authorized impacts to aquatic resources can result in either an increase or decrease in atmospheric greenhouse gas. These impacts are considered de minimis. Greenhouse gas emissions associated with the Corps federal action may also occur from the combustion of fossil fuels associated with the operation of construction equipment, increases in traffic, etc. The Corps has no authority to regulate emissions that result from the combustion of fossil fuels. These are subject to federal regulations under the Clean Air Act and/or the Corporate Average Fuel Economy (CAFE) Program. Greenhouse gas emissions from the Corps action have been weighed against national goals of energy independence, national security, and economic development and determined not contrary to the public interest.

- 7.2 The relative extent of the public and private need for the proposed structure or work: The restoration activities would provide benefits to the public by improving aquatic habitat and in some cases restoring floodplain functions. Some benefits may also be provided during construction periods through increased employment opportunities.
- 7.3 If there are unresolved conflicts as to resource use, explain how the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work was considered.

Discussion: Most situations in which there are unresolved conflicts concerning resource use arise when environmentally sensitive areas are involved (e.g., special aquatic sites, including wetlands) or where there are competing uses of a resource. The nature and scope of the activity, when planned and constructed in accordance with the terms and conditions of this RGP, reduce the likelihood of such conflict. In the event that there is a conflict, the RGP contains provisions that are capable of resolving the matter. General condition 24 requires permittees to minimize potential environmental impacts by conducting authorized activities in a manner that minimizes the adverse impact of the work on water quality, fish and wildlife, and the natural environment, including adverse impacts to migratory waterfowl breeding areas, spawning areas, shellfish beds, and aquatic resource buffer zones. Consideration of off-site alternative locations is not required for activities that are authorized by general permits. General permits authorize activities that have no more than minimal individual and cumulative adverse effects on the environment and the overall public interest. The district engineer will exercise discretionary authority and require an individual permit if the proposed activity will result in more than minimal adverse environmental effects on the project site. The consideration of off-site alternatives can be required during the individual permit process.

- 7.4 The extent and permanence of the beneficial and/or detrimental effects that the proposed work is likely to have on the public and private use to which the area is suited:

Detrimental effects are expected to be minimal and temporary.

Beneficial effects are expected to be more than minimal and permanent.

The nature and scope of the activities authorized by the RGP will most likely restrict the extent of the beneficial and detrimental effects to the area immediately surrounding the aquatic resource restoration, maintenance, or enhancement activity. Activities authorized by this RGP will have no more than minimal individual and cumulative adverse environmental effects.

The terms, conditions, and provisions of the RGP were developed to ensure that individual and cumulative adverse environmental effects are no more than minimal. Specifically, RGPs do not obviate the need for the permittee to obtain other Federal, state, or local authorizations required by law. The RGPs do not grant any property rights or exclusive privileges (see 33 CFR 330.4(g) for further information). Additional conditions, limitations, restrictions, and provisions for discretionary authority, as well as the ability to add activity-specific or regional conditions to this RGP, will provide further safeguards to the aquatic environment and the overall public interest. There are also provisions to allow suspension, modification, or revocation of the RGP.

**8.0 Mitigation**(33 CFR 320.4(r), 33 CFR Part 332, 40 CFR 230.70-77, 40 CFR 1508.20 and 40 CFR 1502.14)

8.1 Avoidance and Minimization: When evaluating a proposal including regulated activities in waters of the U. S., consideration must be given to avoiding and minimizing effects to those waters. Avoidance and minimization measures are described above in Section 1.3.

Were any other mitigative actions including project modifications discussed with the applicant implemented to minimize adverse project impacts (see 33 CFR 320.4(r)(1)(i))? Yes

Project modifications proposed that may cause more than minimal individual and cumulative adverse effects on the environment were not included as an approved activity, such as Stage 0 stream restoration projects. General Conditions have been designed to minimize impacts to aquatic resources. The USFS and BLM are required to further minimize impacts if the ARBO II BOs have more restrictive terms and conditions (General Condition 26).

8.2 Is compensatory mitigation required to offset environmental losses resulting from proposed unavoidable impacts to waters of the U. S.? No

Provide rationale: The projects to be authorized under RGP-4 are aquatic habitat restoration actions with the intent of providing a net environmental benefit to the aquatic system. Overall, actions authorized by RGP-4 are not expected to result in losses to waters of the U.S. However, an aquatic restoration project done under the Off- and Side-Channel Habitat Restoration category could result in a change in the use of a waterbody. This would occur if the project site contains wetland features that have become established in a disconnected side channel and these features are converted to another aquatic type once restoration has been completed and water flows through the channel again. The intent of conducting such a project is to improve or restore habitat lost by past land use

activities, and "[t]he fundamental objective of compensatory mitigation is to offset environmental losses resulting from unavoidable impacts to waters of the United States..." (33 CFR 332.3(a)(1)); therefore, the Corps will not require mitigation for this type of loss.

## **9.0 Compliance with Other Laws, Policies, and Requirements**

### **9.1 Section 7(a)(2) of the Endangered Species Act (ESA):** Refer to Section 2.2 for description of the Corps action area for Section 7.

#### **9.1.1** Has another federal agency been identified as the lead agency for complying with Section 7 of the ESA with the Corps designated as a cooperating agency and has that consultation been completed? Yes

If yes, identify that agency, the actions taken to document compliance with Section 7 and whether those actions are sufficient to ensure the activity(s) requiring DA authorization is in compliance with Section 7 of the ESA:

The USFS and BLM are the lead federal agencies for ESA and have completed consultation with USFWS and NMFS. Programmatic biological opinions were issued to both Services as noted below and include the aquatic habitat restoration activities proposed for inclusion within this RGP. Compliance with the terms and conditions of these opinions will be made a condition of the RGP.

