US Army Corps of Engineers®
Portland District

DEPARTMENT OF THE ARMY PERMIT
REGIONAL GENERAL PERMIT
FOR
U.S. Forest Service and Bureau of Land Management
Aquatic Habitat Restoration
Within the State of Oregon (RGP-4)

Permit No.: NWP-2007-999/4

Effective Date: This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Expiration Date: Two (2) years from the date signed

Issuing Office: U.S. Army Corps of Engineers, Portland District, Regulatory Branch (Corps)

This regional general permit (RGP-4) authorizes the U.S. Forest Service (USFS) and Bureau of Land Management (BLM) to place fill material and certain structures in waters of the United States within the state of Oregon (subject to the terms and conditions contained herein) for the purpose of aquatic habitat restoration in support of USFS and BLM conservation strategies. This general permit is issued upon the recommendation of the Chief of Engineers as provided by 33 CFR 325.2(e)(2), pursuant to Section 404 of the Clean Water Act (P.L. 95-217) and Section 10 of the Rivers and Harbors Act of 1899.

RGP-4 includes activities that may be considered exempt from regulation under Section 404 of the Clean Water Act or otherwise not within the jurisdiction of the Corps. RGP-4 does not identify, and its terms and conditions do not apply to, such activities. The intent of this RGP is to define a scope of work or activities that are minimal in nature and which can be conducted without the need for an extensive project-specific review. USFS or BLM should contact the Corps if there are questions about whether a specific activity is exempt from regulation or is outside of Corps jurisdiction. USFS and BLM should also contact the Corps if questions arise regarding compliance with any of the terms and conditions of this RGP.

PROJECT LOCATION:
Projects will occur on USFS or BLM administered lands within the state of Oregon (see Location Map, Appendix 1). Projects may also occur on non-federal lands when such projects directly assist USFS and/or BLM in achieving their aquatic restoration goals and are funded (either directly or in-kind) in part by the USFS and/or BLM. 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).
Wyden Amendment projects may be conducted by a third-party with oversight by USFS and/or BLM. In such cases the third-party is subject to and must comply with all terms and conditions of this RGP. This RGP does not cover activities conducted by a third-party as part of a larger project, where USFS and/or BLM is a partner, and which would otherwise fit the RGP criteria, but are not directly reviewed, funded, and overseen by USFS or BLM. Those actions require separate authorization.

PURPOSE OF RGP:
To conduct habitat restoration projects implemented, funded, or overseen by USFS and/or BLM within the state of Oregon.

ACTIVITIES AUTHORIZED BY RGP:
USFS and BLM are authorized to implement the following 11 aquatic restoration categories under RGP-4.

1. Fish Passage Restoration
   a. Stream Simulation Culvert and Bridge Projects
   b. Headcut and Grade Stabilization
2. Large Wood, Boulder, and Gravel Placement
   a. Large Wood and Boulder Projects
   b. Porous Boulder Weirs and Veins
   c. Gravel Augmentation
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. Juniper Removal
11. Riparian Vegetative Planting

The details of the General Aquatic Conservation Measures, Project Description, Design Criteria, and Removal and Fill thresholds for each of the 11 categories of activities included within RGP-4 are found in Appendix 2. (Appendices identified within the body of Appendix 2 are part of the final application package and are not attachments to RGP-4).

NOTIFICATION REQUIREMENTS:

1. Pre-Construction Notification. 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 may be sent closer to the proposed start date. In these cases, notification should be provided at least 20 days from the proposed start date unless otherwise coordinated with the Corps. The BLM and USFS 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.

Notification shall include, at a minimum, the following information:

a. **Action Identifier:** The same unique identification number is necessary for each project's Action Notification and Project Completion report.

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

c. **Location:** 6th field Hydrologic Unit Code (HUC), stream name, and latitude/longitude (in DD.DODD format). For linear projects, provide lat/lon coordinates for start and end points. If multiple locations occur in a 6th field watershed, enter latitude/longitude coordinates for each location.

d. **Agency Contact Information:** Agency and project lead name, address, telephone number and email address.

e. **Timing:** Estimated project start and end dates.

f. **Activity Type:** Activity categories that apply.

g. **Project Description:** Brief narrative of the project and objectives.

h. **Extent:** Number of stream miles or acres to be treated.

i. **Removal and Fill Volumes:** Provide estimate of the project's removal/fill volumes (e.g., number of logs and volumes of rocks, boulders, and other restoration materials).

j. **Wyden Amendment Project:** Is the project to be implemented under the Wyden Amendment? If so, attach Wyden Form (Appendix 3) to the Project Notification report. Reference the Action Identifier on the Wyden Form.

k. **Tribal Coordination:** Provide copies of tribal coordination, which includes the project notification, any responses received from that notification, and any other comments/coordination that occur as a result of that action.

l. **Section 106 NHPA compliance:** Provide all documentation showing Section 106 compliance.

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

2. Project Completion Report. No later than November 15 of each year, individual BLM and USFS 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. (Under Project Description, report any changes in length or acres that exceed 10 percent of the notification estimate. Such changes must not exceed the upper threshold limits for the specific activity category).
i. **Removal and Fill Volumes**: Provide actual removal/fill volumes (e.g. number of logs and volumes of rocks, boulders, and other restoration materials). (Under Project Description, report changes in volumes that exceed 10 percent of notification estimate. Such changes must not exceed the upper threshold limits for the specific activity category)
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**: Same information as pre-construction notification.
l. **Section 106 NHPA Compliance**: See pre-construction notification. For all actions, documents should have been provided with Pre-Construction Notification (PCN).
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.

ANNUAL REVIEW:

1. ANNUAL PROGRAM REPORT: By February 15 of each year, the BLM and USFS shall provide an annual program report to the Corps describing projects implemented under RGP-4 during the previous construction season. The report shall include the following information:

a. An assessment of overall program activity.
b. A map showing the location and type of each action carried out under RGP-4.
c. A list of any actions which BLM and USFS funded or carried out using RGP-4.
d. Data or analyses that the BLM and USFS deemed necessary or helpful to assess habitat trends as a result of actions carried out under RGP-4.
e. Additional data that may be necessary for tracking permit actions and determining compliance.

2. ANNUAL COORDINATION MEETING: No later than April 30 of each year, the BLM and USFS shall initiate and implement an annual coordination meeting with the Corps to discuss the annual program report and any actions that will improve conservation under RGP-4 or make the program more efficient and/or accountable. Representatives from the Oregon Department of State Lands (DSL) and ODFW will also be invited to attend this meeting.

3. ANNUAL TRAINING: No later than April 1 of each year, the BLM and USFS shall conduct annual training for their field staff responsible for implementing or reporting aquatic restoration projects under RGP-4. This training will include all essential permit elements to ensure project compliance. Representatives from the Corps, DSL, ODFW, NMFS, and USFWS will be invited to participate.

GENERAL CONDITIONS:

1. MAINTENANCE. The USFS and BLM must maintain individual projects authorized by this RGP in good condition, including maintenance to ensure public safety and conformance with the terms and conditions of this RGP. USFS and/or BLM are not relieved of this requirement if they abandon the individual projects, although USFS and/or BLM may make a good faith transfer to a third party in compliance with Condition 2 below. Should USFS and/or BLM wish to cease to maintain individual projects or should USFS and/or BLM desire to abandon them without a good faith transfer, USFS and/or BLM must obtain a modification of the individual authorization from the Corps, which may require restoration of the area.

2. PROPERTY TRANSFER. If USFS and/or BLM sells properties associated with this RGP, USFS and/or BLM must transfer the individual authorization(s) to the new owner(s) and forward evidence (i.e. written documentation of new owner accepting

transferred authorization) to the Corps to validate the transfer of the authorization(s).

3. GENERAL CONSERVATION MEASURES, DESIGN CRITERIA. Unless otherwise specified by the terms and conditions of RGP-4, the USFS and BLM shall ensure individual projects implemented under this RGP meet the requirements of the Program Administration elements; General Aquatic Conservation Measures; and Activity Category Project Descriptions, Design Criteria, and Removal and Fill Limits specified in Appendix 2.

4. WATER QUALITY CERTIFICATION. USFS and BLM must comply with the conditions specified in the 401 Water Quality Certification issued by the Oregon Department of Environmental Quality on July 24, 2020 (Appendix 4).

5. COASTAL ZONE CONSISTENCY. USFS and BLM must comply with the conditions of the concurrence letter (dated June 9, 2009) issued by the Oregon Department of Land Conservation and Development (DLCD) ensure RGP-4 is consistent with the Oregon Coastal Management Program. In a letter dated May 5, 2020, the DLCD determined that the work proposed for the two-year reissuance of RGP-4 remains consistent with their June 9, 2009 determination, which will remain in effect because no changes were proposed (Appendix 5).

6. ENDANGERED SPECIES ACT & MAGNUSON-STEVENS ACT COMPLIANCE. The USFS and BLM shall comply with the terms and conditions of the biological opinions listed below:

a. **NOAA BO:** 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.

b. **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.

7. 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.

8. CULTURAL RESOURCES AND HISTORIC PROPERTIES.

a. The USFS and BLM are the lead Federal agencies for complying with federal cultural resources and historic preservation laws and regulations, including the National

Historic Preservation Act (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 (NRHP). No individual project shall proceed under the RGP until requirements under federal cultural resources and historic preservation laws and regulations are met.

b. The USFS and BLM shall take all required actions (including notifying the appropriate tribes) should human burials, cultural resources, or historic properties be discovered during project construction.

9. TRIBAL RIGHTS. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

10. WILD AND SCENIC RIVERS. No 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.

11. 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 other alteration of the structure of work herein authorized, or if in the opinion of the Secretary of the Army or their authorized representative said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required upon due notice from the Corps of Engineers to remove, relocate, or alter the structural work or obstructions caused thereby without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

12. COMPLIANCE INSPECTIONS. Compliance inspections may be conducted to ensure that work performed under this general permit is in compliance with its terms and conditions. The District Engineer or their authorized representative will request permission from the property owner for access to the work site. A request for access will be specific as to the date and time of access, and opportunity will be provided for the property owner or his representative to be onsite during the inspection.

13. DISCRETIONARY AUTHORITY. The District Engineer reserves the right to assert discretionary authority on a case-by-case basis when it is determined that individual projects may result in more than minimal impacts, individually or cumulatively, or are otherwise not in the public interest.

14. 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.

LIMITS OF THIS AUTHORIZATION:

a. This general permit does not obviate the need to obtain other Federal, state or local authorizations required by law.
b. This general permit does not grant any property rights or exclusive privileges.
c. This general permit does not authorize any injury to the property or rights of others.
d. This general permit does not authorize interference with any existing or proposed Federal project.

LIMITS OF FEDERAL LIABILTY:

In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
c. Damages to any persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
d. Design or construction deficiencies associated with the permitted work.
e. Damage claims associated with any future modification, suspension, or revocation of this permit.

REEVALUATION OF PERMIT DECISION:

This general permit will be reviewed annually to determine whether the projects authorized by this general permit result in no more than minimal effects, both individually and cumulatively, and to ensure that the terms and conditions of this permit are being observed. The District Engineer will invite other interested federal and state agencies and representatives of Native American Tribes to participate in this review. If

this review concludes that changes in permit terms or conditions are warranted, modification of the permit will be proposed as provided in 33 CFR 325.7, including public notice and opportunity for comment.

The District Engineer may reevaluate this general permit at any time, and, if appropriate, suspend, modify, or revoke this permit as provided 33 CPR 325.7. The District Engineer may also suspend, modify, or revoke authorization under this general permit for any specific geographic area, class of activities, or class of waters within the state of Oregon. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. USFS and/or BLM (or third-party for Wyden Amendment projects) fails to comply with the terms and conditions of this RGP.

b. The information provided by USFS and/or BLM in support of the RGP application proves to have been false, incomplete, or inaccurate.

c. Significant new information surfaces which the Corps did not consider in reaching the original public interest decision.

Such reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.5. These procedures also apply to a third party.

EXPIRATION, MODIFICATION OR REVOCATION OF THIS PERMIT:

Activities authorized under this general permit that are under construction or under contract for construction in reliance upon this authorization will remain authorized provide the activity is completed within 12 months of the date of this general permit's expiration, modification, or revocation, unless the District Engineer has exercised his discretionary authority to modify, suspend, or revoke the authorization of a specific project in accordance with Corps regulations.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

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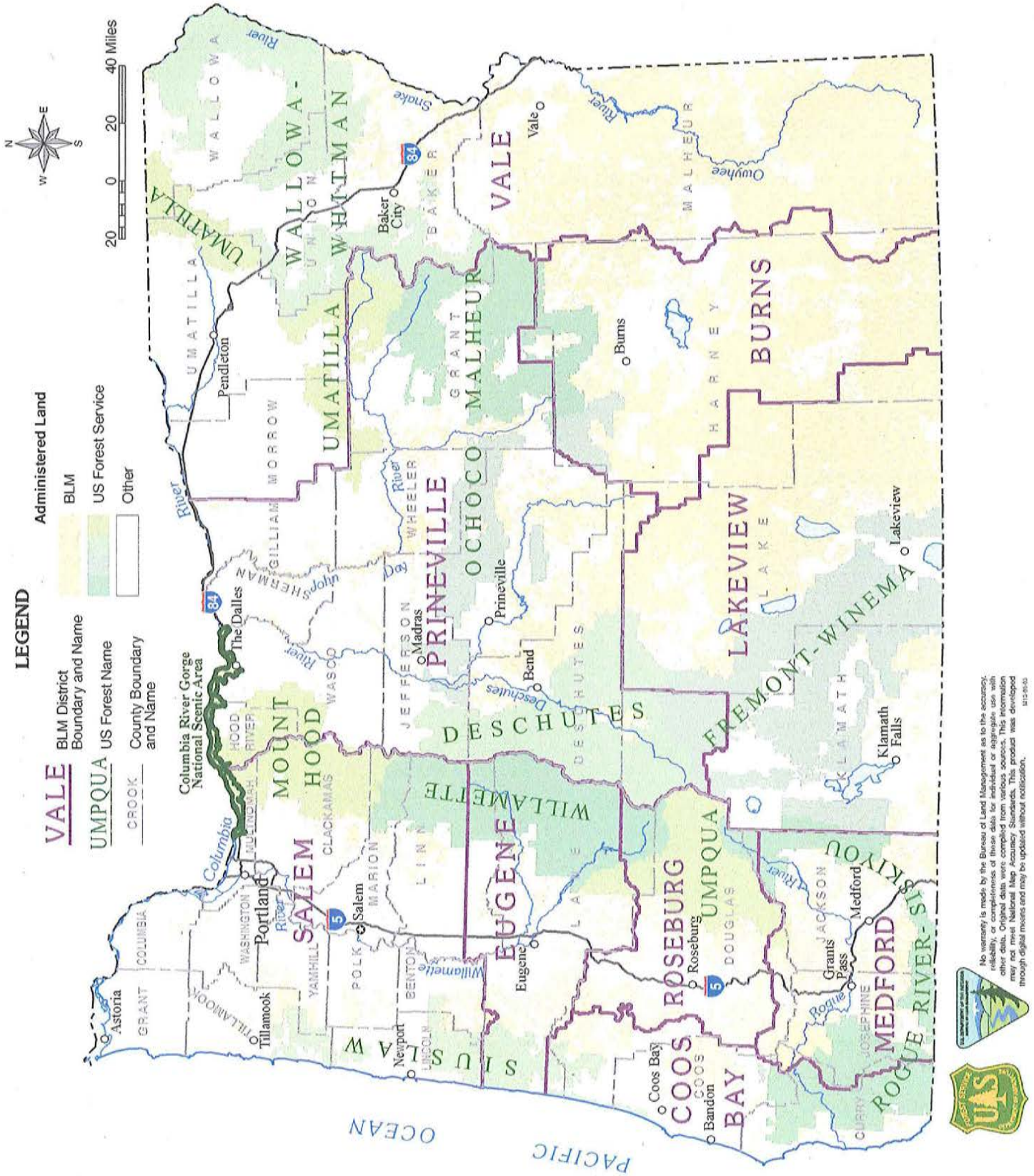
Date: 2020.08.19 23:55:40 -07'00'

Michael D. Helton
Colonel, Corps of Engineers
District Commander

(Date)

FIGURE 1: GEOGRAPHIC AREA OF BLM AND FOREST SERVICE AQUATIC RESTORATION PROJECTS



RGP-4 Appendix 2– Activity Categories, Program Administration, Conservation Measures, Project Design Criteria and Removal and Fill Thresholds that will guide work conducted under a renewed Army Corps of Engineers (Corps) Regional General Permit 4 and Oregon Department of State Lands (ODSL) GP-42104-RF, hereinafter referred to as the "PERMIT."

A. Aquatic Restoration Activity Categories

The BLM and USFS propose to implement the following 11 aquatic restoration categories under the proposed PERMIT.

1. Fish Passage Restoration
   a. Stream Simulation Culvert and Bridge Project
   b. Headcut and Grade Stabilization
2. Large Wood, Boulder, and Gravel Placement
   a. Large Wood and Boulder Projects
   b. Porous Boulder Weirs and Veins
   c. Gravel Augmentation
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. Juniper Removal
11. Riparian Vegetative Planting

B. Program Administration

The framework under which the 11 aquatic restoration categories are to be implemented is constrained by location, the number of allowable projects, reporting of such projects, and program level meetings between the BLM, USFS, Corps, and ODSL.

1. **Location of Projects –** The aquatic restoration projects to be implemented under a PERMIT will occur in the state of Oregon where BLM and USFS administered lands occur.

