

**APPENDIX I: Environmental Compliance Documents**

February 2013

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**DRAFT**  
**FINDING OF NO SIGNIFICANT IMPACT**  
**WILLAMETTE RIVER FLOODPLAIN RESTORATION STUDY**  
**LANE COUNTY, OREGON**

Based on the evaluation prepared in the *Draft Integrated Feasibility Report/Environmental Assessment, Willamette River Floodplain Restoration Study, Lower Coast and Middle Forks Willamette River Subbasins* (January 2013) (hereafter referred to as the Draft Feasibility Report/EA), I have determined that the recommended course of action will have no significant impact on the human environment. The Draft Feasibility Report/EA was prepared by the Corps of Engineers in partnership with the Nature Conservancy.

Any human action has the potential for minor to moderate or even severe impacts and consequences. This Draft Feasibility Report/EA and FONSI have listed all of the important considerations of the proposed project and their environmental impacts. These impacts, both individually and cumulatively, are *NOT SIGNIFICANT* as "significant" has been defined by National Environmental Policy Act (NEPA) law, regulations, and case law.

**PROJECT PURPOSE AND NEED**

The purpose of the proposed action is to restore natural floodplain ecosystem functions along the lower Coast and Middle Forks of the Willamette River. These functions include fish and wildlife habitat, groundwater recharge, incidental flood storage, and sediment and erosion processes.

This project is needed because of the need to restore large floodplain sites to contribute to the recovery of sensitive fish and wildlife species in the subbasins. Without Federal action, other stakeholders in the subbasins would not have the funds or means to accomplish this same scale of restoration. Because of the substantial changes in natural riverine and floodplain processes due to the construction of multiple dams and revetments in the subbasins, the habitats that sustain fish and wildlife populations are disappearing and becoming degraded or developed. Large-scale restoration of floodplains provides the best opportunity to restore the natural formation of habitats and provide important off-channel rearing and refuge habitats for multiple species. Floodplains will likely become even more important to dissipate high energy and high flows as climate change occurs – it is likely that winter snowpack in the Pacific Northwest will decline, whereas more variable rainfall will lead to higher peak runoff events and lower sustained flows. Floodplains help moderate peak runoff events and allow groundwater recharge that contributes to the maintenance of low flows.

**BACKGROUND**

The Coast Fork Willamette River subbasin covers an area of about 665 square miles within the Calapooya Mountains (Western Cascades province) and the floor of the Willamette Valley. The river is approximately 40 miles long and joins the Middle Fork Willamette near Eugene to form the mainstem Willamette River. The Row River, the largest tributary, drains nearly 60% of the Coast Fork subbasin and joins the Coast Fork Willamette River just below the City of Cottage Grove. Two dams divide the Coast Fork subbasin, Cottage Grove Dam on the Coast Fork Willamette at river mile 29 and Dorena Dam on the Row River. These dams limit upstream fish passage and greatly influence downstream hydrologic regimes, temperature patterns, sediment and bedload transport, and large wood delivery to the lower reaches. Revetments, agricultural and urban development, gravel mining, and infrastructure together have further reduced floodplain processes by confining the river channel and reducing floodplain connections.

The Middle Fork Willamette River subbasin covers an area of approximately 1,360 square miles on the western slope of the Cascade Mountains and the floor of the Willamette Valley. The river is 84 miles long and joins the Coast Fork Willamette River near Eugene to form the mainstem Willamette River. The Lookout Point and Dexter Dams divide the Middle Fork subbasin, limiting upstream fish passage and similarly influencing downstream hydrologic, hydraulic, sediment, and water quality processes. Similar to the Coast Fork, revetments and development have reduced floodplain processes.

Fish and wildlife species and their habitats in the study area have declined substantially from historic conditions and these declines have necessitated the listing of numerous species on Federal or state Endangered Species lists. Many of these sensitive species use floodplain habitat for all or part of their life histories. This study was started to evaluate opportunities for the restoration of floodplain processes and habitats. This study is focused on the floodplain area below the dams to the confluence of the Coast and Middle Forks. This lower floodplain area has substantial opportunities for the restoration of natural floodplain processes and habitats.

### **PROPOSED ACTION**

The recommended plan would restore five sites on the lower Coast and Middle Forks that have formerly been gravel mined. Restoration actions would include: 1) removal of invasive plant species; 2) revegetation of the floodplain with native riparian and wetland species; 2) grading of former gravel mined ponds to increase shallow water areas; 3) excavate channels and banks to connect former gravel mined ponds to each other and provide backwater connections to the rivers; 4) install engineered log jams on bar apexes and in specific bank areas on the rivers to promote natural scour/deposition and flow splits to maintain side channels; 5) placement of additional wood in the floodplain and off-channel areas; 6) debris removal; and 7) monitoring and adaptive management.