(1) National Oceanic and Atmospheric Administration (NOAA) Biological Opinion (BO): Reinitiation of the Endangered Species Act Section 7 Formal Programmatic Conference and Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Aquatic Restoration Activities in the States of Oregon and Washington (ARBO II), NMFS Nos. NWP-2013-9664, Issued April 25, 2013.

(2) USFWS BO: Endangered Species Act - Section 7 Consultation and Programmatic Biological Opinion for Aquatic Restoration Activities in the States of Oregon, Washington, and portions of California, Idaho and Nevada (ARBO II) FWS reference: 01EOFW00-2013-F-0090), Issued July 1, 2013.

NMFS concluded the proposed action is not likely to adversely affect southern DPS green sturgeon or Steller sea lion, or their designated critical habitat, or southern resident killer whale. For their remaining trust species, NMFS determined the proposed restoration activities will not jeopardize their continued existence or result in the destruction or adverse modification of their proposed or designated critical habitats, provided the terms and conditions of the opinion are met.

After reviewing the current status of the listed species, the environmental baseline within the action area, the direct and indirect effects of the proposed action, and cumulative effects, USFWS concluded that the proposed action is not likely to jeopardize the continued existence of bull trout, Lost River suckers, shortnose suckers, Modoc suckers, Warner suckers, Foskett speckled dace, Oregon chub, Lahontan cutthroat trout, spotted owls, or marbled murrelets, or result in the destruction or adverse modification of critical habitat that has been designated for any of these species.

The Corps has reviewed the documentation provided by the agency and determined it is sufficient to confirm Section 7 ESA compliance for this permit authorization, and additional consultation is not necessary.

- 9.1.2 Are there listed species or designated critical habitat present or in the vicinity of the Corps' action area? Yes

Effect determination(s), including no effect, for all known species/habitat, and basis for determination(s): See the attached ORM2 Summary sheet for the list of species in the action area and the effect determination for those species where the Corps completed either individual or programmatic consultation.

- 9.1.3 Consultation with either the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service was initiated and completed as required, for any determinations other than "no effect" (see the attached ORM2 Summary sheet for begin date, end date and closure method of the consultation). Based on a review of the information above, the Corps has determined that it has fulfilled its responsibilities under Section 7(a) (2) of the ESA. The documentation of the consultation is incorporated by reference.

**9.2 Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), Essential Fish Habitat (EFH).**

- 9.2.1 Has another federal agency been identified as the lead agency for complying with the EFH provisions of the Magnuson-Stevens Act with the Corps designated as a cooperating agency and has that consultation been completed? Yes

If yes, identify the agency, the actions taken to document compliance with the Magnuson Stevens Act and whether those actions are sufficient to ensure the activity(s) requiring DA authorization is in compliance the EFH provisions:

The USFS and BLM prepared an EFH assessment and consulted on EFH. NMFS anticipates that implementation of the conservation measures contained in the consultation and other considerations outlined previously will avoid, minimize or otherwise offset potential adverse effects to EFH in the proposed action area.

All projects conducted under RGP-4 will be required to meet the terms and conditions of the BO (for both ESA and EFH).

The Corps has reviewed the documentation provided by the agency and determined it is sufficient to confirm compliance for this permit authorization with the EFH provisions, and additional consultation is not necessary.

9.2.2 Did the proposed project require review under the Magnuson-Stevens Act? Yes

9.2.3 If yes, EFH species or complexes considered: See above.

9.2.4 Consultation with the National Marine Fisheries Service was initiated and completed as required (see the attached ORM2 Summary sheet for consultation type, begin date, end date and closure method of the consultation). Based on a review of the above information, the Corps has determined that it has fulfilled its responsibilities under EFH provisions of the Magnuson-Stevens Act.

9.3 **Section 106 of the National Historic Preservation Act (Section 106):** Refer to Section 2.3 for permit area determination.

9.3.1 Has another federal agency been identified as the lead federal agency for complying with Section 106 of the National Historic Preservation Act with the Corps designated as a cooperating agency and has that consultation been completed? Yes

If yes, identify that agency, and whether the undertaking they consulted on included the Corps undertaking(s). Briefly summarize actions taken by the lead federal agency:

USFS and BLM are the lead federal agencies for compliance under federal cultural resources and historic preservation laws and regulations. USFS and BLM are responsible for compliance with the NHPA. USFS and BLM will individually review projects to determine if activities may be located on property registered or eligible for registration in the latest published version of the National Register of Historic Places per the *Programmatic Agreement among the United States Department of Agriculture Forest Service Pacific Northwest Region (Region 6), the Advisory Council on Historic Preservation, and the Oregon State Historical Preservation Officer Regarding Cultural Resources Management in the State of Oregon By the USDA Forest Service (2004)*; and the *State Protocol between the Oregon-Washington State Director of the Bureau of Land Management (BLM) and the Oregon State Historical Preservation Officer (SHPO) regarding the manner in which the Bureau of Land Management will meet its' responsibilities under the National Historic Preservation Act and the National Programmatic Agreement among the BLM, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2015)*.