2. **Wyden Amendment Projects –** The BLM and USFS propose that aquatic restoration projects occur on non-federal lands when such projects directly assist the BLM and/or USFS in achieving their aquatic restoration goals and are funded in part by the BLM and USFS. The BLM and USFS 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 BLM and USFS will implement the following process:
   a. **County Signatures –** The sub-applicant (non-federal landowners) shall complete a Wyden form that will include a section for county signatures. Refer to Appendix 3. The completed form will be kept in the BLM and/or USFS project file. The project notification (section B. 10.) will identify a project as a "Wyden Project" and include the completed form.

b. **Compliance with PERMIT –** The BLM and USFS will ensure that projects covered under the Wyden Authority on non-federal land undergo the same process and compliance as projects occurring on BLM and/or USFS administered lands. This includes compliance with the Federal Endangered Species Act (ESA) and Clean Water Act (CWA), cultural resources requirements, and all other requirements included in this application and subsequent PERMIT.
c. The project notification form (described in B. 10.) will be accompanied by a completed Wyden form found in Appendix 3.

3. **Number of Projects –** Within the state of Oregon, the BLM and USFS propose to conduct no more than 170 projects each year.

4. **Integration of Project Design Criteria (PDC) and Conservation Measures (CM) into Project Design and Contract Language** –Appropriate aquatic and terrestrial CMs along with PDCs listed in the PERMIT shall be incorporated into contract language or force-account implementation plans.

5. **Coordination with Oregon Department of Fish & Wildlife (ODFW)**
   a. **ODFW District Offices**
      i. **Project Notification –** The individual BLM and USFS administrative units shall send the relevant local ODFW office a project notification form 60 days prior to project implementation and a project completion form no later than November 15 of each year. The 60-day notification will provide ODFW a chance to review projects and request involvement, if desired, during implementation.
      ii. **Resolution of conflict with ODFW** – When the ODFW receives the 60-day pre-project notification (described in B. 10. below) and they have concerns that the project does not fit the PERMIT as designed, they may contact the ODSL coordinator. The ODSL may determine based on this feedback that the project is not covered by the PERMIT, will contact the Corps, and may require authorization through a General Authorization or Individual Permit.
      iii. **Annual Coordination** –It is recommended that local field offices (ODFW, BLM, and USFS) coordinate annually on proposed projects, as well as implemented restoration projects within the watersheds.
   b. **State Office Fish Passage Program –** Coordinate with ODFW State Fish Program staff for all projects that involve fish passage restoration.

6. **State Owned Lands:** If a project area includes work in tidally influenced water, a state navigable river, or a meandered lake greater than eight (8) acres, BLM and/or USFS may also need a state proprietary authorization. If any of the preceding is true, please contact the applicable state Land Manager from the Department of State lands for further information.

7. **Oregon State Marine Board (OSMB):**
   a. **Project Notification** – Individual BLM and USFS administrative units shall send the OSMB office a project notification form 60 days prior to project implementation and a project completion form no later than November 15 of each year. The 60-day notification will provide OSMB a chance to review projects (especially the ones

listed below) to determine if such projects will obstruct navigation on the waters of the state. Appendix III lists waters of the State the OSMB regulates for boating.

i. Fish Passage Restoration
ii. Large Wood, Boulder, and Gravel Placement
iii. Legacy Structure Removal (when structures are replaced in the channel)
iv. Off- and Side-Channel Habitat Restoration (when main channel structures are required)
v. Streambank Restoration(when stabilization material, such as large wood, extends into the channel)
vi. Reduction/Relocation of Recreation Impacts (when projects restrict existing boat access)
vii. Livestock Fencing, Stream Crossings, and Off-Channel Livestock Watering (when fences are constructed across the channel)
viii. Juniper Tree Removal (when projects result in felled juniper placed in stream channel)

b. **Resolution of conflict with OSMB** – When OSMB receives the 60-day pre-project notification (described below) and they have concerns that the project may result in obstructions injuring free navigation on the waters of this state, they may contact the project contact listed on the "Project Notification." If the OSMB cannot resolve an issue with the project contact, the OSMB shall contact the ODSL coordinator. The ODSL may determine based on this feedback that the project is not covered by the PERMIT, will contact the Corps, and may require authorization through a General Authorization or Individual Permit.

8. **Tribal Coordination and Compliance with the Section 106 of National Historic Preservation Act:**
   a. Document that the appropriate Tribes have evaluated the proposed project and determined it will not impact such things as cultural resources, treaty fishing access sites, usual and accustomed areas, burial sites, or Traditional Cultural Properties. Document date of contact, issues, and issue resolution.
   b. Document that archeological reviews have been completed via coordination with the State Historic Preservation Office (SHPO).

9. **Wild and Scenic Rivers –** When work is conducted in or along a state or federal wild and scenic river, the following pre-implementation processes will be conducted.
   a. State Wild and Scenic Rivers – The BLM and USFS will contact the Oregon Department of Parks and Recreation to ensure that all projects within Oregon's wild and scenic rivers are in accordance with state statutes.
   b. Federal Wild and Scenic Rivers – Aquatic restoration projects will be in accordance with the federal Wild and Scenic Rivers Act by protecting and enhancing the free-flow condition, water quality, and "Outstandingly Remarkable Values." The BLM and USFS will use locally established protocols to make such determinations.

10. **Project Notification** – Under a PERMIT, individual BLM and USFS administrative units will notify the Corps, ODSL, ODFW, and OSMB of each project at least 60 days prior to implementation through a pre-project notification form. The notification is not a request for approval but to inform the Corps, ODSL, ODFW, and OSMB as to what

projects will be implemented under the PERMIT and to provide an opportunity for such agencies to submit essential information to the BLM and USFS that may not have been available during project planning. However, the RGP-4 activity may not begin until the Corps verifies that the activity may proceed under RPG-4. The notification will include the following information:

a. Action identifier – The same unique identification number is necessary for each project's Notification and Project Completion report.
b. Project Name – Use the same project name from notification to completion (i.e., Jones Creek, Tillamook Co. OR, culvert replacement).
c. Location – 6th field HUC, stream name, and latitude and longitude (in DD.DDDD format). For linear projects, provide latitude and longitude coordinates for start and end points. If multiple locations occur in a 6th field watershed, enter latitude and longitude coordinates for each location.
d. Agency and Name – Agency name and contact information (name, phone, email).
e. Timing – Project start and end dates
f. Activity Type – As listed in Section A. above.
g. Project Description – Brief narrative of the project and objectives.
h. Extent – Number of stream miles or acres to be treated.
i. Removal and Fill Volumes – Provide estimate of project's removal/fill volumes (e.g. number of logs and volumes of rocks, boulders, and other restoration materials). For multiple locations in a 6th watershed, provide volumes for each location.
j. ODFW Scientific Take Permit – For projects that require fish capture/collection, project contact must verify that a permit has been or will be acquired prior to project implementation.
k. Wyden Amendment Project – Is the project to be implemented under the Wyden Amendment? If so, attach Wyden Form to the Project Notification report.
l. Are wetlands present? If yes, describe wetland type.
m. Tribal Coordination – Document and provide copies of tribal coordination, date initiated, issues, and issue resolution.
n. Section 106 NHPA Compliance – Provide documentation showing Section 106 compliance.
o. Species Affected – Listed Fish and or Wildlife species, Critical Habitat, and or EFH, or non-listed fish species affected by project
p. Date of Submittal
q. For any action requiring a site assessment for contaminants, include a copy of the report explaining the likelihood that contaminants are present at the site.
r. Verification – Check box that verifies that all appropriate General Aquatic Conservation Measures, Wildlife Conservation Measures, Project Design Criteria for Aquatic Restoration Activity Categories, and Project Design Criteria for Terrestrial Species and Habitats have been thoroughly reviewed and will be incorporated into project design, implementation, and monitoring.
s. Section 408 – Statement that Section 408 review has occurred. All projects must be screened for potential impacts to federally authorized Corps projects under Section 408. Guidance can be found at https://www.nwp.usace.army.mil/408/

11. **Project Completion Report** – On an annual basis, individual BLM and USFS administrative units will provide the Corps, ODSL, ODFW, and OSMB a project completion report, which summarizes all projects implemented during a field season, no later than November 15. A report will include the information elements used for project notification along with additional completion information.
    a. Action identifier – (same number as in notification)
    b. Project Name – (same name as in notification)
    c. Location – 6th field HUC, stream name, latitude and longitude (in DD.DDDD format). For linear projects, provide latitude and longitude coordinates for start and end points. If multiple locations occur in a 6th field watershed, enter latitude and longitude coordinates for each location.
    d. Agency and Contact – Agency name and contact information (name, phone, email).
    e. Timing – Actual project start and end dates
    f. Activity Type – As listed in Section A. above.
    g. Project Description – Brief narrative of the completed project and objectives.
    h. Extent – Number of stream miles or acres treated. Under Project Description, report any change in project length or acres if such changes exceed 10 percent of the notification estimate.
    i. Removal and Fill Volumes – Provide project's actual removal/fill volumes (e.g. number of logs and volumes of rocks, boulders, and other restoration materials). Under Project Description, report any change in removal and fill volumes and number of logs used if such changes exceed 10 percent of the notification estimate.
    j. ODFW Scientific Take Permit – For projects that require fish capture/collection, project contact must verify that a permit was acquired prior to project implementation.
    k. Wyden Amendment Project – If the project was implemented under the Wyden Amendment, were all ARBO II and PERMIT conditions met? If not, explain.
    l. Are wetlands present? If yes, describe any temporary or permanent impacts and acres impacted.
    m. Tribal Coordination – Document tribal coordination, date initiated, issues, and issue resolution.
    n. Section 106 NHPA Compliance – Document that archeological reviews have been completed.
    o. Species Affected – Fish and or Wildlife species affected by the project, Critical Habitat and or EFH
    p. Number of Northern Spotted Owl, or Marbled Murrelet nests disrupted and disturbed during critical nesting period
    q. Fish Pursuit and Capture – If fish are pursued and/or captured during salvage operations, the project biologist will describe removal methods, stream conditions, and the number of fish handled, injured, or killed. More detailed information will be required for excessive mortality. This report will likely be limited to fish passage projects.
    r. State-Specific 401 Certification monitoring results. If protocol conditions were not met, describe effects and any remedial actions.

s. Post Project Assessment – Effects not considered and remedial actions taken, including any dates work ceased due to high flows
t. In-water work extension – Was the project implemented (and authorized) outside the In-water Work Period? If yes, provide ODFW and NMFS/USFWS contact names.
u. Date of Submittal

12. **Annual Program Report** – The BLM Oregon State Office and USFS Region 6 Office will provide an annual program report to Corps, ODSL, and ODFW by February 15 of each year that describes BLM and USFS projects implemented under the PERMIT. The report will include the following information:
    a. An assessment of overall program activity
    b. A map showing the location and type of each action carried out under the PERMIT
    c. A list of any actions which BLM and USFS funded or carried out using the PERMIT.
    d. Additional data or analyses that may be necessary or helpful to assess habitat trends as a result of actions carried out under the PERMIT.
    e. Additional data that may be necessary for tracking permit actions and determining compliance.

13. **Annual Coordination Meeting** – The BLM and USFS shall initiate and implement an annual coordination meeting with staff from the Corps, ODSL, and ODFW state offices each year to review and discuss implementation and other issues associated with a PERMIT. The annual meeting shall be conducted no later April 30 each year, unless otherwise agreed upon by the Corps, ODSL, ODFW, BLM, and USFS.

14. **BLM and USFS Training**
    a. Annual Training – The Oregon State BLM Office and USFS Region Six Office will conduct annul training sessions for BLM and USFS field staff that plan to implement or report aquatic restoration projects under the PERMIT. Training content will include all essential PERMIT elements to ensure project compliance. The training will be offered prior to April of each year and is mandatory for BLM and USFS staff that plan to implement or report a project during the approaching field season. Staff from the NMFS, USFWS, Corps, ODSL, and ODFW will be invited to participate in annual trainings.
    b. Field Unit Training - BLM or USFS unit-specific training will be provided to staff associated with non-compliance of the PERMIT.

C. General Aquatic Conservation Measures

General Aquatic Conservation Measures (ACM) are intended to minimize effects to the aquatic environment, and the following apply when relevant to all 11 aquatic restoration categories.

1. **Technical Skill and Planning Requirements**
    a. Ensure that an experienced fisheries biologist or hydrologist is involved in the design of all projects covered by a PERMIT. The experience should be commensurate with technical requirements of a project.
    b. Planning and design includes field evaluations and site-specific surveys, which may include reference reach evaluations that describe the appropriate geomorphic context in which to implement the project. Planning and design involves

appropriate expertise from staff or experienced technicians (e.g., fisheries biologist, hydrologist, geomorphologist, wildlife biologist, botanist, engineer, silviculturist, fire/fuels specialists.)

c. The project fisheries biologist/hydrologist will ensure that project design criteria are incorporated into implementation contracts. If a biologist or hydrologist is not the Contracting Officers Representative (COR), then the biologist or hydrologist mustregularly coordinate with the project COR to ensure the project design criteria and conservation measures are being followed:

2. Wetland Identification and Impact Analysis:

a. All information within this section shall be incorporated into the annual training outlined in B. 14. A.

b. Conduct an inspection for all projects to identify wetland areas. Wetlands are defined and identified through criteria set forth in the Corps 1987 Wetland Delineation Manual and regional supplements. http://www.nwp.usace.army.mil/Missions/Regulatory/Jurisdiction.aspx

c. If wetlands exist in the project site, use the following practices in preferential order:

i. Flag wetland boundaries or potential wetlands and avoid construction activities or operating machinery in such areas.

ii. If wetlands cannot be avoided for equipment access, access through wetlands shall occur only when the wetlands are dry or over removable mats or pads to prevent compaction or rutting. Any compaction, rutting, or other disturbance shall be restored to pre-existing conditions following construction.

iii. Wetland projects that are approved under this PERMIT include the following:

a) An aquatic restoration project that converts wetlands to other waters of the state to improve or restore fish habitat lost by past land use activities. This practice applies only to Off- and Side-Channel Habitat Restoration projects, where disconnected side channels and alcoves contain wetland features that will be converted (upon project completion) to a flowing water regime.

b) As part of Large Wood Placement projects, large wood may be placed in wetlands, which are located in floodplains, as long as wetland values and functions are not diminished.

c) Removal of anthropogenic fill in floodplain/wetland areas under the following aquatic restoration categories: Set-back or Removal of Existing Berms, Dikes, and Levees; Reduction/Relocation of Recreation Impacts.

iv. If project removal or fill actions cannot meet these criteria, the project is not eligible under the PERMIT.

3. Climate Change – Consider climate change information, such as predictive hydrographs for a given watershed or region, when designing PERMIT projects.

4. Lamprey – To the extent possible, incorporate lamprey BMPs found in Best Management Practices to Minimize Adverse Effects to Pacific Lamprey, Entosphenus tridentatus (USFWS 2010), and other native lamprey species.

5. In-water Work Period – Follow the appropriate ODFW (2008) guidelines for timing of in-water work:
(http://www.dfw.state.or.us/lands/inwater/Oregon_Guidelines_for_Timing_of_%20InW

ater_work2008.pdf)

If work occurs in occupied Oregon chub habitat, in-water work will not occur between June 1 and August 15. The BLM and USFS will request exceptions to in-water work windows through ODFW and Level I NMFS and/or USFWS representatives when ESA-listed species or critical habitat occur in the project area. Keep correspondence records (such as emails) in project files.

6. **Fish Passage**
   a. **Projects Implemented under the Fish Passage Restoration category –** Fish passage will be provided for any adult or juvenile fish likely to be present in the action area during construction, unless stream isolation and dewatering is required during project implementation or where the stream reach is naturally impassible at the time of construction. After construction, adult and juvenile passage that meets NMFS's fish passage criteria (NMFS 2011) will be provided for the life of the action. Further, all projects should meet ODFW fish passage criteria as defined in OAR 635-412-0035.
   b. **Remaining restoration activity categories –** All projects will maintain existing fish passage in areas currently or historically occupied by native fish.

7. **Wildlife Capture** – Authorization from the Oregon Department of Fish and Wildlife is necessary for the capture or possession of non-game wildlife protected species as described in OAR 635-044-0130.

8. **Site Assessment for Contaminants** – In developed or previously developed sites, such as areas with past dredge mines, or sites with known or suspected contamination, a site assessment for contaminants will be conducted on projects that involve excavation of > 20 cubic yards of material. The action agencies will 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 will be commensurate with the level and type of past or current development at the site. The assessment may include the following:
   a. Review of readily available records, such as former site use, building plans, and records of any prior contamination events.
   b. Site visit to observe the areas used for various industrial processes and the condition of the property.
   c. Interviews with knowledgeable people, such as site owners, operators, occupants, neighbors, local government officials, etc.
   d. Report that includes an assessment of the likelihood that contaminants are present at the site.

9. **Pollution and Erosion Control Measures (PCEM) –** When heavy machinery will be used to complete a project, implement the following PCEMs:
   a. Project Contact: Identify a project contact (name, phone number, an address) that will be responsible for implementing PCEMs.
   b. List and describe any hazardous material that would be used at the project site, including procedures for inventory, storage, handling, and monitoring; notification procedures; specific clean-up and disposal instructions for different products available on the site; proposed methods for disposal of spilled material; and employee training for spill containment.
   c. Temporarily store any waste liquids generated at the staging areas under cover on an impervious surface, such as tarpaulins, until such time they can be properly transported to and treated at an approved facility for treatment of hazardous materials.
   d. Procedures based on Best Management Practices to confine, remove, and dispose of construction waste, including every type of debris, discharge water, concrete, cement, grout, washout facility, welding slag, petroleum product, or other hazardous materials generated, used, or stored on-site.
   e. Procedures to contain and control a spill of any hazardous material generated, used or stored onsite, including notification of proper authorities. Ensure that materials for emergency erosion and hazardous materials control are onsite (e.g., silt fence, straw bales, oil-absorbing floating boom whenever surface water is present).
   f. Best management practices to confine vegetation and soil disturbance to the minimum area, minimize length of time to complete the action, and otherwise prevent or minimize erosion associated with the action area.
   g. No uncured concrete or form materials will be allowed to enter the active stream channel.
   h. Steps to cease work under high flows, except for efforts to avoid or minimize resource damage.