The recommended plan will provide 574 acres of restored and reconnected floodplain in the Coast and Middle Forks subbasins. This will provide essential rearing and refuge habitats for multiple listed fish and wildlife species and species of concern that occur in the subbasins and contribute towards their recovery. Specifically, the types of improvements that this project will make include provision of fish access to off-channel habitats, improvements in quality to the off-channel habitats including provision of more suitable off-channel water depths that vary naturally with the seasons (deeper depths in winter, shallower water in summer), improvements in cover and shading, increases in large wood and small woody debris, removal of invasive species and revegetation with native species, and interspersions of habitat types. This project will also contribute to the restoration of natural riverine processes including channel migration and the recruitment of large woody debris over time as the riparian vegetation grows and matures. At the confluence of the Coast and Middle Forks this project will stimulate the formation of natural habitats along nearly 3 miles of river (1 mile on the Coast Fork and 2 miles on the Middle Fork), such as pools, riffles, alcoves and side channels.

### **PUBLIC AND AGENCY INVOLVEMENT**

Environmental coordination with permitting agencies and stakeholders has been ongoing throughout the project development. The agencies and stakeholders have been invited to comment on the alternatives and aid in determining effects of the project on fish and wildlife species. Specific actions are outlined below.

Presentations were made to the stakeholder group that includes representatives from the U.S. Army Corps of Engineers; NOAA Fisheries; U.S. Fish and Wildlife Service; Oregon Department of Fish and Wildlife, Oregon State Parks, Bonneville Power Administration, Mid-Willamette Council of Governments, Coast Fork Watershed Council, Middle Fork Watershed Council, Friends of Buford Park, and the Nature Conservancy. Public meetings have also been held at various points in the planning process and an additional meeting will be held during the public review of the Draft Feasibility Report/EA, as well as additional outreach by the watershed councils.

## **FINAL DETERMINATION**

**Authority:** The Willamette Floodplain Restoration Study was authorized on 18 June 1999 when the Section 905(b) Analysis (Reconnaissance Report) was approved for proceeding into the feasibility phase and on 11 December 2000, by Section 202 of the Water Resources Development Act of 2000 (P.L. 106-541) that provided authorization and funding for assessing in particular ecosystem protection and restoration in the Willamette River Basin. In fulfilling the authorization, the Corps also is required to take into account other applicable legal mandates. While acknowledging the impacts discussed in the Draft Feasibility Report/EA, the Corps is required by the National Environmental Policy Act (NEPA) to determine if the impacts of the project are significant. 40 CFR 1508.27 lists ten tests of significance, whether impacts rise to the level of “significantly affecting the human environment.” Following are the ten tests from (1) to (10):

- 1) Significant Effect(s) Even Though the Overall Effect Is Beneficial. The proposed restoration action will benefit a multitude of fish and wildlife species, including Upper Willamette River stocks of salmonids that are listed under the Endangered Species Act, Oregon chub, as well as native amphibians and reptiles and migratory bird species. The restoration of off-channel and floodplain aquatic habitats and riparian habitat, particularly hydrologic connectivity and fish access to and from the Coast and Middle Forks of Willamette River will incrementally enhance natural floodplain processes including habitat formation. The Corps expects the recommended plan to provide limited but measurable ecosystem benefits. A finding of no significant environmental impact is not biased by the beneficial effects of the action.
- 2) The Degree to which the Action Affects Public Health and Safety: The construction effects will be short-term, localized, and temporary, and as such will have no adverse effects on public health and safety. The closure of pedestrian access temporarily at Site C1B to exclude non-construction workers from construction zones will prevent a public safety hazard. Trails and access routes will be restored to meet landowner requirements and all closed areas will be reopened. The grading and shallowing of formerly gravel mined ponds will also remove an existing public safety hazard as the current ponds are steep sided and contain construction debris.
- 3) Unique Characteristics of Geographical Area: The project sites are gravel mined floodplains adjacent to the Lower Coast and Middle Forks of the Willamette River. The Corps will: protect historic and cultural resources that may be inadvertently discovered during construction; buffer existing high quality riparian areas, wetlands, shorelines, and streams from construction activities to the maximum extent practicable and will enhance them where feasible. There will not be any measurable adverse effects to Essential Fish Habitat (EFH). There are no prime farmlands, wild and scenic rivers, wilderness, ecologically critical areas, or other unique natural features in the project area, and therefore, no effects will occur to unique geographical characteristics.
- 4) Highly Controversial Effects on the Quality of the Human Environment: The effects of the restoration of gravel mined floodplains are still being studied and understood as more of these areas undergo restoration. However, the potential risks have been evaluated based on information available from other projects to ensure the design accounts for those risks. The project is expected to result in ecological benefits. The types of restoration activities proposed are relatively conventional methods and generally are supported by the resource agencies.
- 5) Highly Uncertain, Unique, or Unknown Risks: The Corps will finalize the restoration design and manage all associated construction activities using Best Management Practices and in accordance with all