Coordination with the appropriate tribes must occur as part of the planning process to ensure individual projects do not impact such things as cultural resources, treaty fishing access sites, usual and accustomed areas, burial sites, or Traditional Cultural Properties. This process may occur through a locally established protocol between USFS or BLM and a Tribe. Both agencies have programmatic agreements (PA) with the Oregon SHPO regarding cultural resources management. As required by the BLM's PA at Section V. (C) *Consultation with Indian Tribes*, consultation procedures in the PA do not limit or lessen BLM's responsibilities under other authorities. BLM and affected individual tribes may establish other agreements specifying the manner in which BLM will satisfy its responsibilities to consult with affected tribes pursuant to the NHPA and/or other authorities. The BLM recognizes that some historic properties of religious and cultural significance to Indian tribes can be identified only by those tribes, and that effects on such properties can only be assessed with tribal participation. BLM shall consult with Indian tribes on individual undertakings in the context of an ongoing government-to-government relationship sustained through regular periodic meetings. These efforts may be supplemented through consultation on specific undertakings, separate processes and/or agreements established between BLM and tribes.

Also, as required by the USFS PA at Stipulation II (A) *Consultation with American Indian Tribes*, each Forest shall seek the views of appropriate Tribes (36 CFR 800.16(m)) for the identification and evaluation of properties and the assessment of effects of undertakings on any historic property during the earliest feasible steps of project planning. The USFS shall ensure access to decisions made pursuant to the PA will consider comments or objections by Tribes in a timely manner consistent with the procedures established in the PA. To the extent possible, each Forest shall integrate tribal consultation requirements following established protocols for government-to-government relations and the NEPA coordination requirements found at 36 CFR 800.8(a)(2).

A PCN must include appropriate documentation demonstrating Section 106 compliance. If Section 106 compliance is via a Programmatic Agreement (PA), the USFS or BLM will provide a statement confirming use of the PA (e.g., a completed and signed USFS "green sheet"). A copy of the PA should be provided to the Corps for record keeping but does not need to be provided for each individual project. If a project specific Memorandum of Understanding or Memorandum of Agreement is developed, a copy of the fully executed document will be provided along with the application materials. If a project specific individual coordination is undertaken with SHPO or Tribe(s) the Corps must be provided with information regarding the effects determination made, any responses from SHPO and/or Tribe(s) and the date that the process is concluded. The documentation for the effects determination should be provided to the Corps along with the application materials.

Consistent with 36 CFR Part 800 and 33 CFR Part 325, as found in Appendix C, Section 2(c), the Corps will review and generally accept USFS or BLM's



compliance with the requirements of Section 106. Should concerns or questions arise with a specific action, Corps staff will coordinate with USFS or BLM staff to resolve the matter appropriately and expeditiously.

The Corps has reviewed the documentation provided by the agency and determined it is sufficient to confirm Section 106 compliance for this permit authorization, and additional consultation is not necessary.

- 9.3.2 Known historic properties present? Unknown; individual project reviews will determine the presence of historic properties.

Effect determination and basis for that determination: N/A

- 9.3.3 Consultation was initiated and completed with the appropriate agencies, tribes and/or other parties for any determinations other than “no potential to cause effects” (see the attached ORM2 Summary sheet for consultation type, begin date, end date and closure method of the consultation). Under RGP-4, no individual project will proceed until requirements under federal cultural resources and historic preservation laws and regulations are met.

#### 9.4 Tribal Trust Responsibilities

- 9.4.1 Was government-to-government consultation conducted with Federally-recognized Tribe(s)? Yes

Provide a description of any consultation (s) conducted including results and how concerns were addressed. On 30 August 2021 a letter was sent to each of the 13 federally recognized tribes in Oregon and to two additional tribes that the Portland District routinely coordinates with, inviting them to comment on the proposed issuance of RGP-4. Consultation was not initiated with the Shoalwater Bay Indian Tribe of the Shoalwater Bay Indian Reservation because the RGP will not authorize projects located in Washington, which is where the Tribe’s area of interest is located. No responses were received from any of the consultations. The Corps has determined that it has fulfilled its tribal trust responsibilities.

- 9.4.2 Other Tribal including any discussion of Tribal Treaty rights? N/A

#### 9.5 Section 401 of the Clean Water Act – Water Quality Certification (WQC)

- 9.5.1 Is a Section 401 WQC required, and if so, has the certification been issued, waived or presumed? An individual water quality certification is required and has been issued by the certifying authority and the neighboring jurisdiction review process is complete. The 401 WQC certification was issued on 21 January 2022 by the Oregon Department of Environmental Quality. General condition 12 requires compliance with the terms and conditions of the 401 WQC.

## 9.6 Coastal Zone Management Act (CZMA)

- 9.6.1 Is a CZMA consistency concurrence required, and if so, has the concurrence been issued, waived or presumed? A general CZMA consistency concurrence has been issued for this permit.

On 11 August 2021, under the Oregon Coastal Management Program (OCMP), the Oregon Department of Land Conservation and Development (DLCD) concurred with the Corps consistency determination provided the following conditions are met. The conditions of the decision supersede conditions established in previous decisions. RGP-4, as well as all projects and activities verified under RGP-4 are subject to the below conditions.

1. A Section 401 Water Quality Certification must be obtained from the Oregon Department of Environmental Quality for the proposed RGP-4 prior to verifying any activity under the new permit provisions. A copy of the 401 Certification must be provided to DLCD-OCMP coast.PERMITS@dlcd.oregon.gov) once authorized.
2. OCMP's standard conditions in Enclosure A must be attached to all RGP-4 verifications taking place within Oregon's coastal zone and adhered to.
3. Verification letters for projects authorized under RGP-4 within Oregon's coastal zone shall be send to coast.PERMITS@dlcd.oregon.gov at the time of verification transmittal.