10. **Site Preparation**
   a. **Flagging Sensitive Areas** – Prior to construction, flag critical riparian vegetation areas, wetlands, and other sensitive sites to minimize ground disturbance.
   b. **Staging Area**– Establish staging areas for storage of vehicles, equipment, and fuels to minimize erosion into or contamination of streams and floodplains.
      i. No Topographical Restrictions – Place staging area 150 feet or more from any natural water body or wetland in areas where topography does not restrict such a distance.
      ii. Topographical Restrictions – If a staging area cannot be placed >150 feet from the water body due to topographical restrictions, place staging area away from water body or wetland to the greatest extent possible.
   c. **Temporary Erosion Controls** – Place sediment barriers prior to construction around sites where significant levels of erosion may enter the stream directly or through road ditches. Temporary erosion controls will be in place before any significant alteration of the action site and will be removed once the site has been stabilized following construction activities.

d. **Stockpile Materials** – Minimize clearing and grubbing activities when preparing staging, project, and or stockpile areas. Any large wood, topsoil, and native channel material displaced by construction will be stockpiled for use during site restoration. Materials used for implementation of aquatic restoration categories (e.g., large wood, boulders, fencing material etc.) may be staged within the 100-year floodplain.
e. **Hazard Trees** - Where appropriate, include hazard tree removal (amount and type) in project design. Fell hazard trees within riparian areas when they pose a safety risk. If possible, fell trees towards a stream. Keep felled trees on site when needed to meet coarse woody debris objectives.

11. Heavy Equipment Use

a. **Choice of Equipment –** Heavy equipment will be commensurate with the project and operated in a manner that minimizes adverse effects to the environment (e.g., minimally-sized, low pressure tires, minimal hard turn paths for tracked vehicles, temporary mats or plates within wet areas or sensitive soils).
b. Fueling and Cleaning and Inspection for Petroleum Products and Invasive Weeds
i. All equipment used for instream work will be cleaned for petroleum accumulations, dirt, plant material (to prevent the spread of noxious weeds), and leaks repaired prior to entering the project area. Such equipment includes large machinery, stationary power equipment (e.g., generators, canes, etc.), and gas-powered equipment with tanks larger than five gallons.
ii. Store and fuel equipment in staging areas after daily use.
iii. Inspect daily for fluid leaks before leaving the vehicle staging area for operation.
iv. Thoroughly clean equipment before operation below ordinary high water or within 50 feet of any natural water body or areas that drain directly to streams or wetlands and as often as necessary during operation to remain grease free.
c. **Temporary Access Roads –** Existing roadways or travel paths will be used whenever possible. Minimize the number of temporary access roads to lessen soil disturbance and compaction and impacts to vegetation. Temporary access roads will not be built on slopes where grade, soil, or other features suggest a likelihood of excessive erosion or failure. When necessary, temporary access roads will be obliterated and/or revegetated. Temporary roads in wet or flooded areas will be restored by the end of the applicable in-water work period. Construction of new permanent roads is not permitted.
d. **Stream Crossings** – Minimize number and length of stream crossings. Such crossings will be at right angles and avoid potential spawning areas to the greatest extent possible. Stream crossings shall not increase the risk of channel re-routing at low and high water conditions. After project completion, temporary stream crossings will be abandoned and associated stream channel and banks will be restored.
e. **Work from Top of Bank –** To the extent feasible, heavy equipment will work from the top of the bank, unless work from another location (instream) would result in less habitat disturbance, less floodplain disturbance, and/or better meet PERMIT design criteria. In another way, operate heavy equipment in streams only when project specialists believe that such actions are the only reasonable alternative for

implementation, or would result in less sediment in the stream channel or damage (short- or long-term) to the overall aquatic and riparian ecosystem relative to other alternatives.

f. **Timely Completion** – Minimize time in which heavy equipment is in stream channels, riparian areas, and wetlands. Complete earthwork (including drilling, excavation, dredging, filling and compacting) as quickly as possible. During excavation, stockpile native streambed materials above the bankfull elevation, where it cannot reenter the stream, for later use.

12. Site Restoration

a. **Initiate Rehabilitation** – Upon project completion, rehabilitate all disturbed areas (e.g. riparian areas, wetlands, staging areas, etc.) in a manner that results in similar or better than pre-work conditions through removal of project related waste, spreading of stockpiled materials (soil, large wood, trees, etc.), seeding and/or planting with local native seed mixes or plants.

b. **Short-term Stabilization** – Measures may include the use of non-native sterile seed mix (when native seeds are not available), weed-free certified straw, jute matting, and other similar techniques. Short-term stabilization measures will be maintained until permanent erosion control measures are effective. Stabilization measures will be instigated within three days of construction completion.

c. **Revegetation** – Replant each area requiring revegetation prior to or at the beginning of the first growing season following construction. Achieve re-establishment of vegetation in disturbed areas to at least 70 percent of pre-project levels within three years. Use an appropriate mix of species that will achieve establishment and erosion control objectives, preferably forb, grass, shrub, or tree species native to the project area or region and appropriate to the site. For wetland areas, use species native to such sites. Barriers will be installed as necessary to prevent access to revegetated sites by livestock or unauthorized persons.

d. **Planting Manuals** – All riparian plantings shall follow USFS direction described in the Regional letter to Units, Use of Native and Nonnative Plants on National Forests and Grasslands May 2006 (Final Draft), or BLM Instruction Memorandum No. OR-2001-014, Policy on the Use of Native Species Plant Material.

e. **Decompact Soils** – When necessary, loosen compacted areas, such as access roads and paths, stream crossings, staging, and stockpile areas.

13. Monitoring – Monitoring will be conducted by BLM or USFS staff during and after a project to track effects and compliance with PERMIT.

a. Implementation

i. Visually monitor during project implementation to ensure effects are not greater (amount, extent) than anticipated and to contact the appropriate regulatory agencies if problems arise.

ii. Fix any problems that arise during project implementation.

iii. Regular biologist/hydrologist coordination with COR if biologist/hydrologist is not always on site to ensure contractor is following all stipulations.

b. **401 Certification** – To minimize short-term degradation to water quality during project implementation, follow current 401 Certification provisions of the Federal CWA for maintenance of water quality standards described by the Oregon Department of Environmental Quality (DEQ).

c. **Post Project** – A post-project review shall be conducted after winter and spring high flows.
   i. For each project, conduct a walk through/visual observation to determine if there are post-project affects that were not considered. For fish passage and revegetation projects, monitor in the following manner:
      a) Fish Passage Projects – Note any problems with channel scour or bedload deposition, substrate, discontinuous flow, vegetation establishment, or invasive plant infestation.
      b) Revegetation – For all plant treatment projects, including site restoration, monitor for and remove invasive plants until native plants become established.
   ii. In cases where remedial action is required, such actions are permitted without additional consultation if they use relevant PERMIT PDCs and CMs and the effects of PERMIT actions are not exceeded.

d. **Compliance Monitoring –** The BLM and USFS will conduct compliance monitoring each year, and a protocol will be co-developed with the BLM, USFS, ODSL, and Corps prior to the 2015 field season.

D. Work Area Isolation & Fish Capture and Release

Isolate the construction area and remove fish from a project site for projects that include concentrated and major excavation at a single location within the stream channel. This condition will typically apply to Fish Passage Restoration projects, such as culvert removal or replacement.

1. **ODFW Scientific Take Permit (STP)** – Prior to work area isolation and fish salvage, acquire a STP from ODFW. For STP procedures refer to the following website: http://www.dfw.state.or.us/fish/license_permits_apps/scientific_taking_permit.asp

2. **Isolate Capture Area –** Install block nets at up and downstream locations outside of the construction zone and leave in a secured position to exclude fish from entering the project area. Leave nets secured to the stream channel bed and banks until construction activities within the stream channel are complete. If block nets or traps remain in place more than one day, monitor the nets and or traps at least on a daily basis to ensure they are secured to the banks and free of organic accumulation and to minimize fish predation in the trap.

3. **Capture and release –** Fish trapped within the isolated work area will be captured and released as prudent to minimize risk of injury. Release fish at a safe site, preferably upstream of the isolated reach in a pool or other area that provides cover and flow refuge. Collect fish by seine or dip nets as the area is slowly dewatered, and minnow traps will be in place overnight. Fish must be handled with extreme care and kept in water the maximum extent possible during transfer procedures. A healthy environment for the stressed fish shall be provided—large buckets (five-gallon minimum to prevent overcrowding) and minimal handling of fish. Place large fish in buckets separate from smaller prey-sized fish. Monitor water temperature in buckets and well-being of captured fish. If buckets are not being immediately transported, use aerators to maintain water quality. As rapidly as possible (especially for temperature-sensitive bull trout), but after fish have recovered, release fish. In cases where the stream is intermittent upstream, release fish in downstream areas and away from the influence

of the construction. Capture and release will be supervised by a fishery biologist experienced with work area isolation and safe handling of all fish.

4. **Electrofishing –** Use electrofishing only where other means of fish capture may not be feasible or effective. If electrofishing will be used to capture fish for salvage, NMFS' electrofishing guidelines will be followed: NMFS 2000 - http://www.nwr.noaa.gov/ESA-Salmon-Regulations-Permits/4d-Rules/upload/electro2000.pdf. Those guidelines are available from the NMFS Northwest Region, Protected Resources Division in Portland, Oregon.
   a. Reasonable effort should be made to avoid handling fish in warm water temperatures, such as conducting fish evacuation first thing in the morning, when the water temperature would likely be coolest. No electrofishing should occur when water temperatures are above 18ºC or are expected to rise above this temperature prior to concluding the fish capture.
   b. If fish are observed spawning during the in-water work period, electrofishing shall not be conducted in the vicinity of spawning fish or active redds.
   c. Only Direct Current (DC) or Pulsed Direct Current (PDC) shall be used.
   d. Conductivity <100, use voltage ranges from 900 to 1100. Conductivity from 100 to 300, use voltage ranges from 500 to 800. Conductivity greater than 300, use voltage to 400.
   e. Begin electrofishing with minimum pulse width and recommended voltage and then gradually increase to the point where fish are immobilized and captured. Turn off current once fish are immobilized.
   f. Do not allow fish to come into contact with anode. Do not electrofish an area for an extended period of time. Remove fish immediately from water and handle as described below. Dark bands on the fish indicate injury, suggesting a reduction in voltage and pulse width and longer recovery time.
   g. If mortality is occurring during salvage, immediately discontinue salvage operations (unless this would result in additional fish mortality), reevaluate the current procedures, and adjust or postpone procedures to reduce mortality.

5. **Dewater Construction Site** –When dewatering is necessary to protect species and/or critical habitat, divert flow around the construction site with a coffer dam (built with non-erosive materials) and an associated pump, a by-pass culvert, or a water-proof lined diversion ditch. Diversion sandbags can be filled with material mined from the floodplain as long as such material is replaced at end of project. Small amounts of instream material can be moved to help seal and secure diversion structures. Pumps must have fish screens and be operated in accordance with NMFS fish screen criteria described in Section 6. below.

   Dissipate flow energy at the bypass outflow to prevent damage to riparian vegetation or stream channel. If diversion allows for downstream fish passage, place diversion outlet in a location to promote safe reentry of fish into the stream channel, preferably into pool habitat with cover.

   When necessary, pump seepage water from the de-watered work area to a temporary storage and treatment site or into upland areas and allow water to filter through vegetation prior to reentering the stream channel.

6. **Fish Screens for Dewatering**
   a. **NMFS Hydro Fish Passage Review and Approve –** When using fish screens for surface water that is diverted by gravity or by pumping at a rate that exceeds three (3) cfs, the BLM and USFS will ensure that the action is individually reviewed by the Portland office of the NMFS' Habitat Conservation Division for consistency with criteria in *NOAA Fisheries Anadromous Salmonid Passage Facility Design* (NMFS 2011), located at: http://www.nwr.noaa.gov/Salmon-Hydropower/FERC/upload/Fish-Passage-Design.pdf
   b. For the dewatering of a work site to remove or install culverts, bridge abutments, etc. a fish screen must be used on the pump intake to avoid juvenile fish entrainment that meets criteria specified by NMFS (2011, or most recent version).
   c. All other diversions will have a fish screen that meets the following specifications: (a) An automated cleaning device with a minimum effective surface area of 2.5 square feet per cfs, and a nominal maximum approach velocity of 0.4 feet per second (fps), or no automated cleaning device, a minimum effective surface area of one (1) square foot per cfs, and a nominal maximum approach rate of 0.2 fps; and (b) a round or square screen mesh that is no larger than 2.38 mm (0.094 inches) in the narrow dimension, or any other shape that is no larger than 1.75 mm (0.069 inches) in the narrow dimension.
   d. Each fish screen will be installed, operated, and maintained according to NMFS' fish screen criteria (NMFS 2011, or most recent version). NMFS fish screen criteria applies to federally listed salmonid species under their jurisdiction as well as bull trout, Oregon chub, shortnose sucker, Lahontan cutthroat trout, Lost River sucker, Modoc sucker, and Warner sucker under USFWS jurisdiction.

7. **Stream Re-watering –** Upon project completion, slowly re-water the construction site to prevent loss of surface water downstream as the construction site streambed absorbs water and to prevent a sudden increase in stream turbidity. Monitor downstream during re-watering to prevent stranding of aquatic organisms below the construction site.

E. Aquatic Restoration Activity Categories: Descriptions and Project Design Criteria

The 11 aquatic restoration activity categories will be designed and implemented to help restore watershed processes. These projects will improve channel dimensions and stability, sediment transport and deposition, and riparian, wetland, floodplain and hydrologic functions, as well as water quality. As such, these improvements will help address limiting factors—related to spawning, rearing, migration, and more—for ESA-listed and other native fish species. Aquatic habitat restoration and enhancement projects are conducted within stream channels, adjacent riparian/floodplain areas, wetlands, and uplands. Work may be accomplished using manual labor, hand tools (chainsaws, tree planting tools, augers, shovels, and more), all-terrain vehicles, flat-bed trucks, and heavy equipment (backhoes, excavators, bulldozers, front-end loaders, dump trucks, winch machinery, cable yarding, etc.). Helicopters will be used for many large wood projects.

The following Project Design Criteria (PDC) was developed to guide the design of aquatic restoration projects to be implemented under a PERMIT.

1. **Fish Passage Restoration** includes the following: total removal of culverts or bridges, or replacing culverts or bridges with properly sized culverts and bridges, replacing a damaged culvert or bridge, and resetting an existing culvert that was improperly installed or damaged and stabilizing and providing passage over headcuts. Such projects will take place where fish passage has been partially or completely eliminated through road construction and stream degradation. Equipment such as excavators, bull dozers, dump trucks, front-end loaders, and similar equipment may be used to implement projects.
    a. **Stream Simulation Culvert and Bridge Projects –** 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* (USFS 2008), located at: http://stream.fs.fed.us/fishxing/aop_pdfs.html.

Stream Simulation Culvert and Bridge Projects – Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	2
Oregon State Marine Board Coordination	2
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	12

ii. **Excluded Projects –** Treated wood bridges; bridge piers and abutments constructed in the bankfull width; the hydraulic method (e.g. culverts with constructed baffles or weirs); projects that permit exotic fish into isolated populations of bull trout and other native fish populations.; culvert or bridge removals replaced with a low-water ford.

iii. Maximum Removal and Fill Limits for GP-42104-RF and RGP-4

a. One project is equal to the replacement or removal of one road stream crossing structure (culvert or bridge). Project length, including grade control structures, shall not exceed 300 feet.

b. For culvert replacement projects, both removal and fill will not exceed 700 cubic yards (each) below OHWM. (This will accommodate large structures, such as open-bottom arches 30 feet by 100 feet. These large structures will constitute <25 percent of the fish passage projects.) Substrate will be imported to embed culverts or open-bottom arches. The majority of projects will fall below this upper limit.

c. For culvert removal and channel restoration projects, removal and fill amounts will be commensurate with that needed to restore floodplain and stream channel dimensions.

d. Bypass roads that use culverts shall be constructed within the isolated work area, and the associated culvert shall be large enough to carry the highest flow reasonably to be expected to occur during construction. Bypass roads constructed from temporary bridges shall occur within or immediately adjacent to the dewatered area. For temporary bridges adjacent to the dewatered area, such bridges shall span the bankfull width and follow wetland guidelines in C. 2. d. of this appendix. Remove all construction material and restore area to pre-project conditions.

i. **Culvert Criteria** – Within the considerations of stream simulation, the structure shall, at a minimum, accommodate a bankfull wide channel plus constructed banks to provide for passage of all life stages of native fish species (for more information, reference Chapter 6, page 35 of the USFS Stream Simulation Guide). The following crossing-width guidance applies to specific ranges of entrenchment ratios as defined by Rosgen (1996):

a) Non-entrenched Streams: If a stream is not fully entrenched (entrenchment ratio of greater than 1.4), the minimum culvert width shall be at least 1.3 times the bankfull channel width. This is consistent with the *NOAA Fisheries Anadromous Salmonid Passage Facility Design* (section 7.4.2 "Stream Simulation Design") (NMFS 2011), located at: http://www.nwr.noaa.gov/Salmon-Hydropower/FERC/upload/Fish-Passage-Design.pdf

b) Entrenched Streams: If a stream is entrenched (entrenchment ratio of less than 1.4), the culvert width must be greater than bankfull channel width, allow sufficient vertical clearance to allow ease of construction and maintenance activities, and provide adequate room for the construction of natural channel banks. Consideration should be given to accommodate the floodprone width. Floodprone is the width measured at twice the maximum bankfull depth (Rosgen, 1996).

ii. Bridge Design

a) Bridges with vertical abutments—including concrete box culverts, which are constructed as bridges—shall have their stream channels, including width, designed according to culvert guidelines.

b) Structure material must be concrete or metal. Concrete must be sufficiently cured or dried before coming into contact with stream flow. The use of treated wood for bridge construction or replacement is not allowed under this PERMIT.

c) Riprap must not be placed within the bankfull width of the stream. Riprap may only be placed below bankfull height when necessary for protection of abutments and pilings. However, the amount and placement of riprap should not constrict the bankfull flow.

iii. Crossing Design

a) All projects shall meet ODFW fish passage design criteria as defined in OAR 635-412-0035.

b) Crossings shall be designed using an interdisciplinary design team consisting of an experienced Engineer, Fisheries Biologist, and Hydrologist/Geomorphologist.

c) Crossing structures with widths that exceed 20 feet or with costs that exceed $100,000 shall be reviewed by the USDA Forest Service AOP Design Assistance Team or a BLM equivalent.

d) At least one member of the design team shall be trained in a week-long Aquatic Organism Passage course based on the USDA Forest Service's guide, *Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings* (USFS 2008*)* http://stream.fs.fed.us/fishxing/aop_pdfs.html.

e) Bankfull width shall be based on the upper end of the distribution of bankfull width measurements as measured in the reference reach to account for channel variability and dynamics.

iv. **NMFS Hydro Fish Passage Review and Approve -** 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 NMFS (2011).

b. **Headcut and Grade Stabilization –** Headcuts often occur in meadow areas, typically on Rosgen "C" and "E" channel types. Headcuts develop and migrate during bankfull and larger floods, when the sinuous path of Rosgen E type streams may become unstable in erosive, alluvial sediments, causing avulsions, meander cut-offs, bank failure, and development of an entrenched Rosgen G gully channel (Rosgen 1994).