terms and conditions of the Biological Opinions and the Water Quality Certification. The Corps does not anticipate the project to present unique or uncertain risks beyond those addressed in the analyses in the Draft Feasibility Report/EA.

6) Future Precedents: Section 202 of the Water Resources Development Act of 2000 (P.L. 106-541, 11 December 2000) authorizes the U.S. Army Corps of Engineers to assess and conduct ecosystem protection and restoration in the Willamette River Basin. Ecosystem restoration is a beneficial effect and does not constitute an irrevocable or irretrievable step toward future changes in the scope, scale, orientation, nor design of the current flood risk management system, nor in the current and historic method or approach to managing gravel mined areas. For these reasons, the action will not establish a precedent for future actions that have not been previously taken as restoration strategies in the Willamette Basin or elsewhere.

7) Significant Cumulative Impacts: The Draft Feasibility Report/EA considered the effects of implementing the proposed action in association with past, present, and reasonably foreseeable actions in the study area. Significant cumulative adverse effects were not identified, and the project is likely to incrementally reverse some of the effects of the past cumulative effects that have occurred in the area.

8) National Register of Historic Places and Other Historical and Culturally Significant Places: A cultural resources survey was performed in 2012. Ground inspections did not reveal any historic properties or archaeological resources within the work area. The proposed work is expected to have little chance of impacting intact or significant archaeological resources because the project area occurs on a historic floodplain subject to river migration, sediment deposition and erosion. Furthermore, many locations within the project area have been subject to significant disturbance and reconfiguration in the past including road construction and gravel mining. Coordination of findings is currently in progress with the State Historic Preservation Office (SHPO) and potentially affected tribes. Although the Corps is presently seeking SHPO and tribal concurrence with a determination of “No Effect” on historic properties, additional stipulations that require monitoring by a professional archaeologist during ground disturbing activities in to-be-specified locations and/or development of an approved, long-term monitoring plan may also be issued.

9) Endangered or Threatened Species or Critical Habitat: Although there will be temporary adverse impacts as a result of the project, every effort has been made to minimize those impacts by incorporating anticipated conservation measures and BMPs. Construction staging and storage areas have been selected to avoid and minimize impacts to Waters of the United States as required under Executive Order 11990 and the Clean Water Act. Further, the Corps will implement both a dewatering work area isolation plan and a fish exclusion and salvage plan to avoid and reduce impacts to aquatic species. The Corps will comply with all Terms and Conditions stipulated in the Biological Opinions.

There are multiple threatened and endangered fish and wildlife species and associated critical habitat (following species name with a CH in parentheses) that may occur on or adjacent to the project sites including: Upper Willamette River Chinook (CH); Upper Willamette River steelhead (CH); bull trout (CH), Oregon chub; marbled murrelet, Northern spotted owl, Fender’s blue butterfly, and three plants. In accordance with Section 7(a) (2) of this Act, federally funded, constructed, permitted, or licensed projects must take consult with the NMFS and/or USFWS on the potential impacts to federally listed (or proposed in some cases) T&E species. A Biological Assessment has been submitted to NMFS and USFWS detailing the potential for temporary adverse effects, but the project is not likely to jeopardize the existence of any listed species.

10) Other Legal Requirements: Discussion of compliance with applicable environmental laws or requirements is identified in the Draft Feasibility Report/EA. This project will not violate any environmental laws and regulations.

### **CONCLUSION**

No construction actions will begin until receipt of all applicable environmental clearance documents. Construction is expected to begin in July 2015. Upon receipt of the remaining approvals, I will review all existing environmental documentation to determine if conditions have changed or whether existing documentation and clearances continue to adequately describe the effects of the proposed action.

Currently, I have determined these impacts, both individually and cumulatively, are not “significant” as defined by the NEPA legal statute, regulations, and case law. Based upon the Draft Feasibility Report/EA, I have determined that the proposed action would not significantly affect the quality of the human environment and that an environmental impact statement is not warranted.

Date: \_\_\_\_\_

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John W. Eisenhauer, P.E.  
Colonel, Corps of Engineers  
District Commander