## 9.7 Wild and Scenic Rivers Act

- 9.7.1 Is the project located in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system? Yes

It is possible that some project-specific actions may occur in rivers designated as wild and scenic. RGP-4 includes a general condition that no activity may occur in such rivers unless the appropriate management agency has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

## 9.8 Effects on Corps Civil Works Projects (33 USC 408)

- 9.8.1 Does the applicant also require permission under Section 14 of the Rivers and Harbors Act (33 USC 408) because the activity, in whole or in part, would alter, occupy or use a Corps Civil Works project? Individual projects may.

It is unlikely that projects will occur in areas where Corps Civil Works projects are located. However, General Condition 4 of the permit requires that an activity which requires a 408 permission must receive permission before the activity will be authorized under RGP-4.

**9.9 Corps Wetland Policy (33 CFR 320.4(b))**

9.9.1 Does the project propose to impact wetlands? Yes

9.9.2 Based on the public interest review herein, the beneficial effects of the project outweigh the detrimental impacts of the project.

9.10 **Other (as needed):** N/A

**10.0 General Conditions**

10.1 Are general conditions required to protect the public interest, ensure effects are not significant and/or ensure compliance of the activity with any of the laws above? Yes.

General Conditions applicable to all restoration activities have been made a part of this permit. It has been designed such that individual actions must either meet the requirements as outlined in the RGP and its associated General Conditions, which include the General Aquatic Conservation Measures and activity specific PDC of the ARBO II BOs (General Conditions 7 and 8), the conditions of the 401 WQC (General Condition 12), requirements of the Coastal Zone Management Act Consistency Determination (General Condition 13), BMP requirements to minimize project impacts (General Condition 17), among other conditions. If the activity does not meet the terms and conditions of the RGP, the USFS/BLM may seek DA authorization through another permitting option.

**1. Pre-Construction Notification.**

(a) **Timing.** For each individual project proposed to be implemented under RGP-4, the USFS/BLM shall notify the Corps 60 days prior to the proposed start date. Under certain circumstances approved by the Corps, such as receiving unanticipated funding for an aquatic restoration project near or during a field season, the Pre-Construction Notification (PCN) may be sent closer to the proposed start date. In these cases, notification should be provided at least 30 days from the proposed start date unless otherwise coordinated with the Corps. The USFS and BLM must ensure all other compliance steps have been met prior to sending the notification. The RGP-4 activity may not begin until the Corps verifies that the activity may proceed under RGP-4;

(b) **Contents of Pre-Construction Notification.** The PCN must be in writing and should utilize either the Joint Permit Application (JPA), the Corps Application for a Department of the Army Permit Form ENG 4345, or a letter containing the required information. The PCN must include the following information:

(1) **Action Identifier.** The same unique identification number shall be used for each project's notification and project completion report;

(2) **Project Name.** Use the same project name from notification to completion (i.e., Jones Creek, Tillamook Co. OR, culvert replacement);

(3) **Location.** Area map showing activity location(s), stream name(s), latitude and longitude (in DD.DDDD format). For linear projects, provide latitude and longitude coordinates for start and end points. If multiple activity locations are associated with a single and complete project, enter latitude and longitude coordinates for each activity location;

(4) **Land Ownership** if not USFS or BLM;

(5) **Agency and Name.** Agency name and project contact information (name, phone, email);

(6) **Date** of submittal;

(7) **Timing.** Project start and end dates;

(8) **Activity Type.** If multiple activities are part of a single and complete project, list all activity types;

(9) **Identification of Aquatic Resources.** Aquatic resources must be identified by type (e.g. wetland, tributary, lake, man-made ditch, pond, etc.). Wetlands within the project area shall be identified per the 1987 Corps of Engineers Wetlands Delineation Manual and Regional Supplements found at [https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/reg\\_supp/](https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/reg_supp/) Show pre-existing wetland boundary(s) on project drawings and label approximate area in square feet or acres;

(10) **Project Description.** Narrative of the project purpose, objectives, and activity components in enough detail to demonstrate how the activity is meeting the General Aquatic Conservation Measures and PDC of the ARBO II biological opinion(s);

(11) **Extent.** Number of stream miles treated and area of impact for each activity located in an aquatic resource. List area of impact to each aquatic resource separately (i.e. stream impacts separate from wetland impacts);

(12) **Removal and Fill Volumes.** Estimate of project's removal/fill volumes (e.g. number of logs and volumes of rocks, boulders, and other restoration materials). For multiple locations, provide volumes and area of impact for each location. Impacts to all waters of the U.S. must be reported in acres or square feet. The volume of dredged or fill material that would be permanently and/or temporarily discharged into waters of the U.S. shall be included. A table may be used to convey this information;

(13) **Sketches, Maps, Drawings, and Plans.** Must be provided to show that the activity complies with the terms of the RGP. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity. Large and small-scale maps must be provided to show the project site location. Drawings and plans should be to scale, with scale included, and depict all identified aquatic resources and aquatic resource impact areas, including plan and cross-section profile drawings, and recent aerial photograph;

(14) **Wyden Amendment Project.** The USFS and BLM propose that aquatic restoration projects occur on non-federal lands when such projects directly assist the USFS and/or BLM in achieving their aquatic restoration goals and are funded in part by the USFS and BLM. The USFS and BLM are permitted to fund such projects under Wyden Amendment authority (16 U.S.C. 1011(a), as amended by Section 136 of PL 105-277). When such projects occur, the USFS and BLM will implement the

following process: State in PCN the project is being implemented under the Wyden Amendment. In addition to all other PCN requirements, identify if the project is located in the Oregon Coastal Zone. If so, provide the additional documentation found in (22) below. Include name and affiliation of person(s) implementing the project to include their mailing address, phone number(s), and email address(s);