Headcut and Grade Stabilization – Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	2
Oregon State Marine Board Coordination	2
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	NA

ii. Excluded Projects – Actions that include complete fill of degraded/downcut stream channel; projects that use gabion baskets, sheet pile, concrete, articulated concrete block, and/or cable anchors, and straight weirs that disperse flows and cause channel widening and structure flanking (erosion around the structure).

iii. Maximum Removal and Fill Limits for GP-42104-RF and RGP-4

a. Rock and Organic Material Headcut Armoring projects
   (i) One project is equal to the stabilization of one headcut and associated fish passage structures. Project length, from the headcut to the last downstream weir, shall not exceed 400 feet.
   (ii) Only clean erosion resistant rock from an upland source is allowed. No broken concrete or asphalt may be used.
   (iii) No more than 1,000 cubic yards of material will be placed within a stream channel with no more than 150 cubic yards to be used for an individual structure, such as checkdam or headcut armor.
   (iv) Fill to armor a headcut may extend into wetland areas immediately above the headcut.
   (v) Removal and fill associated with streambank excavation sites to key-in check dams will be commensurate with structure size. The width of a single excavation trench will not exceed two times the structure width, and trench length will not exceed 10 feet on either side of a stream.

i. Stabilize Headcuts

a) Armor headcut with sufficiently sized and amounts of material to prevent continued up-stream migration of the headcut. Materials can include both rock and organic materials which are native to the area. Material shall not contain gabion baskets, sheet pile, concrete, articulated concrete block, and cable anchors.

b) Focus stabilization efforts in the plunge pool, the headcut, as well as a short distance of stream above the headcut.

ii. Minimize lateral migration of channel around headcut (“flanking”) by placing rocks and organic material at a lower elevation in the center of the channel cross section to direct flows to the middle of channel.

iii. In streams with current or historic fish presence, provide fish passage over stabilized headcut through constructed riffles for pool/riffle streams or a series of log or rock weir structures for step/pool channels as described in part ii below.

iv. Short-term headcut stabilization (including emergency stabilization projects) may occur without associated fish passage measures. However, fish passage must be incorporated into the final headcut stabilization action and be completed during the first subsequent in-water work period.

v. In streams without current or historic fish presence, it is recommended to construct a series of downstream log or rock weirs as described in Part(ii) below to expedite channel aggradation.

vi. Grade Stabilization to promote Fish Passage associated with Headcut Stabilization

a) Design Review

(i) **NMFS Hydro Fish Passage Review and Approve –** If headcut stabilization and channel spanning non-porous weirs create discrete longitudinal drops > 6", the BLM and FS will ensure that the action is individually reviewed by the Portland office of the NMFS' Habitat Conservation Division for consistency with criteria in *NOAA Fisheries Anadromous Salmonid Passage Facility Design* (NMFS 2011), located at: http://www.nwr.noaa.gov/Salmon-Hydropower/FERC/upload/Fish-Passage-Design.pdf.

(ii) ODFW Fish Passage Review – All projects shall meet ODFW fish passage criteria as defined in OAR 635-412-0035. If headcut stabilization and channel spanning non-porous weirs create discrete longitudinal drops > 6 inch, the BLM and FS will ensure that design review of this action is coordinated through the ODFW Fish Passage Program (ORS Chapter 509), located in the Salem Office.

b) Provide fish passage over stabilized headcut through constructed riffles for pool/riffle streams or a series of log or rock weir structures for step/pool channels. If large wood and boulder placement will be used for headcut stabilization, refer to activity Category 2. Large Wood, Boulder, and Gravel Placement.

c) Construct weirs in a 'V' shape, oriented with the apex upstream, and lower in the center to direct flows to the middle of channel.

d) Key weirs into the stream bed to minimize structure undermining due to scour, preferably at least 2.5 times their exposure height. The weir should also be keyed into both banks—if feasible greater than 8 feet.

e) If several structures will be used in series, space the weirs at the appropriate distances to promote fish passage of all life stages of native fish. Incorporate state fish passage criteria (jump height, pool depth, etc.) in the design of weir structures. Recommended weir spacing should be no closer than the net drop divided by the channel slope (for example, a one-foot high weir in a stream with a two-percent gradient will have a minimum spacing of 50-feet [1/0.02]).

f) Include fine material in the weir material mix to help seal the weir/channel bed, thereby preventing subsurface flow and ensuring fish passage immediately following construction if natural flows are sufficient.

g) If a project involves the removal of multiple barriers on one stream or in one watershed over the course of a work season, remove the most upstream barrier first if possible.

2. **Large Wood, Boulder, and Gravel Placement** includes large wood (LW) and boulder placement, porous boulder weirs and vanes, gravel placement, and tree removal for LW projects. Such activities will occur in areas where channel structure is lacking due to past stream cleaning (LW removal), riparian timber harvest, and in areas where natural 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 floodplain function. Equipment such as helicopters, excavators, dump trucks, front-end loaders, full-suspension yarders, and similar equipment may be used to implement projects.

a. Large Wood and Boulder Projects

Large Wood and Boulders – Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	NA
Oregon State Marine Board Coordination	2
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	NA

ii. Excluded Projects – Engineered Log Jams--large wood structures used in larger streams that require buoyancy measurements and significant amounts of ballast to ensure stability.

iii. Maximum Removal and Fill Limits for GP-42104-RF and RGP-4

a. One project is equal to LW placement within a 6th HUC during a field season, regardless of placement method and project length.

b. Large Wood Projects

(i) No more than 400 logs (key and non-key logs) per mile will be placed within the Ordinary High Water Mark (OHWM). Additional logs can be placed in the floodplain (above OHWM) and associated wetlands as long as wetland functions and values are not impaired. The number of logs placed in a stream shall be commensurate with stream size, type, and local geomorphology and in a manner that does not impede fish passage.

(ii) Placement of boulders to stabilize large wood may be used.

(iii) Removal and fill associated with streambank excavation sites to anchor log structures into stream banks will be commensurate with structure size. In general, the width of excavation trenches will not exceed 2 times the structure or log width, and trench length will typically not exceed 1/2 the structure or log length. Longer trench lengths will be required for structures built to resist movement during high flows.

c. Natural/random boulder placement

(i) No more than 1,000 cubic yards of boulders will be placed within the OHW per mile. No more than 100 cubic yards of material will be placed at one site.

(ii) Boulders should be placed in patterns of natural deposition that are found in the area.

i. Project Design Criteria

a) Place LW and boulders in areas where they would naturally occur and in a manner that closely mimic natural accumulations for that particular stream type. For example, boulder placement may not be appropriate in low-gradient meadow streams.

b) Structure types shall simulate disturbance events—debris flows, rock slides, wind-throw, tree breakage, etc.—to the greatest degree possible.

c) No limits are to be placed on the size or shape of structures as long as such structures are within the range of natural variability of a given location and do not block fish passage.

d) Projects can include grade control and bank stabilization structures, while size and configuration of such structures will be commensurate with scale of project site and hydraulic forces.

e) The partial burial of LW and boulders is permitted and may constitute the dominant means of placement. This applies to all stream systems but more so for larger stream systems where use of adjacent riparian trees or channel features is not feasible or does not provide the full stability desired.

f) LW includes whole conifer and hardwood trees, logs, and rootwads. LW size (diameter and length) should account for bankfull width and stream discharge rates. When available, trees with rootwads should be a minimum of 1.5 times bankfull channel width, while logs without rootwads should be a minimum of 2.0 times bankfull width.

g) Structures may partially or completely span stream channels or be positioned along stream banks.

h) Stabilizing or key pieces of LW must be intact, hard, with little decay, and if possible have root wads (untrimmed) to provide functional refugia habitat for fish. Consider orienting key pieces such that the hydraulic forces upon the large wood increases stability.

i. Anchoring Large Wood – Anchoring alternatives may be used in preferential order:
   (i) use of adequate sized wood sufficient for stability;
   (ii) orient and place wood in such a way that movement is limited;
   (iii) ballast (gravel and/or rock) to increase the mass of the structure to resist movement;
   (iv) use of large boulders as anchor points for the LW.

b. Porous Boulder Weirs and Vanes

Porous Boulder Weirs and Vanes – Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	NA
Oregon State Marine Board Coordination	2
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	NA

ii. Excluded Projects – Channel-spanning weirs that are perpendicular to stream flow; downstream pointed U or V style weirs. The use of gabions, cable, or other means to prevent the movement of individual boulders in a boulder weir is not allowed.

iii. Maximum Removal and Fill Limits for GP-42104-RF and RGP-4

a. One project is equal to boulder placement within a 6th HUC during a field season, regardless of placement method and project length.

b. Only clean erosion resistant rock from an upland source is allowed. No broken concrete or asphalt may be used.

c. Boulder weirs in bedrock systems.

(i) For boulder weirs in bedrock streams, projects are limited to streams <80 feet bankfull width and <5 percent slope, and such weirs shall not fill more than 50 percent of the bankfull cross-sectional area.

(ii) No more than 1,500 cubic yards of boulders will be placed within the OHWM per mile, an upper limit that will accommodate severely degraded coastal basins.

(iii) No more than 150 cubic yards of material will be used to construct a single weir.

(iv) Natural boulder placement may be implemented upstream and downstream of a weir.

(v) Removal and fill associated with streambank excavation sites to anchor boulder. structures into stream banks will be commensurate with structure size. In general, the width of excavation trenches will not exceed 2 times the structure or boulder width, and trench length will not exceed 20 feet on a single side of the stream. Slight amounts of bank armoring (up to 25 percent of the bankfull width in length up- and downstream of the excavation site) can be used to prevent bank scour.

i. Project Design Criteria

a) Full channel spanning boulder weirs are to be installed only in highly uniform, incised, bedrock-dominated channels to enhance or provide fish habitat in stream reaches where log placements are not practicable due to channel conditions (not feasible to place logs of sufficient length, bedrock dominated channels, deeply incised channels, artificially constrained reaches, etc.), where damage to infrastructure on public or private lands is of concern, or where private landowners will not allow log placements due to concerns about damage to their streambanks or property.

b) Install boulder weirs low in relation to channel dimensions so that they are completely overtopped during channel-forming flow events (approximately a 1.5-year flow event).

c) Boulder weirs are to be placed diagonally across the channel or in more traditional upstream pointing "V" or "U" configurations with the apex oriented upstream.

d) Boulder weirs are to be constructed to allow upstream and downstream passage of all native fish species and life stages that occur in the stream. Plunges shall be kept less than 6 inches in height.

e) The use of gabions, cable, or other means to prevent the movement of individual boulders in a boulder weir is not allowed.

f) Rock for boulder weirs shall be durable and of suitable quality to assure long-term stability in the climate in which it is to be used. Rock sizing depends on the size of the stream, maximum depth of flow, planform, entrenchment, and ice and debris loading.

g) The project designer or an inspector experienced in these structures should be present during installation.

i. Full spanning boulder weir placement should be coupled with measures to improve habitat complexity and protection of riparian areas to provide long-term inputs of LW.

c. Gravel Augmentation

Gravel Placement – Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	2
Oregon State Marine Board Coordination	2
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	NA

ii. **Excluded Projects** – Gravel placement at road crossings.

iii. Maximum Removal and Fill Limits for GP-42104-RF and RGP-4

a. One project is equal to gravel placement within a 6th HUC during a field season, regardless of placement method and project length.

b. No more 1,500 cubic yards of material will be placed within the OHW per mile and shall be in association with instream structures. No more than 250 cubic yards of material can be placed at one site. The amount of gravel placed shall be commensurate with stream size and geomorphology and in a manner that does not impede fish passage. Spawning gravel will be comprised of clean, rounded river rock and its size determined by the need of fish species (typically 0.25 - 6 inches).

i. Project Design Criteria

a) Gravel can be placed directly into the stream channel, at tributary junctions, or other areas in a manner that mimics natural debris flows and erosion.
b) Augmentation will only occur in areas where the natural supply has been eliminated, significantly reduced through anthropogenic disruptions, or used to initiate gravel accumulations in conjunction with other projects, such as simulated log jams and debris flows.
c) Gravel to be placed in streams shall be a properly sized gradation for that stream, clean, and non-angular. When possible use gravel of the same lithology as found in the watershed. Reference the *Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organism*s at Road-Stream Crossings (USFS 2008) to determine gravel sizes appropriate for the stream. This manual can be found at the following location: http://stream.fs.fed.us/fishxing/aop_pdfs.html
d) Gravel can be mined from the floodplain at elevations above bankfull. Crushed rock is not permitted.
e) After gravel placement in areas accessible to higher stream flow, allow the stream to naturally sort and distribute the material.
f) Do not place gravel directly on bars and riffles that are known spawning areas, which may cause fish to spawn on the unsorted and unstable gravel, thus potentially resulting in redd destruction.
g) Imported gravel must be free of invasive species and non-native seeds. If necessary, wash gravel prior to placement.

d. Tree Removal for LW Projects – Project Design Criteria

i. Live conifers and other trees can be felled or pulled/pushed over in riparian and upland areas (e.g., LSR, AMA, NSO/MaMu CH) for in-channel large wood placement only when conifers and trees are fully stocked. Tree felling shall not create excessive stream bank erosion or increase the likelihood of channel avulsion during high flows.
ii. Danger trees and trees killed through fire, insects, disease, blow-down and other means can be felled and used for in-channel placement regardless of live-tree stocking levels.
iii. Trees may be removed by cable, ground-based equipment, horses or helicopters.
iv. Trees may be felled or pushed/pulled directly into a stream and/or floodplain.
v. Trees may be stock piled for future instream restoration projects.
vi. The project manager for an aquatic restoration action under PERMIT will coordinate with an action-agency wildlife biologist in tree-removal planning efforts.

3. **Legacy Structure Removal** include actions to remove large wood, boulders, rock gabions, and other in-channel structures that were constructed to improve fish habitat but were installed in a manner that was and continues to be inappropriate for the given stream type. 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). For instance, these legacy structures typically led to widened stream channels, increased width/depth ratios, decreased sinuosity, and increased stream exposure to solar radiation. Removal of legacy structures would include the use of excavator-type machinery, spyders, backhoes, and dump trucks.

Legacy Structure Removal – Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	NA
Oregon State Marine Board Coordination	2
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	NA

ii. Excluded Projects – Removal of dams, diversions, and tidegates.

iii. Maximum Removal and Fill Limits for GP-42104-RF and RGP-4

a. One project is equal to removal of legacy structures within a 6th HUC during a field season, regardless of removal method and project length.

b. For large wood legacy structures, up to 350 logs may be removed or altered/stream mile below the OHWM with no more than 50 logs at any given site within a one-mile length.

c. For boulder and gabion projects, removal will not exceed 2,500 cubic yards/stream mile below the OHWM with no more than 250 cubic yards at any given site, such as a single weir or a 100 feet stream section that was treated with integrated boulders. Legacy boulder structures may be altered to better accommodate natural conditions.

a. Project Design Criteria

i. If the structure being removed contains material (i.e., large wood, boulders, concrete, etc.) not typically found within the stream or floodplain at that site, remove material from the 100-year floodplain.

ii. If the structure being removed contains material (i.e., large wood, boulders, etc.) that is typically found within the stream or floodplain at that site, the material can be reused to implement habitat improvements described under Large Wood, Boulder, and Gravel Placement activity category.

iii. If the structure being removed is keyed into the bank, fill in “key” holes with native materials to restore contours of stream bank and floodplain. Compact the fill material adequately to prevent washing out of the soil during over-bank flooding. Do not mine material from the stream channel to fill in “key” holes.

iv. When removal of buried log structures may result in significant disruption to riparian vegetation and/or the floodplain, consider using a chainsaw to extract the portion of log within the channel and leaving the buried sections within the streambank.

v. If a project involves the removal of multiple barriers on one stream or in one watershed over the course of a work season, remove the most upstream barrier first if possible.

vi. If the legacy structures (log, rock, or gabion weirs) were placed to provide grade control, evaluate the site for potential headcutting and incision due to structure removal. If headcutting and channel incision are likely to occur due to structure removal, additional measures must be taken to reduce these impacts.

vii. If the structure is being removed because it has caused an over-widening of the channel, consider implementing other restoration categories to decrease the width to depth ratio of the stream to a level commensurate with the geomorphic setting.