(15) **Tribal Coordination or Consultation.** Provide documentation of tribal coordination, date initiated, concerns raised (if any), and resolution if concerns were raised;

(16) **Section 106 NHPA Compliance.** Provide appropriate documentation demonstrating Section 106 compliance. For coordination with SHPO, the applicant should document if a Programmatic Agreement applies to the project (e.g., a completed and signed USFS “green sheet”). A copy of the Programmatic Agreement should be provided to the Corps for record keeping but does not need to be provided for each project. If a project specific Memorandum of Agreement or Memorandum of Understanding is developed, a copy of the fully executed agreement must be provided along with the application materials. If a project specific individual coordination is undertaken with SHPO or Tribe(s), the Corps must be provided with information regarding the effects determination made, any responses from SHPO and/or Tribe(s) and the date that the process is concluded. The documentation for the effects determination should be provided to the Corps along with the application materials;

(17) **Species Affected.** ESA-listed fish and/or wildlife species, Critical Habitat, and/or Essential Fish Habitat (EFH) affected, including the documentation demonstrating compliance with the ESA;

(18) **Verification.** Verify that all appropriate General Aquatic Conservation Measures and PDC have been thoroughly reviewed and will be incorporated into project design, implementation, and monitoring. Provide sufficient detail in the project description to document all conditions have been met;

(19) **Section 408.** All projects must be screened for potential impacts to U.S., Army Corps of Engineers federally authorized civil works projects under 33 U.S.C. 408 (“Section 408”). Guidance can be found at <https://www.nwp.usace.army.mil/408>. Include a statement that Section 408 review has occurred. If response was received by the Section 408 team per their review, provide a copy with the PCN;

(20) **List of Authorizations** required by other federal, state, or local agencies for the work, including all approvals received or denials already made;

(21) **NMFS/USFWS Fish Passage Review and Approvals:** If fish passage reviews and approval is required per the NMFS and/or USFWS ARBO II biological opinions, provide copies of the NMFS and/or USFWS approval(s). For activities that require Restoration Review Team (RRT) review per the ARBO II biological opinions, provide copies of the approval(s). Projects that require NMFS and/or USFWS fish passage review, and approval include the following:

- a. Dewatering construction sites by pumping at a rate that exceeds 3 cubic feet per second (cfs) will require fish screen review
- b. Fish passage culverts and bridges that do not meet width standards
- c. Headcut Stabilization and channel spanning non-porous rock structures that create discrete longitudinal drops > 6”
- d. Fish Ladders
- e. Engineered log jams (ELJs) that occupy >25% of the bankfull area
- f. Irrigation Diversion Replacement/Relocation & Screen Installation/Replacement

- g. Dam removal
- h. Channel Reconstruction/Relocation projects
- i. Off and side channel reconstruction when the proposed side channel will contain >20% of the bankfull flow
- j. Passage that reconnects isolated populations of bull trout to new areas where they may face new exposure to populations of non-native (brook trout, etc.) must be approved by the USFWS Division or Field Office Supervisor;

(22) **Wild and Scenic Rivers:** For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must include written notification from the federal agency with direct management responsibility for that river that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

## 2. Project Completion Report.

No later than November 15 of each year, individual USFS and BLM administrative units shall provide to the Corps a project completion report summarizing all projects implemented during the previous field season for that unit. The report shall include the same elements used for pre-construction notification with additional completion information.

- (a) **Action Identifier:** Same as in pre-construction notification.
- (b) **Project Name:** Same as in pre-construction notification.
- (c) **Location:** 6th field Hydrologic Unit Code (HUC), stream name, and latitude/longitude (in DD.DDDD format). For linear projects, provide latitude/longitude coordinates for start and end points. If multiple locations occur in a 6th field watershed, enter lat/lon coordinates for each location.
- (d) **Agency Contact:** Agency and project lead name, address, telephone number and email address.
- (e) **Timing:** Actual project start and end dates.
- (f) **Activity Type:** Activity categories that apply.
- (g) **Project Description:** Brief narrative of the completed project and objectives.
- (h) **Extent:** Number of stream miles or acres treated.
- (i) **Removal and Fill Volumes:** Provide actual removal/fill volumes (e.g. number of logs and volumes of rocks, boulders, and other restoration materials).
- (j) **Wyden Amendment Projects:** If the project was implemented under the Wyden Amendment, were all the permit conditions met? If not, explain.
- (k) **Tribal Coordination:** If monitoring was required and/or if inadvertent

discoveries were made during construction, provide a report summarizing details and include copies of the inadvertent discovery plan any further coordination with the tribe(s). Same information as pre-construction notification.

(l) **Section 106 NHPA Compliance:** See pre-construction notification. For all actions, documents should have been provided with PCN. If additional consultation and/or reporting was required per the requirements of the permittee's Programmatic Agreement with the Oregon State Historic Preservation Office (SHPO), or if Section 106 compliance was met through a separate consultation with the SHPO or Tribal Historic Preservation Office and included reporting, provide copies.

(m) **Species Affected:** Listed fish and wildlife species, critical habitat, and or EFH, or non-listed fish species affected by the project.

(n) **Post-project Assessment:** Effects not considered and remedial actions taken, including any dates work ceased due to high flows.

(o) **In-water Work Window Extension:** Was the project approved to be implemented outside of the Oregon Department of Fish and Wildlife (ODFW)-recommended in-water work window? If yes, provide ODFW and National Marine Fisheries Service (NMFS)/U.S. Fish & Wildlife Service (USFWS) contact names.