4. **Off- and Side-Channel Habitat Restoration** projects will be implemented to reconnect historic side-channels with floodplains by removing off-channel fill and plugs. Furthermore, 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. These project types will 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. Equipment such as excavators, bull dozers, dump trucks, front-end loaders, and similar equipment may be used to implement projects.

Off and Side-channel Habitat Restoration Projects – Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	NA
Oregon State Marine Board Coordination	2
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	12 (if conditions mandate)

ii. Excluded Projects – Reconnection of main stem river oxbows; construction of side channels where such channels would not naturally occur; reconnection of side channels that have been have been abandoned by fully functioning (natural/desired) channel processes.

iii. Maximum Removal and Fill Limits for GP-42104-RF and RGP-4

a. One project is equal to one side channel or alcove project.

b. No more than 400 cubic yards of material will be removed below the existing OHWM and from wetlands (within historic side channels or alcoves to be reconnected) from one project. Removal is limited to the inlet, outlet, and other filled portions of a side channel or alcove area.

c. When constructing log or boulder structures in the main channel to restore side channel flow, fill shall not exceed 100 cubic yards for small streams (bankfull <40 feet) and 350 cubic yards for larger streams or main-stem rivers (bankfull >40 feet). Boulder weir construction will follow project design criteria provided in the Large Wood, Boulder, and Gravel Placement category.

a. Project Design Criteria

i. **NMFS Hydro Fish Passage Review and Approve –** When a proposed side channel will contain >20 percent of the bankfull flow, the BLM and USFS will ensure that the action is individually reviewed by the Portland office of the NMFS' Habitat Conservation Division for consistency with criteria in NMFS (2011). Refer to Section C. 3. of this appendix.

ii. **Data Requirements** – Data requirements and analysis for off- and side-channel habitat restoration include evidence of historical channel location, such as land use surveys, historical photographs, topographic maps, remote sensing information, or personal observation.

iii. **Allowable Excavation –** Off- and side-channel improvements can include minor excavation (≤ 10 percent of volume) of naturally accumulated sediment within historical channels. Except for projects implemented under a GP-42104-RF and RGP-4, there is no limit as to the amount of excavation of anthropogenic fill within historic side channels as long as such channels can be clearly identified through field and/or aerial photographs. Excavation depth will not exceed the maximum thalweg depth in the main channel. Excavated material removed from off- or side-channels shall be hauled to an upland site or spread across the adjacent floodplain in a manner that does not restrict floodplain capacity.

5. **Streambank Restoration** will be implemented through bank shaping and installation of coir logs or other soil reinforcements as necessary to support riparian vegetation; installing large wood; planting trees, shrubs, and herbaceous cover as necessary to restore ecological function in riparian and floodplain habitats; or a combination of the above methods. Such actions are intended to restore banks that have been altered through road construction, improper grazing, invasive plants, and more. Benefits include increased amounts of riparian vegetation and associated shading, bank stability, and reduced sedimentation into stream channels and spawning gravels. Equipment such as excavators, bull dozers, dump trucks, front-end loaders, and similar equipment may be used to implement projects.

Streambank Restoration Projects – Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	NA
Oregon State Marine Board Coordination	3
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	NA

ii. Excluded Projects – Use of dikes, groins, buried groins, drop structures, rip-rap, rock-toes, and similar structures to stabilize streambanks. Projects that use instream rock to stabilize banks. Projects that harden the streambanks in a manner that severely restricts channel forming processes.

iii. Maximum Removal and Fill Limits for GP-42104 and RGP-4

a. One project is equal to stabilization of eroding banks within a 6th HUC during a field season, regardless of project length.

b. No more 1,500 feet of stream bank will be excavated and sloped per 0.5 miles within a single year.

c. Individual stream banks to be excavated and sloped shall not exceed 500 feet in length and 8 feet in height.

d. Banks will be excavated in the following manner: at bankfull elevation excavate horizontally (terrace/bench) followed by sloping (up to 3:1 [h/v] slope); sloping from channel edge up to a 3:1 slope. Excavation can begin from the slope toe (under OHWM) to better connect channel and newly constructed streambank.

e. When using sedge or rush mats, no more than 500 mats (3-foot by 6-foot by 1-foot) shall be used to stabilize banks. Mat placement can extend below the OHWM but most will occur at or above the OHW. To minimize potential effects to wetlands, harvest of mats shall be distributed across the project area and not from a single location. At harvest sites, no more than 25 percent of the vegetation shall be removed and mats will be taken in such a manner as to leave undisturbed vegetation of equal size or greater between each excavated mat. Plant native sedge or rush plugs and/or seeds throughout excavated area to promote regrowth. Monitor for project related spread of noxious plants and apply eradication measures upon detection of such plants.

a. Project Design Criteria

i. Without changing the location of the bank toe, restore damaged streambanks to a natural slope and profile suitable for establishment of riparian vegetation. This may include sloping of unconsolidated bank material to a stable angle of repose or the use of benches in consolidated, cohesive soils.

ii. Complete all soil reinforcement earthwork and excavation in the dry. When necessary, use soil layers or lifts that are strengthened with biodegradable fabrics and penetrable by plant roots.

iii. Include large wood to the extent it would naturally occur. If possible, large wood should have untrimmed root wads to provide functional refugia habitat for fish. Wood that is already within the stream or suspended over the stream may be repositioned to allow for greater interaction with the stream.

iv. Rock will not be used for streambank restoration, except as ballast to stabilize large wood or where such rock is a natural element of streambank material in that location.

v. Use a diverse assemblage of vegetation species native to the action area or region, including trees, shrubs, and herbaceous species. Vegetation, such as willow, sedge and rush mats, may be gathered from abandoned floodplains, stream channels, etc.

vi. Do not apply surface fertilizer within 50 feet of any stream channel.

vii. Install fencing as necessary to prevent access to revegetated sites by livestock or unauthorized persons.

viii. Conduct post-construction monitoring and treatment or removal of invasive plants until native plant species are well established.

6. **Set-back or Removal of Existing Berms, Dikes, and Levees** will be conducted to reconnect historic fresh-water deltas to inundation and stream channels with floodplains as a means to increase habitat diversity and complexity, moderate flow disturbances, and provide refuge for fish during high flows. Other restored ecological functions include overland flow during flood events, dissipation of flood energy, increased water storage to augment low flows, sediment and debris deposition, growth of riparian vegetation, nutrient cycling, and development of side channels and alcoves. Such projects will take place where floodplains have been disconnected from adjacent rivers through drain pipes and anthropogenic fill. Equipment such as excavators, bull dozers, dump trucks, front-end loaders, and similar equipment may be used to implement projects.

Set-back or Removal of Existing Berms, Dikes, and Levees –Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	NA
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	NA

ii. Excluded Projects – Tidegate removal and estuary projects.

iii. Maximum Removal and Fill Limits for GP-42104-RF and RGP-4

a. One project is equal to overburden removal within a 6th HUC during a field season, regardless of project length.

b. Removal amounts associated with overburden removal will becommensurate with that required to recreate more natural floodplain or delta dimensions.

c. Overburden material will be removed or redistributed above the OHW and minor amounts can be removed/recontoured below OHW to better connect the stream and reconstructed floodplains and deltas. The horizontal extension into the stream channel shall not exceed 1/3 of the bankfull width or 10 feet, whichever is less.

d. Removal amounts associated with restoration of tributary and/or side channels, which were blocked and covered by overburden material, will be commensurate with natural channel dimensions.

a. Project Design Criteria

i. Design actions to restore floodplain characteristics—elevation, width, gradient, length, and roughness—in a manner that closely mimics, to the extent possible, those that would naturally occur at that stream and valley type.

ii. Remove drain pipes, fences, and other capital projects to the extent possible.

iii. To the extent possible, remove nonnative fill material from the floodplain and wetland areas to an upland site.

iv. Where it is not possible to remove or set-back all portions of dikes and berms, or in areas where existing berms, dikes, and levees support abundant riparian vegetation, openings will be created with breaches. Breaches shall be equal to or greater than the active channel width to reduce the potential for channel avulsion during flood events. In addition to other breaches, the berm, dike, or levee shall always be breached at the downstream end of the project and/or at the lowest elevation of the floodplain to ensure the flows will naturally recede back into the main channel thus minimizing fish entrapment.

v. Elevations of dike/levee setbacks shall not exceed the elevation of removed structures.

vi. When necessary, loosen compacted soils once overburden material is removed. Overburden or fill comprised of native materials, which originated from the project area, may be used within the floodplain to create set-back dikes and fill anthropogenic holes provided that floodplain function is not impeded.

7. **Reduction/Relocation of Recreation Impacts** is intended to close, better control, or relocate recreation infrastructure and use along streams and within riparian areas. This includes 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 in riparian areas. The primary purpose is to eliminate or reduce recreational impacts to restore riparian areas and vegetation, improve bank stability, and reduce sedimentation into adjacent streams. Equipment such as excavators, bull dozers, dump trucks, front-end loaders, and similar equipment may be used to implement projects.

Reduction/Relocation of Recreation Impacts – Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	NA
Oregon State Marine Board Coordination	2
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	NA

ii. Excluded Projects – Construction of new recreation facilities not associated with relocation of existing facilities further away from a stream channel, wetland, or other water body.

iii. Maximum Removal and Fill Limits for GP-42104-RF and RGP-4

a. One project is equal to restoration work conducted at one recreation site.

b. No more 500 cubic yards of material can be removed or altered below the OHWM or in wetlands. Work would involve removal of anthropogenic material along streambanks and in floodplains and wetlands to prepare for stream channel, bank, floodplain, and/or wetland restoration projects.

a. Project Design Criteria

i. Design remedial actions to restore floodplain characteristics—elevation, width, gradient, length, and roughness—in a manner that closely mimics, to the extent possible, those that would naturally occur at that stream and valley type.

ii. To the extent possible, non-native fill material shall be removed from the floodplain to an upland site.

iii. Overburden or fill comprised of native materials, which originated from the project area, can be used to reshape the floodplain, placed in small mounds on the floodplain, used to fill anthropogenic holes, buried on site, and/or disposed into upland areas.

iv. For recreation relocation projects—such as campgrounds, horse corrals, ORV trails—move current facilities out of the riparian area or as far away from the stream as possible.

v. Consider de-compaction of soils and vegetation planting once overburden material is removed.

vi. Place barriers—boulders, fences, gates, etc.—outside of the bankfull width and across traffic routes to prevent ORV access into and across streams.

b. For work conducted on ORV roads and trails, follow relevant PDC in the Road and Trail Erosion Control and Decommissioning category.

8. Livestock Fencing, Stream Crossings and Off-Channel Livestock Watering Facilities projects will be implemented by constructing fences to exclude riparian grazing, providing controlled access for walkways that livestock use to transit across streams and through riparian areas, and reducing livestock use in riparian areas and stream channels by providing upslope water facilities. Such projects promote a balanced approach to livestock use in riparian areas, reducing livestock impacts to riparian soils and vegetation, streambanks, channel substrates, and water quality. Equipment such as excavators, bull dozers, dump trucks, front-end loaders, and similar equipment may be used to implement projects.

Livestock Fencing, Stream Crossings and Off-Channel Livestock Watering Facilities – Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	NA
Oregon State Marine Board Coordination	2
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	NA

ii. Excluded Projects – Fencing to create livestock handling facilities; pressure treated wood placed in or in contact with waterways or wetlands.

iii. Maximum Removal and Fill Limits for GP-42104-RF and RGP-4

a. One project is equal to one stream crossing or water gap.

b. No more than 40 cubic yards of material shall be placed within the OHWM to construct a water gap. Minimal channel scraping, smoothing, and removal may occur to prepare foundation for rock placement.

c. Only clean erosion resistant rock from an upland source is allowed. No broken concrete or asphalt may be used.

a. Livestock Stream Crossings – Project Design Criteria

i. The number of crossings will be minimized.

ii. Locate crossings or water gaps where streambanks are naturally low. Livestock crossings or water gaps must not be located in areas where compaction or other damage can occur to sensitive soils and vegetation (e.g., wetlands) due to congregating livestock.

iii. To the extent possible, crossings will not be placed in areas where ESA-listed species spawn or are suspected of spawning (e.g., pool tailouts where spawning may occur), or within 300-feet upstream of such areas.
iv. Existing access roads and stream crossings will be used whenever possible, unless new construction would result in less habitat disturbance and the old trail or crossing is retired.
v. Access roads or trails will be provided with a vegetative buffer that is adequate to avoid or minimize runoff of sediment and other pollutants to surface waters.
vi. Essential crossings will be designed and constructed or improved to handle reasonably foreseeable flood risks, including associated bedload and debris, and to prevent the diversion of stream flow out of the channel and down the trail if the crossing fails.
vii. If necessary, the streambank and approach lanes can be stabilized with native vegetation and/or angular rock to reduce chronic sedimentation. The stream crossing or water gap should be armored with sufficient sized rock (e.g., cobble-size rock) and use angular rock if natural substrate is not of adequate size.
viii. Livestock crossings will not create barriers to the passage of adult and juvenile fish. Whenever a culvert or bridge—including bridges constructed from flatbed railroad cars, boxcars, or truck flatbeds—is used to create the crossing, the structure width will tier to project design criteria listed for Stream Simulation Culvert and Bridge Projects under the Fish Passage Restoration category.
ix. Stream crossings and water gaps will be designed and constructed to a width of 10 to 15 feet in the upstream-downstream direction to minimize the time livestock will spend in the crossing or riparian area.
x. When using pressure treated lumber for fence posts, complete all cutting/drilling offsite (to the extent possible) so that treated wood chips and debris do not enter water or flood prone areas.
xi. Riparian fencing is not to be used to create livestock handling facilities or riparian pastures.

b. Off-channel livestock watering facilities – Project Design Criteria

i. The development of a spring is not allowed if the spring is occupied by ESA-listed species
ii. Water withdrawals must not dewater habitats or cause low stream flow conditions that could affect ESA-listed fish. Withdrawals may not exceed 10 percent of the available flow.
iii. Troughs or tanks fed from a stream or river must have an existing valid water right. Surface water intakes must be screened to meet the most recent version of NMFS fish screen criteria (*NOAA Fisheries Anadromous Salmonid Passage Facility Design* (NMFS 2011), located at: http://www.nwr.noaa.gov/Salmon-Hydropower/FERC/upload/Fish-Passage-Design.pdf), be self-cleaning, or regularly maintained by removing debris buildup. A responsible party will be designated to conduct regular inspection and as-needed maintenance to ensure pumps and screens are properly functioning.
iv. Place troughs far enough from a stream or surround with a protective surface to prevent mud and sediment delivery to the stream. Avoid steep slopes and areas where compaction or damage could occur to sensitive soils, slopes, or vegetation due to congregating livestock.

v. Ensure that each livestock water development has a float valve or similar device, a return flow system, a fenced overflow area, or similar means to minimize water withdrawal and potential runoff and erosion.
vi. Minimize removal of vegetation around springs, wet areas.
vii. When necessary, construct a fence around the spring development to prevent livestock damage.

9. Road and Trail Erosion Control and Decommissioning includes hydrologically closing or decommissioning roads and trails, including culvert removal in perennial and intermittent streams; removing, installing or upgrading cross-drainage culverts; upgrading culverts on non-fish-bearing steams; 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 soils; soil stabilization and tilling compacted surfaces to reestablish native vegetation. This category also includes programmatic/public notice road closures under USFS and BLM equivalent Travel and Access Management Plans. Such actions will target priority roads that contribute sediment to streams, block fish passage, and/or disrupt floodplain and riparian functions. Equipment such as excavators, bull dozers, dump trucks, front-end loaders, and similar equipment may be used to implement projects.

Road and Trail Erosion Control and Decommissioning – Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	2
Oregon State Marine Board Coordination	NA
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	11

ii. Excluded Projects – Routine road maintenance; new road construction not associated with road removal and relocation further away from water bodies or wetlands.

iii. Maximum Removal and Fill Limits for GP-42104-RF and RGP-4

a. One project is equal to all road treatments within a 6th HUC where the road-bed is altered with heavy equipment within the OHWM, wetlands, or above OHWM when high degree of connectivity occurs between road and stream.
b. No more than 2,500 cubic yards of material can be removed below the OHWM per mile. Material for removal would include road fill (bed and/or fill slopes) and bank-hardening structures, such as rock gabions and riprap. Such removal would be conducted to prepare for implementation of one or more restoration actions (e.g. Large Wood, Boulder, and Gravel placement, Streambank Stabilization, Riparian Planting) to restore stream channels, banks, and associate floodplains impacted by the road.
c. Disposal of excavated material from project sites shall not be placed in wetlands.
d. For culvert projects, follow removal and fill estimates described in the Fish Passage Culvert and Bridge Projects category.

a. Project Design Criteria

i. For road decommissioning and hydrologic closure projects within riparian areas, recontour the affected area to mimic natural floodplain contours and gradient to the extent possible.

ii. When obliterating or removing segments immediately adjacent to a stream, consider using sediment control barriers between the project and stream.

iii. Dispose of slide and waste material in stable sites out of the flood-prone area. Native material may be used to restore natural or near-natural contours.

iv. Drainage features used for stormproofing and treatment projects should be spaced as to hydrologically disconnect road surface runoff from stream channels. If grading and resurfacing is required, use gravel, bark, or other permeable materials for resurfacing.

v. Minimize disturbance of existing vegetation in ditches and at stream crossings.

vi. Conduct activities during dry-field conditions (generally May 15 to October 15) when the soil is more resistant to compaction and soil moisture is low.

vii. When removing a culvert from a first or second order, non-fishing bearing stream, project specialists shall determine if culvert removal should include stream isolation and rerouting in project design. Culvert removal on fish bearing streams shall adhere to the measures described in the Fish Passage Restoration activity category.

viii. For culvert removal projects, restore natural drainage patterns and channel morphology. Evaluate channel incision risk and construct in-channel grade control structures when necessary.

10. Juniper Tree Removal will be conducted in riparian areas and adjoining uplands to help restore plant species composition and structure that would occur under natural fire regimes. Juniper removal will occur in those areas where juniper have encroached into riparian areas as a result of fire exclusion, thereby replacing more desired riparian plant species such as willow, cottonwood, aspen, alder, sedge, and rush. This action will help restore composition and structure of desired riparian species, thereby improving ground cover and water infiltration into soils. Equipment may include chainsaws, pruning shears, winch machinery, feller-bunchers, and slash-buster.

Juniper Tree Removal – Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	NA
Oregon State Marine Board Coordination	2
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	NA

ii. Excluded Projects – Placement of juniper in a stream in a manner that significantly prohibits the stream from attaining its natural sinuosity.

iii. Maximum Removal and Fill Limits for GP-42104-RF and RGP-4

a. One project is equal to juniper thinning within a 6th HUC where felled junipers are placed in the stream channel and associated wetlands during a field season, regardless of project length.

a. Project Design Criteria

i. Remove juniper to natural stocking levels where BLM and USFS determines that juniper trees are expanding into neighboring plant communities to the detriment of other native riparian vegetation, soils, or stream flow.

ii. Do not cut old-growth juniper, which typically has several of the following features: sparse limbs, dead limbed or spiked-tops, deeply furrowed and fibrous bark, branches covered with bright-green arboreal lichens, noticeable decay of cambium layer at base of tree, and limited terminal leader growth in upper branches (Miller *et al*. 2005).

iii. Felled trees may be left in place, lower limbs may be cut and scattered, or all or part of the trees may be used for streambank or wetland restoration (e.g., manipulated as necessary to protect riparian or wetland shrubs from grazing by livestock or wildlife or otherwise restore ecological function in floodplain, riparian, and wetland habitats).

iv. Where appropriate, cut juniper may be placed into stream channels and floodplains to provide aquatic benefits. Juniper can be felled or placed into the

stream to promote channel aggradation as long as such actions do not obstruct fish movement and use of spawning gravels or increase width to depth ratios.

v. On steep and/or south-facing slopes, where ground vegetation is sparse, leave felled juniper in sufficient quantities to promote reestablishment of vegetation and prevent erosion.

vi. If seeding is a part of the action, consider whether seeding would be most appropriate before or after juniper treatment.

vii. When using feller-buncher and slash-buster equipment, operate equipment in a manner that minimizes soil compaction and disturbance to soils and native vegetation to the extent possible. Equipment exclusion areas (buffer area along stream channels) should be as wide as the feller-buncher or slash-buster arm.

11. Riparian Vegetation Planting includes the planting of native riparian species that would occur under natural disturbance regimes. Activities may include the following: planting conifers, deciduous trees and shrubs; placement of sedge and or rush mats; gathering and planting willow cuttings. The resulting benefits to the aquatic system can include desired levels of stream shade, bank stability, stream nutrients, large wood inputs, increased grasses, forbs, and shrubs, and reduced soil erosion. Equipment may include excavators, backhoes, dump trucks, power augers, chainsaws, and manual tools.

Riparian Vegetation Planting – Key Corps and ODSL Requirements:

i. Key Coordination Requirements and More

Key Requirements	Appendix II page #
Wyden Projects	1
ODFW District Office Coordination via notification	2
ODFW State Office Fish Passage Program Coordination	NA
Oregon State Marine Board Coordination	2
Tribal Coordination	3
Wild and Scenic River Documentation	3
Wetlands Identification	7
Fish Passage	8
ODFW Scientific Take Permit for Fish Capture and Release	NA

ii. Excluded Projects – Planting of non-native plant species.

iii. Maximum Removal and Fill Limits for GP-42104-RF and RGP-4

a. One project equals all planting activities that use heavy machinery to cross a stream or conduct work activities below the OHW in a 6th HUC during a field season, regardless of project length.

b. For the planting of mature willow along with sapling cottonwood, alder, and other riparian deciduous vegetation, no more than 500 cubic yards will be removed and subsequently refilled within the OHW/mile. Such material will be a result of excavation and re-filling of transplant holes or trenches.

c. When using sedge or rush mats, no more than 500 mats (3-foot by 6-foot by 1-foot) shall be used to stabilize individual banks. Mat placement can extend below the OHW but most will occur above the OHW. To minimize potential effects to wetlands, harvest of mats shall be distributed across the project area and not from a single location. At harvest sites, no more than 25 percent of the vegetation shall be removed and mats will be taken in such a manner as to leave undisturbed vegetation of equal size or greater between each excavated mat. Plant native sedge or rush plugs and/or seeds throughout excavated area to promote regrowth. Monitor for project related spread of noxious plants and apply eradication measures upon detection of such plants.

a. Project Design Criteria

i. Experienced silviculturists, botanists, ecologists, or associated technicians shall be involved in designing vegetation treatments.
ii. Species to be planted will be of the same species that naturally occur in the project area. Acquire native seed and/or plant sources as close to the watershed as possible.
iii. Tree and shrub species, willow cuttings, as well as sedge and rush mats to be used as transplant material shall come from outside the bankfull width, typically in terraces (abandoned flood plains), or where such plants are abundant.
iv. Sedge and rush mats should be sized to prevent their movement during high flow events.
v. Concentrate plantings above the bankfull elevation.
vi. Removal of native and non-native vegetation that will compete with plantings is permitted.
vii. Enclosure fencing to prevent utilization of plantings by deer, elk, and livestock is permitted.

Appendix V - Pre-Construction Notification
For a BLM/USFS RGP/GP Wyden Amendment Project

Oregon Department of State Lands **US Army Corps Of Engineers (Portland District)**

DSL Number	General Permit - 42104 RF	Corps Number	RGP – 4

Project Name	
Activity Types	

County									
Stream name					6th field HUC				
Township		Range		Section		Quarter/quarter		Tax Lot	

2. PROJECT CONTACT INFORMATION

Provide the contact information for the grantee responsible for undertaking the project through the Wyden Amendment.

Name		Affiliation			
Mailing address or PO Box					
Town/City		State		Zip code	
Phone number		Cell number Or alternate #		Fax number	
E-mail					

By signing below:

- (If acting on behalf of an organization) I certify that I have authority to act on the organization's behalf and to make the following commitments for the organization.
- I certify that the all activities being undertaken have been directly reviewed, funded (either directly or in-kind), and overseen by the USFS or BLM.
- I understand that activities conducted as part of a larger project, where the USFS or BLM are a partner, and which would otherwise fit the criteria, but are not directly reviewed, funded, and overseen by the USFS or BLM are not covered by this General Permit and will be applied for separately.
- I certify that I possess the authority (as the landowner, or with written permission from the landowner) to undertake the proposed activities and will be responsible for compliance.
- I authorize DSL and Corps of Engineers to access the project site for the purpose of verifying information contained in this form and determining compliance with the rules.
- I understand a copy of this notice and the general permit shall be kept on-site during construction.
- I certify that I have been given a copy of the general permit. I agree to comply with and fulfill all terms and conditions of this permit and understand I would be subject to enforcement action for any violation of this general permit, the Removal-Fill Law and administrative rules, or Section 404 of the Clean Water Act while performing the project. I further understand that if I violate any of those requirements, USFS or BLM will take action against me under the federal grant agreement.

Signature		Date	

2. USFS/BLM VERIFICATION				
Name			☐USFS/☐BLM Management Unit	
Phone number		E-mail		

By signing below:

- I certify the grantee identified above will be commencing the identified activities under the Wyden Amendment and that the activities will be, or have been, directly reviewed, funded (either directly or in-kind), and overseen by the USFS or BLM
- I certify that this project has undergone the same process and compliance as projects occurring on USFS/BLM lands.
- I understand that by proceeding under this General Permit the USFS and/or BLM are responsible for ensuring that all projects are carried out in compliance with the criteria and conditions of this permit, including those implemented through the Wyden Amendment, under this General Permit.
- I understand that if DSL/Corps inform the USFS/BLM in writing that a grantee has violated the terms of this General Permit (or the Removal-Fill Law) that the USFS and/or BLM has agreed to promptly invoke any/all mechanisms necessary to bring the grantee into compliance with the terms and conditions of this permit.

Signature		Date	

CITY/COUNTY PLANNING DEPARTMENT AFFIDAVIT.
After completing the blocks above and before submitting this notification to DSL take it to the local planning department for signature.

An application has been filed for local approvals.	☐NO ☐YES ☐ NOT REQUIRED

I have reviewed the project outlined in this application and have determined that:

☐	The proposed action or activity does not require a local land use approval or compatibility determination
☐	The proposed action or activity is compatible with the affected local government's comprehensive plan.
☐	The compatibility of the proposed action or activity with the affected local government's comprehensive plan cannot be determined until the necessary local land use approval(s) have been issued. ☐Conditional Use Approval ☐Development Permit ☐Flood plain/floodway alteration or no-rise evaluation ☐Other (please identify) _____
☐	The proposed action or activity is not compatible with the affected local government's comprehensive plan, consistency requires: a plan amendment, zone Change, or other review. **Please note: If this box is checked this project may not qualify for this General Permit. Please contact DSL for permitting options.**
☐	The proposed action or activity is not compatible with the affected local government's comprehensive plan. **Please note: If this box is checked this project may not qualify for this General Permit. Please contact DSL for permitting options.**

I am providing the following information to explain or clarify the above determination:

Do any riparian and/or wetland ordinances, planning goal overlays, or sub-plans apply to this project?

☐ NO	☐ YES - Specify ordinance or requirements:

The project location is:	☐ Inside city limits ☐ Inside UGB ☐ Outside UGB
Is Zoning of project site EFU?	☐YES ☐ NO
Is there a proposed change to current zoning?	☐ NO ☐ YES**,** proposed zone change to

Planning Official Signature:		**Title:**			
Print Name:		**Jurisdiction:**	☐ County ☐ City	Date:	

If necessary, depending upon city/county agreement on jurisdiction (i.e. outside city limits but within UGB):

Planning Official Signature:		**Title:**			
Print Name:		**Jurisdiction:**	☐ County ☐ City	Date:	

ADDITIONAL INFORMATION THAT MAY BE NECESSARY FOR COUNTY SIGN OFF

The following information may be helpful to take when getting county sign off. Requirements vary by county please contact them for specific requirements. This information does not need to be submitted to DSL/Corps as part of this notification.

Project Description: Description of the specific actions to implement this project construction equipment and methods, description of types, sources, and volumes of material.

Location map/Tax map with the project location and affected property identified.

Drawings of proposed project, including activities proposed within wetlands and waterways. Be sure to include appropriate labels (scale bar, legend, north arrow, etc.)

SEND ONE SIGNED COPY OF THIS NOTICE TO EACH AGENCY:

DSL - West of the Cascades: State of Oregon Department of State Lands 775 Summer Street, Suite 100 Salem, OR 97301-1279 503-986-5200	or	DSL - East of the Cascades: State of Oregon Department of State Lands 1645 NE Forbes Road, Suite 112 Bend, Oregon 97701 541-388-6112	and	US Army Corps of Engineers District Engineer ATTN: CENWP-OD-GP PO Box 2946 Portland, OR 97208-2946 503-808-4373

http://www.oregonstatelands.us/ http://www.nwp.usace.army.mil/op/g/home.asp

Oregon
Kate Brown, Governor

Department of Environmental Quality
Northwest Region Portland Office/Water Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232-4100
(503) 229-5263
FAX (503) 229-6957
TTY 711

July 24, 2020

USDI Bureau of Land Management
Oregon Office
Attn: Scott Lightcap
1220 SW 3rd Avenue, PO Box 2965
Portland, OR 97208

USDA Forest Service, Region 6
Pacific Northwest Region
Attn: William Brignon
1220 SW 3rd Avenue, PO Box 3623
Portland, OR 97208

RE: 2007-00999-4; Regional General Permit 4, Aquatic Habitat Restoration in Oregon - 401 Water Quality Certification

Dear Mr. Lightcap and Mr. Brignon:

The Department of Environmental Quality (DEQ) has reviewed the U.S. Army Corps of Engineers Permit (USACE) application #2007-00999-4 (Department of State Lands [DSL] 42104-GP), pursuant to a request for a Clean Water Act Section 401 Water Quality Certification (WQC) received on February 14, 2020. DEQ's 401 WQC public comment opportunity was circulated with the USACE public notice, and DEQ received no water quality comments.

The Bureau of Land Management (BLM) and the USDA Forest Service (USFS) (hereafter referred to as the applicants), have requested reissuance of a Regional General Permit which authorizes the applicants to conduct aquatic habitat restoration activities within the state of Oregon. Projects would be located on USFS or BLM administered lands within the state of Oregon. Projects may also occur on non-federal lands for projects that directly assist the USFS and/or BLM in achieving aquatic restoration, and are funded in part by these agencies.

Project Description: The applicants propose to implement projects under 11 aquatic restoration activity categories listed below that will be conducted below the ordinary high water mark (OHWM) of waters of the United States. These restoration activities will maintain, enhance, and/or restore watershed functions to benefit fish species, other aquatic organisms, water quality, riparian areas, floodplains, and wetlands. The proposed activities are commonly implemented on BLM and USFS administered lands, predictable as to their effects, and are consistent with broad scale aquatic conservation strategies and the best available science. The 11 categories are as follows:

1. Fish Passage Restoration (Stream Simulation Culvert and Bridge Projects, Headcut and Grade Stabilization)

2. Large Wood, Boulder, and Gravel Placement (Large Wood and Boulder Projects, Porous Boulder Weirs and Veins, Gravel Augmentation)
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. Juniper Removal
11. Riparian Vegetative Planting

The BLM and USFS propose to conduct no more than 170 projects each year.

Status of Affected Waters of the State: Activities proposed could affect any water of the state that are located on USFS or BLM administered lands within the state of Oregon, or that occur on non-federal lands for projects that directly assist the USFS and/or BLM in achieving aquatic restoration, and are funded in part by these agencies.

DEQ has designated the North Fork Smith River as an Outstanding Waters (340-041-0004). High Quality Waters include the Clackamas River, the North Santiam River, and the McKenzie River (above river mile 15), as described in DEQ's Three Basin Rule (OAR 340-041-0350) and all waterbodies that are *not* listed for any parameters per the Clean Water Act Section 303(d) list of impaired waterbodies. Water Quality Limited Waters include all waterbodies listed as impaired, including those for which a Total Maximum Daily Load (TMDL) has been developed to address impairments, in DEQ's most current approved Water Quality Assessment Integrated Report (available at: https://www.oregon.gov/deq/wq/Pages/2012-Integrated-Report.aspx, please check for updates to this report).

Beneficial Uses: Both Oregon Law and the federal Clean Water Act are structured to require that water quality be protected and maintained so that existing designated and potential beneficial uses of public waters are not impaired or precluded by degraded water quality. Designated beneficial uses of Oregon's waters are available at: https://www.oregon.gov/deq/wq/Pages/WQ-Standards-Uses.aspx. In general, it is assumed that in achieving a water quality standard that fully protects the most sensitive beneficial use, then all beneficial uses are fully protected.

Certification Decision: Based on the information provided by the applicants and the USACE, DEQ is reasonably assured that implementation of the project will be consistent with applicable provisions of Sections 301, 302, 303, 306, and 307 of the federal Clean Water Act, state water quality standards set forth in Oregon Administrative Rules Chapter 340 Division 41, and other appropriate requirements of state law, provided the following conditions are incorporated into the USACE permit and strictly adhered to by the applicants.

401 CERTIFICATION CONDITIONS

1. **Responsible parties:** This 401 WQC applies to the applicants. The applicants are responsible for the work of contractors and subcontractors, as well as any other entity that performs work related to this Water Quality Certification.

2. **Work Authorized:** Work authorized by this Order is limited to the work described in the Joint Permit Application signed on February 2, 2020 and additional application materials (hereafter "the permit application materials"), unless otherwise authorized by DEQ. If the project is operated in a manner that is not consistent with the project description contained in the permit application materials, the applicants are not in compliance with this Order and may be subject to enforcement.

3. **Duration of Certification:** This 401 WQC for impacts to waters, include dredge and fill activities, is valid until closure of the in-water timing window of the second year after issuance of the USACE permit. A new 401 WQC must be obtained prior to any substantial modification of the USACE permit.

4. **401 WQC on Site:** A copy of this 401 Water Quality Certification letter must be kept on the job site and readily available for reference by the applicants, contractors and subcontractors, as well as by DEQ, US Army Corps of Engineers, National Marine Fisheries Service, Oregon Department of Fish and Wildlife and other state and local government inspectors.

5. **Project Changes:** DEQ may modify or revoke this certification, in accordance with Oregon Administrative Rules 340-048-0050, if the project changes or project activities are having an adverse impact on state water quality or beneficial uses, or if the applicants violate any of the conditions of this certification.

6. **Access:** The applicants contractors must allow DEQ access to the project site with prior notice, including staging areas, and mitigation sites to monitor compliance with these certification conditions, including:

    a. Access to any records, logs, and reports that must be kept under the conditions of this certification;

    b. To inspect best management practices, monitoring or equipment or methods; and

    c. To collect samples or monitor any discharge of pollutants.

7. Failure of any person or entity to comply with this order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce its terms.