(p) **NMFS/USFWS Fish Passage Review and Approvals:** If NMFS and/or USFWS fish passage review and approval, or if NMFS and/or USFWS Restoration Review Team (RRT) review and approval were required per the NMFS and USFWS ARBO II biological opinions, provide copies of the approval(s) a summary of actions that required additional reviews, which include the project name and location.

### 3. Navigation.

(a) No activity may cause more than a minimal adverse effect on navigation.

(b) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocation, or alter the structural work or obstructions caused thereby, without expense to the United States on account of any such removal or alteration.

(c) The permittee shall install and maintain any lights, signals, or other appropriate markers necessary to clearly designate the location of structures or work that might pose a hazard to public safety. USFS and BLM shall abide by U.S. Coast Guard requirements concerning the marking of structures and work in navigable waters of the U.S.

**4. Activities Affecting Structures or Works Built by the United States.**

A project may require permission from the Corps pursuant to Section 408 because it may alter or temporarily or permanently occupy or use a Corps federally authorized Civil Works project. An alteration is defined as any action that builds upon, alters, improves, moves, occupies or otherwise affects the usefulness, or the structural or ecological integrity of a Corps federally authorized project. An activity that requires section 408 permission is not authorized by RGP-4 until the Corps issues the section 408 permission to alter, occupy, or use the Corps' project and the Corps issues a written RGP-4 verification. If you suspect a project may require section 408 permission, you may contact the section 408 team directly at section408nwp@usace.army.mil.

**5. Site Inspection.**

The permittee shall allow representatives from the Corps to inspect the authorized project site and the authorized activity to ensure that it is being, or has been, constructed and maintained in accordance with the RGP authorization and any special conditions of the verification.

**6. Fish Passage and Aquatic Life Movements.**

(a) No regulated activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area.

(b) The proposed project must be designed to provide fish passage over stabilized headcuts through constructed riffles for riffle/pool streams or a series of log or rock weir structures for step/pool channels.

(c) NMFS Hydro Fish Passage Review and Approval: if the structure width is determined to be less than the established width criteria as defined above, a variance may be requested from the Portland office of the NMFS' Habitat Conservation Division for consistency with criteria in *NOAA Fisheries Anadromous Salmonid Passage Facility Design* (NMFS 2011).

**7. Endangered Species Act.**

(a) No activity is authorized under this RGP which is likely to directly or indirectly jeopardize the continued existence of threatened or endangered species, or a species proposed for such designation under the ESA, or which will directly or indirectly destroy or modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under this RGP which "may affect" a listed species or critical habitat unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed.

(b) Authorization of an activity by this RGP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of



separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion (BO) with “incidental take” provisions, etc.) from the FWS or the NMFS, the ESA prohibits any person subject to the jurisdiction of the United States to take a listed species. The BO(s) prepared by the NMFS dated April 25, 2013, and the USFWS dated July 1, 2013 contain mandatory terms and conditions to implement the reasonable and prudent measures that are associated with the specified “incidental take” in the BO(s) (NMFS reference numbers NWP-2013-9664, and USFWS reference number 01EOFW00-2013-F-0090) (Enclosures 1 and 2). The permittee’s authorization under RGP-4 is conditional upon their compliance with all of the mandatory terms and conditions associated with the incidental take provisions of the BO(s). These terms and conditions are incorporated by reference in RGP-4. Failure to comply with the commitments made in this document constitutes non-compliance with the ESA and this RGP. The USFWS/NMFS is the appropriate authority to determine compliance with ESA.

(c) The permittee must re-initiate consultation with the appropriate agency, USFWS or NMFS, if critical habitat is designated for a species and the BO(s) must be revised to include the necessary changes prior to construction of a project located in designated critical habitat.

(d) The BO(s) issued to the permittees may be modified, renewed, or updated to incorporate changes in listed species, critical habitat or Terms and Conditions, as deemed necessary by the issuing agency, USFWS or NMFS. Copies of the revised and/or renewed BO(s) must be sent to the U.S. Army Corps of Engineers, Regulatory Branch, within 10 days of the date of the revised BO. The Corps will then modify this permit to require compliance with any modified, renewed, or updated BO.

(e) The BO(s) include General Aquatic Conservation Measures for in-water work timing based on Oregon Department of Fish and Wildlife’s (ODFW) *Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources* (June 2008). Variances to the state guidelines shall be coordinated with the NMFS and/or USFWS and documentation of that approval shall be provided in the PCN to the Corps.

## **8. Essential Fish Habitat.**

The USFS, Pacific Northwest Region 6 has completed EFH consultation pursuant to section 305(b) of the MSA and implementing regulation at 50 CFR Part 600. In this consultation, NMFS concluded that the proposed actions may adversely affect designated EFH for Pacific salmon. NMFS has included conservation recommendations in the BO (NMFS Reference Number NWP-2013-9664), dated April 25, 2013 (Enclosure 1), to avoid, minimize or otherwise offset effect to EFH produced by activities authorized by this RGP. The USFS authorization under RGP-4 is conditional upon their compliance with all of the conservation recommendations in the NMFS BO. These conservation measures are incorporated by reference in this permit. Failure to comply with the commitments made in this document constitutes non-compliance with the MSA and this RGP. The NMFS is the appropriate authority to determine compliance with MSA.

**9. Historic Properties and Cultural Resources.**

(a) No activity is authorized under this RGP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places (NHRP) until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) The USFS and BLM are the designated federal lead agencies for compliance with the National Historic Preservation Act (NHPA) and should follow their own procedures for complying with the requirements of Section 106 of the NHPA. The USFS or BLM must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. If the appropriate documentation is not submitted, then additional consultation under Section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with Section 106.