8. **Land Use Compatibility Statement:** In accordance with OAR 340-048-0020(2) (i), each project must submit findings prepared by the local land use jurisdiction that demonstrates the activity's compliance with the local comprehensive plan. Such findings can be submitted in one the following forms:

    a. Block 11 of the USACE/DSL/DEQ Joint Permit Application, signed by the appropriate local official and indicating:
        i. "This project is not regulated by the comprehensive plan and land use regulations", or
        ii. "This project is consistent with the comprehensive plan and land use regulations", or

iii. "This project is consistent with the comprehensive plan and land use regulations with the following", and indicated which approval is still needed.

b. DEQ's Land Use Compatibility Statement form (https://www.oregon.gov/deq/FilterDocs/lucs.pdf), signed my the appropriate local official and indicating one of the four "yes" responses in block 2E, with accompanying local findings and approvals, as warranted.

9. **Excluded Projects and Maximum Removal Fill limits:** All project design criteria, including excluded projects, and maximum removal and fill limits must be followed as outlined in Appendix II, Section E (pgs 14-40) of the Joint Permit Application.

10. **Fish Protection/ Oregon Department of Fish and Wildlife Timing:** The applicant must perform in-water work only within the Oregon Department of Fish and Wildlife preferred time window as specified in the *Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources* (please follow the link: https://www.dfw.state.or.us/lands/inwater/Oregon_Guidelines_for_Timing_of_%20InWater_Work2008.pdf) or as authorized otherwise under a Department of State Lands removal/fill permit. Exceptions to the timing window must be recommended by Oregon Department of Fish and Wildlife, US Fish and Wildlife Service, and/or the National Marine Fisheries Services as appropriate.

11. **Reporting Requirments:** The applicants must provide a copy of the *Project Notification Form* to DEQ at least 60 days prior to project start date, as outlined in Appedix I of the Joint Permit Application. The applicants must also provide DEQ a copy of the annual *Project Completion Report* as outlined in Appendix II of the Joint Permit Application.

12. **Aquatic Life Movements:** Any activity that may disrupt the movement of aquatic life living in the water body, including those species that normally migrate through the area, is prohibited. The applicant must provide unobstructed fish passage at all times during any authorized activity. Exceptions must be reviewed and recommended by Oregon Department of Fish Wildlife, US Fish and Wildlife Service and/or the National Marine Fisheries Service as appropriate.

13. **Isolation of in-water work areas:** Isolation of in-water work areas from the active flowing stream must be accomplished to the maximum extent practicable. Methods of isolation include, but are not limited to: timing work at low water so as to effectively work in the dry or using silt curtains, cofferdams, inflatable bags, geo blocks, sandbags, sheet pilings, or similar materials.

14. **Cessation of Work:** The applicant must cease project operations under high-flow conditions that will result in inundation of the project area. Only efforts to avoid or minimize turbidity or other resource damage as a result of inundation of the exposed project area are allowed during high-flow conditions.

15. **Turbidity:** Applicants must implement all reasonably availably technological controls and management practices to meet the standard in rule of no more than a 10% increase in project caused turbidity above background levels. However, if all reasonably available controls and practices are implemented by the applicants, turbidity exceedances of more

than 10% above background are allowed for limited times depending on the severity of the increase, as specified in this condition.

a. **Monitoring Requirements:** Turbidity monitoring must be conducted and recorded as described below. Monitoring must occur at two-hour intervals each day when in-water work is being conducted. An appropriately and regularly calibrated turbidimeter is required, unless it is determined that sediments contain less than 20% fine material (silt, clay). In this case, visual gauging is acceptable, however, *turbidity that is visible over background is considered an exceedance of the standard*. Required monitoring steps include:

i. **Representative Background Point**: The applicant must take and record a turbidity measurement every two hours during in-water work at an undisturbed area 100 feet up-current from the in-water disturbance, in order to establish background turbidity levels. The background turbidity, location, date, tidal stage (if applicable) and time must be recorded immediately prior to monitoring down-current at the compliance point described below.

ii. **Compliance Point**: The applicant must monitor every two hours location downcurrent from the disturbing activity, at approximately mid-depth, within any visible plume, and at the distance that corresponds to the size of the waterbody where work is taking place as listed in the table below. The turbidity, location, date, tidal stage (if applicable) and time must be recorded for each measurement.

WETTED STREAM WIDTH	COMPLIANCE DISTANCE
Up to 30 feet	50 feet
>30 feet to 100 feet	100 feet
>100 feet to 200	200 feet
>200 feet	300 feet
LAKE, POND, RESERVOIR	Lesser of 100 feet or maximum surface dimension

iii. **Compliance**: The applicant must compare turbidity monitoring results from the compliance points to the representative background levels taken during each two hour monitoring interval. Pursuant to Oregon Administrative Rules 340-041-0036, short-term exceedances are allowed as followed:

MONITORING WITH A TURBIDIMETER		
ALLOWABLE EXCEEDANCE TURBIDITY LEVEL	ACTION REQUIRED AT 1ST MONITORING INTERVAL	ACTION REQUIRED AT 2ND MONITORING INTERVAL
0 to 5 NTU above background	Continue to monitor every 2 hours	Continue to monitor every 2 hours
6 to 29 NTU above background	Modify controls & continue to monitor every 2 hours	Stop work after 4 hours at 6-29 NTU above background
30 to 49 NTU above background	Modify controls & continue to monitor every 2 hours	Stop work after 2 confirmed hours at 30-49 NTU above background
50 NTU or more above background	Stop work	Stop work

VISUAL MONITORING*		
No plume observed	Continue to monitor every 4 hours	Continue to monitor every 4 hours
Plume observed within compliance distance	Modify controls & continue to monitor every 4 hours	Stop work after 8 hours with an observed plume within compliance distance
Plume observed beyond compliance distance	Stop work	Stop work
**Note: Monitoring visually may require stopping work as soon as the visual plume exceeds the waterbody specific compliance distance. However, using a turbidimeter can allow work to continue based on a more precise determination of the severity of turbidity increase over time.*		

iv. **Reporting:**
1. Record all turbidity monitoring required by subsections (a) and (b) above in daily logs
2. Keep records on file for the duration of the permit cycle Record
3. A narrative must be prepared discussing all exceedances with subsequent monitoring, actions taken, and the effectiveness of the actions. Applicant must make available copies of daily logs for turbidity monitoring to regulatory agencies including DEQ, USACE, NMFS, USFWS, and ODFW upon request.

v. If turbidity monitoring cannot be conducted due to dry conditions, the applicant must provide photo documentation with a date and time stamp.

b. **Turbidity Control Measures** - The Applicants must implement all reasonably available controls and practices to minimize turbidity during in-water work, which may include, but are not limited to:

i. Sequence/Phasing of work – The applicant must schedule work activities to minimize in-water disturbance and duration of in-water disturbances.

ii. Bucket control - All in-stream digging passes by excavation machinery and placement of fill in-stream using a bucket must be completed to minimize turbidity. All practical techniques such as employing an

experienced equipment operator, not dumping partial or full buckets of material back into the wetted stream, adjusting the volume, speed, or both of the load, or using a closed-lipped environmental bucket must be implemented.

iii. The applicant must limit the number and location of stream-crossing events. Establish temporary crossing sites as necessary at the least sensitive areas and amend these crossing sites with clean gravel or other temporary methods as appropriate, to discharge sediments to the waterbody.

iv. Excavated material must be placed so that it is isolated from the water's edge or wetlands, and not placed where it could re-enter waters of the state uncontrolled.

v. Containment measures such as silt curtains, geotextile fabric, and silt fences must be in place and properly maintained in order to minimize in-stream sediment suspension and resulting turbidity.

16. **Erosion Control**: During construction, erosion control measures must be implemented to prevent soil from reaching waters of the state. The applicant is required to develop and implement an effective erosion and sediment control plan. Refer to DEQ's Oregon Sediment and Erosion Control Manual, January, 2013 at: https://www.oregon.gov/deq/FilterPermitsDocs/ErosionSedimentControl.pdf **Any project that disturbs more than one acre is required to obtain a National Pollutant Discharge Elimination System 1200-C construction stormwater general permit from DEQ.** Contact DEQ for more information. Contact information can be found at: https://www.oregon.gov/deq/wq/wqpermits/Pages/Stormwater-Construction.aspx

In addition, the applicant must:

a. Maintain an adequate supply of materials necessary to control erosion at the construction site

b. Prohibit erosion of stockpiles. Deploy compost berms, impervious materials, or other effective methods during rain or when stockpiles are not moved or reshaped for more than 48 hours.

c. Inspect erosion control measures daily and maintain erosion control measures as often as necessary to ensure the continued effectiveness of measures. Erosion control measures must remain in place until all exposed soil is stabilized;

i. If monitoring or inspection shows that the erosion and sediment controls are ineffective, the applicant must act immediately to make repairs, install replacements, or install additional controls as necessary.

ii. If sediment has reached a third of the exposed height of a sediment or erosion control, the applicant must remove the sediment to its original contour.

d. Use removable pads or mats to prevent soil compaction at all construction access points through, and staging areas in, riparian or wetland areas to prevent soil compaction, unless otherwise authorized by DEQ.

e. Flag or fence off wetlands not specifically authorized to be impacted to protect from disturbance and/or erosion.

f. Place dredged or other excavated material on upland areas with stable slopes to prevent materials from eroding back into waterways or wetlands.

g. Place clean aggregate at all construction entrances, and utilize other best management practices, including, but not limited to truck or wheel washes, when earth-moving equipment is leaving the site and traveling on paved surfaces. Vehicles are prohibited from tracking sediment off site.

h. This certification does not authorize the placement of best management practices into waters of the state unless specifically outlined in the application and authorized by DEQ.

i. Upon completion of construction activities, stormwater facilities must be inspected and adequately prepared for post-construction stormwater treatment.

j. Upon completion of construction activities, stormwater facilities must be tested to ensure they are working and adequately prepared for post-construction stormwater treatment.

17. **Deleterious waste materials**: The applicant is prohibited from placing biologically harmful materials and construction debris where they could enter waters of the state, including wetlands (wetlands are waters of the state). This includes, but is not limited to: petroleum products; chemicals; cement cured less than 24 hours; welding slag and grindings; concrete saw cutting by-products; sandblasted materials; chipped paint; tires; wire; steel posts; asphalt; and waste concrete.

    The applicant must:

    a. Cure concrete, cement, or grout for at least 24 hours before any contact with flowing waters;

    b. Use only clean fill, free of waste and polluted substances;

    c. Employ all practicable controls to prevent discharges of spills of harmful materials to surface or groundwater;

    d. Maintain at the project construction site, and deploy as necessary, an adequate supply of materials needed to contain deleterious materials during a weather event;

    e. Remove all foreign materials, refuse, and waste from the project area; and

    f. Employ general good housekeeping practices at all times.

18. **Spill Prevention:** The applicant must have a spill prevention and control plan. The applicant must fuel, operate, maintain and store vehicles and equipment, and must store construction materials, in areas that will not disturb native habitat directly or result in potential discharges. In general, reasonable precautions and controls must be used to prevent any discharges of petroleum products or other harmful or toxic materials from

entering the water as a result of any in-water activities. In addition, the following specific requirements apply:

a. Vehicle and motorized equipment staging, cleaning, maintenance, refueling, and fuel storage must take place in a vehicle staging area 150 feet or more from any waters of the state. DEQ may approve in writing exceptions to this distance if all practical prevention measures are employed and this distance is not possible because of any of the following site conditions:

   i. Physical constraints that make this distance not feasible (e.g., steep slopes, rock outcroppings)

   ii. Natural resource features would be degraded as a result of this setback

   iii. Equal or greater spill containment and effect avoidance is provided even if staging area is less than 150 feet away from waters of the state.

b. If staging areas are within 150 feet of any waters of the state, as allowed under subsection (a)(iii) of this condition, full containment of potential contaminants must be provided to prevent soil and water contamination, as appropriate.

c. All vehicles operated within 150 feet of any waters of the state must be inspected daily for fluid leaks before leaving the vehicle staging area. Any leaks detected in the vehicle-staging area must be repaired before the vehicle resumes operation.

d. Before operations begin and as often as necessary during operation, equipment must be steam cleaned (or undergo an approved equivalent cleaning) until all visible oil, grease, mud, and other visible contaminants are removed if the equipment will be used below the bank of a waterbody.

e. All stationary power equipment (e.g., generators, cranes, stationary drilling equipment) operated within 150 feet of any waters of the state must be covered by an absorbent mat to prevent leaks, unless other suitable containment is provided to prevent potential spills from entering any waters of the state.

f. An adequate supply of materials (such as straw matting/bales, geotextiles, booms, diapers, and other absorbent materials) needed to contain spills must be maintained at the project construction site and deployed as necessary.

g. All equipment operated in state waters must use bio-degradable hydraulic fluid.

h. A maintenance log documenting equipment maintenance inspections and actions must be kept on-site and available upon request.

19. **Spill & Incident Reporting:**

a. In the event that petroleum products, chemicals, or any other harmful materials are discharged into state waters, or onto land with a potential to enter state waters, the applicant must promptly report the discharge to the Oregon Emergency Response System (800-452-0311). The applicant must immediately begin containment and complete cleanup as soon as possible.

b. If the project operations cause a water quality problem which results in distressed or dying fish, the applicant must immediately:

i. Cease operations;

ii. Take appropriate corrective measures to prevent further environmental damage;

iii. Note condition of fish (dead, dying, decaying, erratic, or unusual behavior);

iv. Note the number, species, and size of fish in each condition;

v. Note the location of fish relative to operations;

vi. Note the presence of any apparently healthy fish in the area at the same time;

vii. Collect fish specimens and water samples; and

viii. Notify DEQ, Oregon Department of Fish and Wildlife, National Marine Fisheries Service and U.S. Fish and Wildlife Service as appropriate (reporting of listed fish mortality to National Marine Fisheries Service is required).

20. **Vegetation Protection and Restoration:**

a. The applicant must protect riparian, wetland, and shoreline vegetation in the authorized project area (as defined in the permit application materials) from disturbance through one or more of the following:

i. Minimization of project and impact footprint

ii. Designation of staging areas and access points in open, upland areas

iii. Fencing and other barriers demarcating construction areas

iv. Use of alternative equipment (e.g., spider hoe or crane)

b. If authorized work results in vegetative disturbance and the disturbance has not been accounted for in planned mitigation actions, the applicant must successfully reestablish vegetation to a degree of function equivalent or better than before the disturbance. The standard for success is 80 percent cover for native plant species. The vegetation must be reestablished by the completion of authorized work and include:

i. Restoring damaged streambanks to a natural slope, pattern, and profile suitable for establishment of permanent woody vegetation, unless precluded by pre-project conditions (e.g., a natural rock wall)

ii. Replanting or reseeding each area requiring revegetation before the end of the first planting season following construction

iii. Planting disturbed areas with native plants and trees in all cases except where the use of non-native plant materials may be essential for erosion control

iv. The use of invasive species to re-establish vegetation is prohibited

v. Herbicides, pesticides and fertilizers must be applied per manufacturer's instructions, and only if necessary for vegetation establishment. If chemical treatment is necessary, the applicant is responsible for ensuring that pesticide application laws, including with the National Pollutant Discharge Eliminations System 2300-A general permit are met. Please review the information on the following website for more information: https://www.oregon.gov/deq/wq/wqpermits/Pages/Pesticide.aspx

Additionally:

1. Unless otherwise approved in writing by DEQ, applying surface fertilizer within stormwater treatment facilities or within 50 feet of any stream channel is prohibited.

2. Other than spot application to cut stems, no herbicides are allowed within stormwater treatment facilites or within 150 feet of waters of the state. Mechanical, hand, or other methods may be used to control weeds and unwanted vegetation within stormwater treatment facilites or within 150 feet of waters of the state; and

3. No pesticides may be used within stormwater treatment facilities or within 150 feet of waters of the state.

vi. Install wildlife-friendly fencing as necessary to prevent access to revegetated sites by livestock or unauthorized persons

vii. Minimize soil compaction, especially in areas that are designated for replanting. If soils are compacted, decompact staging areas and work construction areas prior to replanting. Leave topsoil when possible. Chip materials from clear and grub operation and spread on soil surface, unless cleared areas contained invasive species.

viii. Provide a buffer zone, where practicable (minimum width of 50 feet recommended), in order to protect existing riparian areas and existing and mitigation wetlands.

21. **Previously Contaminated Soil and Groundwater:** If any contaminated soil or groundwater is encountered, it must be handled and disposed of in accordance with the soil and groundwater management plan for the site, as well as local, state and federal regulations. The applicant must notify the Environmental Cleanup Section of DEQ at 800-452-4011 Ex.6258.

If either of the applicants is dissatisfied with the conditions contained in this certification, a contested case hearing may be requested in accordance with OAR 340-048-0045. Such

request must be made in writing to the DEQ Office of Compliance and Enforcement at 700 NE Multnomah Ave, Portland Oregon 97232 within 20 days of the mailing of this certification.

The DEQ hereby certifies this project in accordance with the Clean Water Act and state rules, with the above conditions. If you have any questions, please contact Sara Slater at slater.sara@deq.state.or.us, by phone at 541-633-2007 or at the address on this letterhead.

Sincerely,

for Steve Mrazik
Water Quality Manager
Northwest Region

cc: Danielle Erb, USACE
Bethany Harrington, DSL
Deanna Caracciolo, DLCD

Oregon
Kate Brown, Governor

Oregon Coastal Management Program
Department of Land Conservation and Development
635 Capitol Street, Suite 150
Salem, Oregon 97301-2540
Phone (503) 373-0050
FAX (503) 378-6033
http://www.oregon.gov/LCD/OCMP

May 5, 2020

Judy Linton
Regulatory Project Manager, Special Studies
USACE, Portland District, Regulatory Branch
P.O. Box 2946
Portland, Oregon 97208-2946

Project: **Reissuance of Regional General Permit #4 (NWP-2007-999-4):** Aquatic habitat restoration activities conducted by U.S. Forest Service and U.S. Bureau of Land Management
Agency: **US Army Corps of Engineers**
Location: **Statewide, Oregon**
Decision: **Concurrence**, no conditions

Dear Ms. Judy Linton:

Thank you for contacting the Oregon Coastal Management Program (OCMP-DLCD) regarding the U.S. Army Corps of Engineers (Corps) proposed Regional General Permit #4 (RGP-4) Reissuance. As a Federal agency activity, the proposed action is subject to consistency review pursuant to Section 307 of the Coastal Zone Management Act (CZMA) and attendant regulations of 15 CFR Part 930, Subpart C.