**10. Discovery of Previously Unknown Remains and Artifacts.**

If any previously unknown historic, cultural, or archeological remains and artifacts are discovered while accomplishing the activity authorized by this permit, you must immediately notify the Corps of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The federal permittee will initiate the federal, tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

**11. Tribal Rights.**

(a) No activity authorized by this RGP-4 may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

(b) The USFS and BLM will follow their own procedures for tribal coordination. The USFS and BLM must provide the district engineer with the appropriate documentation to demonstrate that coordination with tribes has been completed. If the appropriate documentation is not submitted, then additional coordination may be necessary.

**12. Water Quality Certification.**

On 21 January 2022, the Oregon Department of Environmental Quality issued to the USFS and BLM the Section 401 Water Quality Certification (WQC) for activities under RGP-4. The USFS and BLM must comply with the conditions specified in the WQC (Attachment 3).

**13. Coastal Zone Management Act Consistency Determination.**

On August 11, 2021, the Oregon Department of Land Conservation and Development issued a state coastal zone management consistency concurrence

under Section 307(c) of the Coastal Zone Management Act of 1972 (CZMA), as amended (16 USC 1456(c)). For any activity that may affect any land or water use or natural resource of the coastal zone, the USFS and BLM must comply with the conditions specified in the CZMA determination (Attachment 4).

**14. Wild and Scenic Rivers Act.**

No authorized activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

**15. Invasive Species.**

Vegetation planting as part of proposed project activities or for restoration of temporary impacts shall not include species identified as a noxious weed species by the Oregon Department of Agriculture. To the maximum extent practicable, the permittee shall plant regionally and site appropriate native species. Native seed or plan species should be acquired as close to the project site as possible.

**16. Vegetation Protection.**

Permittees must clearly mark all construction area boundaries before beginning work and minimize the removal of native vegetation in riparian areas and wetlands to the maximum extent practicable. Areas subject to temporary vegetation removal in wetlands or riparian areas during construction shall be replanted with appropriate native species immediately after the project is complete.

**17. Best Management Practices (BMP).**

To minimize adverse effects to aquatic resource functions that may occur as a result of the authorized work, appropriate BMP must be implemented and maintained. Appropriate BMP include but are not limited to:

(a) The permittee shall place heavy equipment working in wetlands on mats or take other appropriate measures to minimize soil disturbance.

(b) The permittee shall use and maintain appropriate erosion and sediment controls in effective operating condition and permanently stabilize all exposed soil and other fills, including any work below the ordinary high water mark or high tide line, at the earliest practicable date using native vegetation to the maximum extent practicable. The permittee shall remove all installed controls as soon as they are no longer needed to control erosion or sediment.

(c) Work that disturbs the substrate, bank, or shore of a water of the United States shall occur in the dry whenever practicable.

(d) In-water work areas shall be isolated from the surrounding waterbody by a properly installed silt screen or a similar sediment containment device whenever practicable. The permittee shall remove the silt screen or other temporary sediment containment devices as soon as they are no longer necessary to protect the surrounding waterbody.

(e) For authorized work above the OHWM the BMP must remain in place until the affected area is stabilized with vegetation or adverse effects (e.g., total suspended solids or sedimentation) to the water column outside of the authorized work area. Heavy equipment working in wetlands or special aquatic sites must be placed on mats, or other measures must be taken to minimize soil disturbance. All BMP must be inspected and properly maintained following storm events to ensure they are operational. All exposed slopes and stream banks must be stabilized within 24 hours after completion of all tributary crossings.

(f) Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be re-vegetated with native plants, as appropriate.

**18. Maintenance.**

Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable RGP-4 conditions, as well as activity-specific conditions imposed by the Corps.

**19. Suitable Material.**

No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Only clean, erosion resistant rock shall be placed into waters of the U.S. Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act). No broken concrete or asphalt may be placed into waters of the U.S. Materials placed into aquatic resources shall be clean and any gravels shall be washed prior to being discharged.

**20. Fills Within 100-Year Floodplains.**

The activity must comply with applicable Federal Emergency Management Agency approved state or local floodplain management requirements.

**21. Limits of Federal Liability.**

In issuing this permit, the Federal Government does not assume any liability for damages to the permitted project, persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit (see 33 CFR Appendix A to Part 325).

**22. Contractor's Copy of Permit.**

The permittee shall provide complete copies of this permit to the contractor. Appropriate General Aquatic Conservation Measures and activity-specific PDC listed

in the ARBO II biological opinions shall be incorporated into contract language or force-account implementation plans to ensure that the Terms and Conditions of the NMFS and USFWS biological opinions for the authorized project will be met. Copies of this permit and USFS's and/or BLM's contract must be kept at the project site during construction and be available for inspection at the project site.

**23. Operation of Equipment.**

Equipment shall be operated from the top of the bank, dry gravel bar, work platform, or similar out-of-water location whenever possible. Equipment shall be operated in a manner that minimizes the suspension of particulates. All equipment used in or around waters shall be clean and inspected daily prior to use to ensure that the equipment has no fluid leaks. Should a leak develop during use, the leaking equipment shall be removed from the site immediately and not used again until it has been adequately repaired. No equipment may be stored or fueled so close to a surface water that the activity could adversely affect the waterbody.