The Department of Land Conservation and Development (DLCD) is the state's designated coastal zone management agency, and the Oregon Coastal Management Program (OCMP-DLCD) conducts consistency reviews to ensure that federal activities affecting any coastal use or resource are consistent with the enforceable policies of the coastal program (Program). Federal activities include direct federal actions as well as federal projects that require federal licenses or permits. To be consistent with the enforceable policies of the OCMP, federal activities must be consistent with:

1) Oregon's Statewide Planning Goals;
2) Applicable acknowledged city or county comprehensive plan; and
3) Selected state authorities (e.g. those governing removal-fill, water quality, and fish & wildlife protections).

Proposed Project & Federal Consistency Review

The Oregon Department of Land Conservation and Development (DLCD) has reviewed the U.S. Army Corps of Engineers (Corps) notice and associated materials regarding the reissuance of RGP-4 authorizing the U.S. Forest Service and U.S. Bureau of Land Management to conduct aquatic habitat restoration activities within the state of Oregon.

The Corps issued the current RGP-4 in June, 2015, and proposes to reissue RGP-4 to expedite the authorization of restoration activities that will maintain, enhance, and/or restore watershed functions.

Projects authorized by the proposed RGP-4 will fall into the same 11 categories authorized in 2015:

> *Fish passage restoration; large wood, boulder, and gravel placement; legacy structure removal; off- and side-channel habitat restoration; streambank restoration; setback or removal of existing berms, dikes, and levees along floodplains, freshwater deltas, and estuaries; reduction/relocation of recreation impacts; livestock fencing, stream crossings, and off-channel livestock watering; road and trail erosion control and decommissioning; juniper removal; and riparian vegetative planting*.

The RGP-4 will expedite the authorization of recurring activities that are similar in nature and have minor individual and cumulative adverse impacts on the aquatic environment. While the proposed RGP-4 covers restoration projects throughout the state of Oregon, DLCD's federal consistency concurrence is necessary only for those projects occurring in Oregon's coastal zone and those projects that affect coastal uses or resources in Oregon.

In both 2009 and 2014, DLCD concurred that the activities authorized by the current RGP-4 were consistent to the maximum extent practicable with the Oregon Coastal Management Program (OCMP). The Corps has determined that there will be no changes to the activities authorized by the proposed RGP-4 from the 2015 reissuance, and therefor would not affect any coastal use or resource substantially different than originally described.

Although the project has not yet received Section 401 Water Quality Certification, an enforceable policy of the Program, the Department of Environmental Quality has agreed that the project has met the requirements of the enforceable policy to the maximum extent practicable for the purposes of federal consistency, given limitations from procedural timelines. This consistency concurrence does not change the requirement under federal law for the project to receive applicable Section 401 authorization(s).

This reissuance is intended to give regulating agencies a greater opportunity to evaluate and gather comment on potential modifications to future RGP-4, which would be reviewed for reauthorization in ~2025. At this time, reauthorization of a modified RGP-4 will require a Federal Consistency Determination as outlined by 15 CFR 930 Subpart C. Alternatively, applicable federal agencies and DLCD may agree upon an Environmentally Beneficial Activities Exemption as outlined by 15 CFR 930.33(a)(4) if modifications are conducive.

Consistency Decision

DLCD concurs with the Corps determination that the proposed project remains consistent to the maximum extent practicable with the enforceable policies of the OCMP, and will not require further review of the proposed RGP-4. DLCD requests that notification letters for projects authorized under RGP-4 be send to coast.permits@state.or.us for required record keeping.

Availability of Mediation

In accordance with federal regulations, in the event the Corps has a serious disagreement with the OCMP-DLCD's coastal zone decision, the Corps may request mediation services provided by the Office for Coastal Management or the Secretary of the U.S. Department of Commerce, as provided for in 15 CFR Part 930 Subpart G. The OCMP-DLCD or the Governor of Oregon may also request such mediation services.

If you have any questions or comments regarding this concurrence or the consistency review process, please contact me at 503-934-0026 or by e-mail at: deanna.caracciolo@state.or.us.

Sincerely,

Deanna Caracciolo
Coastal State-Federal Relations Coordinator

CC:

USFS (William.Brignon@usda.gov)
BLM (Slightca@blm.gov)

Oregon
Theodore R. Kulongoski, Governor

Ocean and Coastal Management Program
Department of Land Conservation and Development
635 Capitol Street, Suite 150
Salem, Oregon 97301-2540
Phone (503) 373-0050
FAX (503) 378-6033
www.oregon.gov/LCD/OCMP

June 9, 2009

Mr. Al Doelker
Bureau of Land Management
333 SW First Avenue
PO Box 2965
Portland, OR 97208

Mr. Scott Peets
US Forest Service
333 SW First Avenue
PO Box 3623
Portland, OR 97208

Action: **Projects authorized under NWP-2007-999**
Agency: **US Forest Service (USFS) and Bureau of Land Management (BLM)**
Location: **Federal and non-Federal lands in Oregon**
Description: **Aquatic restoration projects, as defined by NWP-2007-999**

Dear Mr. Doelker and Mr. Peets:

The Department of Land Conservation and Development (DLCD) has considered your consistency determination (ref 15 CFR 930.34) for the above referenced proposed activities with respect to the Oregon Coastal Management Program (OCMP). To be consistent with the OCMP, the proposed activities must be consistent to the maximum extent practicable with: 1) the statewide planning goals; 2) the applicable acknowledged city or county comprehensive plan; and 3) selected state authorities (e.g. those governing removal-fill, water quality, and fish & wildlife protections).

Findings

- The BLM and the USFS have not submitted a formal consistency determination. This action has been discussed in conference calls between the USFS, BLM, Corps of Engineers, and the OCMP.
- The BLM and the USFS are not asserting any provision of federal law which would prohibit full consistency with the OCMP. (ref 15 CFR 930.32(a)(2))
- The USFS and BLM intend all project completed under this Regional General Permit to be beneficial to the aquatic and terrestrial environments.

- Projects completed under this Regional General Permit will occur on and off USFS and BLM land. Projects occurring on USFS and BLM lands are not in the Oregon Coastal Zone. (ref 15 CFR 930.11(e))
- Projects completed under this Regional General Permit may or may not have reasonably foreseeable direct and indirect effects on any coastal use or resource. (ref 15 CFR 930.33(a)(1))
- The DLCD has accepted the Joint Permit Application for NWP-2007-999 as a complete description of the proposed activities for the purposes of a consistency certification under 15 CFR 930.34.
- The statewide planning goals do not apply directly in this case. The goals are implemented through the applicable local comprehensive plans and ordinances.
- The Department of State Lands has issued permit 42104 for the proposed activities.
- Qualifying projects will use an already issued Department of the Army general permit that includes Endangered Species Act (ESA) and Essential Fish Habitat (EFH) consultation, and State clean water certification.

The authorization by the Corps of Engineers, permit NWP-2007-999, is not subject to consistency review (15 CFR 930.52). This consistency decision has been made pursuant to 15 CFR 930, Subpart C, and shall apply to work performed by or on behalf of the US Forest Service or the Bureau of Land Management. (ref 15 CFR 930.31(a)) For the purposes of Subpart C, authorized activities, including projects funded through the Wyden Amendment, are considered federal "development projects." (ref 15 CFR 930.31(b))

Situations for the Regional General Permit

From the perspective of the Oregon Coastal Management Program (OCMP), the projects contemplated by the USFS and BLM may occur in four distinct situations. First, the project may occur on federal lands and have no reasonably foreseeable direct and indirect effects on any coastal use or resource. Second, projects may occur on federal lands but include reasonably foreseeable direct and indirect effects on a coastal use or resource. Finally, projects may occur within the Oregon Coastal Zone. Those projects may be conducted by federal or non-federal actors.

Projects occurring on federal lands that *do not* have reasonably foreseeable direct and indirect effects on any coastal use or resource in the coastal zone *do not* fall under the authority of the OCMP. (15 CFR 930.33(a)(2))

Projects which occur on federal lands that *do* have reasonably foreseeable direct and indirect effects on a coastal use or resource in the coastal zone "shall consider the enforceable policies of [the OCMP] as requirements to be adhered to…." (15 CFR 930.32(a)(2))

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Finally, projects which occur off federal lands are presumed to have reasonably foreseeable direct and indirect effects on coastal uses or resources in the coastal zone. Projects in the coastal zone which are conducted by federal agencies are distinct from projects conducted by non-federal actors using federal funds.

To summarize, the four cases are:

1. Projects on federal lands with no reasonably foreseeable direct and indirect effects.
2. Projects on federal lands with reasonably foreseeable direct and indirect effects.
3. Projects off federal land conducted by federal agencies.
4. Projects off federal lands conducted by non-federal actors.

Consistency with the OCMP

In the second, third and fourth instances above, each project shall, to be consistent with the "maximum extent practicable" standard of 15 CFR 930.32, demonstrate its consistency with the OCMP by fulfilling each of the seven (7) conditions given in Appendix A of this letter. The determination of reasonably foreseeable direct and indirect effects on any coastal use or resource is the responsibility of the individual federal agencies. In Appendix B, the OCMP provides some suggestions regarding which of the proposed classes of activity are most likely to have an impact beyond federal lands. To avoid confusion over the interpretation of "reasonably foreseeable direct and indirect effects on any coastal use or resource," the DLCD recommends that all projects undertaken under this RGP satisfy the conditions given in Appendix A.

Pursuant to the applicant's compliance with the conditions given in Appendix A of this letter, DLCD concurs with the USFS and BLM's certification that the proposed activities are consistent with the Oregon Coastal Management Program. *Failure to obtain and abide by required local, state, or federal permits may compromise this consistency finding.*

RIGHT OF APPEAL (TO OBJECTION OR SPECIAL CONDITIONS)

Pursuant to 15 CFR 930, Subpart H, and within 30 days from receipt of this letter, the applicants, collectively or individually, may request that the Secretary of Commerce override our objection/special condition. In order to grant an override request, the Secretary must find that the activity is consistent with the objectives or purposes of the Coastal Zone Management Act, or is necessary in the interest of national security. A copy of the request and supporting information must be sent to the Oregon coastal management program and the federal permitting or licensing agency. The Secretary may collect fees from the applicant for administering and processing their request. (15 CFR 930.63)

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If you have any questions or comments regarding this coastal zone management consistency finding, the consistency review process, or the Oregon Coastal Management Program, please contact me at 503-373-0050 ext. 253 or by e-mail at: *jay.charland@state.or.us*

Sincerely,

Jay Charland
Coastal Permits Coordinator

cc: Ms. Alex Cyril, DEQ, 811 SW 6th Ave, Portland, OR 97204-1390
Mr. Kevin Herkamp, DSL, 775 Summer St NE, Salem, OR 97301
Ms. Judy Linton, US Army Corps of Engineers, PO Box 2946, Portland, OR 97208-2946
OCMP File

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Appendix A

CZM Conditions for projects conducted under NWP-2007-999

CZ Condition 1. Consistency with Local Comprehensive Plans.

(1) Authorization for projects in or affecting Oregon's coastal zone under this permit is valid only if the proposed project is consistent with or not subject to the applicable local comprehensive plan and implementing land use regulations, or to the statewide land use planning goals where applicable. Permits or other authorizations must be obtained, when required, from the applicable local government before work is initiated under this permit. Verification of the local jurisdiction's decision must be given to the Corps of Engineers. All appeals of the local jurisdiction's decision(s) must be resolved before any regulated work may begin.

(2) All conditions placed on an authorization or permit by the local government are incorporated by reference into the conditions for consistency concurrence by the Oregon Coastal Management Program.

CZ Condition 2. Consistency with Removal-Fill Law.

(1) Authorization for projects in Oregon's coastal zone under this permit is valid only if the proposed project is consistent with or not subject to the state statutes for state lands and removal-fill in waters of the state. Unless the project is exempt under state law, permits or other authorizations must be obtained from the Oregon Department of State Lands (DSL) before any regulated work may begin.

(2) For projects found not subject to the Removal/Fill Law by DSL, any changes in project design or implementation which may reasonably be expected to require application of the Removal/Fill Law shall be submitted to DSL for review.

(3) All conditions placed on a Removal-Fill permit by the Oregon Department of State Lands are incorporated by reference into the conditions for consistency concurrence by the Oregon Coastal Management Program.

CZ Condition 2a. Leases of State Lands.

(1) Authorization for projects in Oregon's coastal zone under this permit is valid only if the proposed project has obtained any required lease or other license required for the use of state lands or waters. Permits or other authorizations must be obtained when required from the Oregon Department of State Lands (DSL) before any regulated work may begin.

(2) All conditions placed on a lease, license, or authorization by the Oregon Department of State Lands are incorporated by reference into the conditions for consistency concurrence by the Oregon Coastal Management Program.

CZ Condition 3. Department of Environmental Quality.

(1) Authorization for a project in or affecting Oregon's coastal zone under this permit is valid only if the proposed project has been certified or does not require certification by the Oregon Department of Environmental Quality (DEQ) through its 401 Water Quality Certification process.

(2) All conditions placed on a DA license, permit, or authorization by the Oregon Department of Environmental Quality are incorporated by reference into the conditions for consistency concurrence by the Oregon Coastal Management Program.

(3) If the Corps of Engineers determines that a project is covered by an existing Nationwide Permit which has been certified by the DEQ, that certification is valid for the purposes of federal consistency.

CZ Condition 4. In-Water Work.

(1) All in-water work, including temporary fills or structures, shall occur within the ODFW recommended period for in-water work for the affected water body. Exceptions to the recommended time periods require specific approval from the Corps, and:

(i) The US Forest Service and/or BLM shall coordinate exceptions to work windows with ODFW and NMFS (NOAA Fisheries), as necessary. Decisions to not apply ODFW or NMFS work windows shall be accompanied by written approval from ODFW;

(ii) On tribal lands, the US Forest Service and/or BLM shall coordinate exceptions with the EPA.

(2) Condition #10 of Attachment A of DSL permit number 42104, as issued on May 21, 2009 is hereby incorporated by reference.

CZ Condition 5. Fish and Aquatic Life Passage.

(1) Where applicable, all authorized projects shall be in conformance with ODFW standards for fish passage (http://www.dfw.state.or.us/fish/passage/). Decisions to abrogate ODFW fish passage standards shall be accompanied by written approval from ODFW.

(2) No work shall be authorized that does not provide for adequate passage of "aquatic life." Aquatic life shall be interpreted to include amphibians, reptiles, and mammals whose natural habitat includes waters of this state and which are generally present in or around, or pass through the project site.

(3) This condition is effective only where ODFW regulations apply.

CZ Condition 6. Heavy Equipment Use

(1) Heavy equipment shall be operated from the bank, and not placed in a stream or wetland unless specifically authorized. In-stream work may be authorized by the Project Specialist (as defined in Appendix II to the JPA) if necessary in the interest of safety or due to site conditions

prohibiting work from the bank.

(2) This condition is effective only in situations where the Removal-Fill Law applies.

CZ Condition 7. Collateral Damage

(1) Permittees shall be required to repair, restore, or mitigate for any and all impacts within or impacting waters of the state which occur in the course of the work, including those beyond the scope of the permitted work, whether intentional or unintentional, including those impacts due to accident, misinterpretation, or misunderstanding.

(2) This condition is effective only in situations where the Removal-Fill Law applies.

Appendix B

15 CFR 930.33 Guidance for projects conducted under NWP-2007-999

The Oregon Coastal Management Program (OCMP) has previously identified classes of activities outside the coastal zone considered to have a direct impact on the coastal zone (OCMP 1987, p 54). These activities include:

- Road construction and maintenance;
- Activities affecting or altering surface water runoff quantity or quality;
- Dredge, fill, or development in coastal waters and wetlands;
- Alteration of scenic qualities visible from outside federal property;
- Management of fish and wildlife which passes through federal lands.

For each of the project types listed in the JPA, specific considerations a Project Specialist might take into account when considering whether the project is likely to have impacts to the coastal zone are given below. This information is offered as guidance only. DLCD expects the Federal agency to follow 15 CFR 930.33 *et seq* in making its determinations and contacting the relevant state and local regulatory agencies (e.g., the county planning office, the Department of Fish and Wildlife, the Department of State Lands) before commencing any action expected to impact the coastal zone.

Large Wood, Boulder, and Gravel Placement
Considerations: Local flooding; release of debris downstream, changes to hydrology

Reconnection of Existing Side Channels and Alcoves
No specific guidance

Headcut Stabilization and Associated Fish Passage
No specific guidance

Streambank Stabilization
Considerations: Increased erosion or deposition up or down stream from project site; impairment of fishing spot.

Fish Passage Culvert and Bridge Projects
No specific guidance

Irrigation Screen Installation and Replacement & Weir Removal
No specific guidance

Floodplain Overburden Removal
No specific guidance

Reduction of Recreation Impacts
Considerations: Complete loss of recreational opportunities (off Federal lands)

Riparian Exclusion Fencing that include Stream Crossings and Water Gaps
No specific guidance

Riparian Planting

No specific guidance

Road Treatments

Considerations: Loss of recreational opportunities (off Federal land)

Removal of Legacy Structures

Considerations: Loss of historic/cultural resources

Riparian Juniper Treatment

No specific guidance