**24. Minimization of Environmental Impact.**

The permittee shall make every reasonable effort to conduct the authorized activities in a manner that minimizes the adverse impact of the work on water quality, fish and wildlife, and the natural environment, including adverse impacts to migratory waterfowl breeding areas, spawning areas, shellfish beds, and aquatic resource buffer zones.

**25. Property Transfer.**

*Transfer of Regional General Permit (RGP) Verifications.* If the permittee sells the property associated with the RGP verification, the permittee may transfer the RGP verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the RGP verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this RGP, including any general conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this RGP and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

\_\_\_\_\_  
(Transferee)

\_\_\_\_\_  
(Date)

**26. General Aquatic Conservation Measures and Project Design Criteria.**

Unless otherwise specified by the terms and conditions of RGP-4, the USFS and BLM shall ensure individual projects implemented under RGP-4 meet the terms and

conditions of the NMFS and/or USFWS ARBO II biological opinions. If terms and conditions identified in the programmatic biological opinions or from an individual biological opinion are more restrictive, then the terms and conditions from the more restrictive biological opinion shall take precedence.

**27. Wyden Amendment Projects.**

USFS and BLM shall ensure projects covered under the authority of the Wyden Amendment undergo the same process and compliance as projects occurring on USFS and/or BLM lands.

10.2 Required special condition(s)

Special condition(s): N/A

Rationale: See 10.1 above.

**11.0 Findings and Determinations**

11.1 Section 176(c) of the Clean Air Act General Conformity Rule Review: The proposed permit action has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. It has been determined that the activities proposed under this permit will not exceed de minimis levels of direct or indirect emissions of a criteria pollutant or its precursors and are exempted by 40 CFR Part 93.153. Any later indirect emissions are generally not within the Corps' continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons a conformity determination is not required for this permit action.

11.2 Presidential Executive Orders (EO):

11.2.2 EO 11988, Floodplain Management:

The proposed RGP, including General Condition 20, is consistent with E.O. 11988, Floodplain Management, with respect to the Corps' authority to regulate specific activities that may occur in floodplains (i.e., discharges of dredged or fill material into waters of the United State). The Corps considered potential impacts to floodplain values and flood hazards

11.2.3 EO 12898, Environmental Justice: This EO requires, to the greatest extent practicable and permitted by law, that each federal agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Mariana islands. Guidance issued by U.S. EPA (U.S. EPA 1998) suggests

three steps for considering environmental justice: (1) determine the existence of minority and low-income populations; (2) determine if resource impacts are high and adverse; and (3) determine if the impacts fall disproportionately on minority and low-income populations.

Applying these three steps to the reissuance of this RGP, the Corps finds that this RGP can be used to authorize discharges of dredged or fill material into waters of the United States and structures and work in navigable waters of the United States in areas with minority populations and low-income populations. In addition, this RGP can be used to authorize discharges of dredged or fill material into waters of the United States and structures and work in navigable waters of the United States in areas with majority populations and high-income populations. This RGP is issued by the Corps to be used the State of Oregon to authorize discharges of dredged or fill material into waters of the United States and structures and work in navigable waters of the United States that have no more than minimal individual and cumulative adverse environmental effects. Because this RGP authorizes only those activities involving discharges of dredged or fill material into waters of the United States and structures and work in navigable waters of the United States that have no more than minimal individual and cumulative adverse environmental effects, the reissuance of this RGP will not result in high and adverse resource impacts to areas with minority and low-income populations. Because this RGP can be used to authorize discharges of dredged or fill material into waters of the United States and structures and work in navigable waters of the United States in Oregon that have no more than minimal adverse environmental effects, the activities authorized by this RGP and their associated impacts will not fall disproportionately on minority and low-income populations. The reissuance of this RGP is not expected to negatively impact any community, and therefore is not expected to cause any disproportionately high and adverse impacts to minority or low-income communities (i.e., environmental justice communities).

11.2.4 EO 13112, Invasive Species: The evaluation provided above included invasive species concerns in the analysis of impacts at the project site.

11.2.5 EO 13212 and EO 13302, Energy Supply and Availability: The proposal is not one that will increase the production, transmission, or conservation of energy, or strengthen pipeline safety.

11.3 Findings of No Significant Impact: Based on the information in this document, I have determined that the discharges of dredged or fill material into waters of the United States and the structures and work in navigable waters of the United States authorized by the issuance of this RGP will not have a significant impact on the quality of the human environment. During the period (up to five years) this RGP is anticipated to be in effect, the activities authorized by this RGP will result

in only minor changes to the affected environment. Therefore, the preparation of an environmental impact statement is not required for the issuance of this RGP

- 11.4 Compliance with the Section 404(b)(1) Guidelines: Based on the information in this document, I have determined that the discharges authorized by this RGP comply with the 404(b)(1) Guidelines, with the inclusion of appropriate and practicable conditions that minimize adverse effects on affected aquatic ecosystems. The discharges of dredge or fill material into waters of the United States authorized by this RGP will result in only minor changes to the environmental setting and will have no more than minimal individual and cumulative adverse effects on the aquatic environment during the period this RGP is anticipated to be in effect.



11.5 Public interest determination: Having reviewed and considered the information above, I find that the proposed project is not contrary to the public interest.

**PREPARED BY:**



23 March 2022

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For: Danielle Erb  
Project Manager

Date

**REVIEWED BY:**




23 March 2022

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Kristen Hafer  
Section Chief, Regulatory Branch

Date

**REVIEWED BY:**



23 March 2022

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William D. Abadie  
Chief, Regulatory Branch

Date

**APPROVED BY:**

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Michael D. Helton, PMP  
Colonel, Corps of Engineers  
District Commander

Date