



**US Army Corps  
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Portland District  
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## FINDING OF NO SIGNIFICANT IMPACT

### FALL CREEK DAM AND RESERVOIR ADULT FISH FACILITY UPGRADE

LANE COUNTY, OREGON

I find that the selected course of action to upgrade the existing adult fish collection facility at Fall Creek dam and reservoir will not significantly affect the quality of the human environment, and that an Environmental Impact Statement is not required. The selected course of action is the *Preferred Alternative* as described in the *Environmental Assessment – Fall Creek Dam and Reservoir Adult Fish Facility Upgrade* (U.S. Army Corps of Engineers, January 2015) (herein referred to as the EA).

#### INTRODUCTION

The U.S. Army Corps of Engineers (Corps), Portland District is proposing to upgrade the existing fish collection facility at the Fall Creek dam and reservoir to improve fish passage conditions and increase survival of threatened Upper Willamette River (UWR) Chinook salmon (*Oncorhynchus tshawytscha*) migrating to upstream spawning locations.

The dam and reservoir are located within areas deemed to be critical habitat for UWR Chinook salmon and which have high conservation value. The Middle Fork population of UWR Chinook salmon is considered to be at very high risk of extinction based on an analysis of its recent abundance, productivity, spatial structure, and diversity. Upgrading the Fall Creek Fish Collection Facility will enhance fish passage through the Fall Creek Dam and implement the National Marine Fisheries Service (NMFS) Reasonable and Prudent Alternative (RPA) Measure 4, Fish Passage, as recommended in the *Endangered Species Act Section 7(a)(2) Consultation, Biological Opinion and Magnuson-Stevens Fishery Conservation & Management Act Essential Fish Habitat Consultation on the Willamette River Basin Flood Control Project (BiOp)* issued July 11, 2008 (NMFS 2008).

An environmental assessment, *Environmental Assessment – Fall Creek Dam and Reservoir Adult Fish Facility Upgrade* (EA), was prepared by the Corps in compliance with the National Environmental Policy Act (NEPA) to evaluate the environmental impacts of this proposal. Various alternatives for overall project location and facility layout for the Fall Creek fish collection facility rebuild project were considered. However, the alternatives were further refined to two alternatives: the No Action Alternative and the Preferred Alternative which consists of an elongated at-grade facility. As described in the EA, the Preferred Alternative will improve passage and minimize delay and possible injury for adult salmonids migrating to upstream spawning locations.

Project alternatives, including the No Action Alternative, were evaluated based on biological efficiency, constructability, environmental impact, operation, and overall cost. The parameters used to establish the design criteria for the fish facility, which includes construction of the fish ladder, pre-sort pool, holding/acclimation ponds, and sorting area, pertain specifically to Chinook

salmon and steelhead. However, the facility will be designed to accommodate passage of other fish species, including cutthroat trout, resident rainbow trout, and lamprey. The Corps' preferred alternative provides volitional swim-up facilities, capacity to temporarily hold fish, and water-to-water transfer capabilities, all of which minimize stress and injury to adult fish. Furthermore, the Preferred Alternative meets the Corps' purpose and need and the long-term effects of the upgrade would benefit fish by improving survival of individual fish released upstream for spawning in upstream reaches of Fall Creek.

## **PUBLIC INVOLVEMENT**

A notice of availability and a request for comments on the draft EA was posted to the Corps' website on November 11<sup>th</sup>, 2014. The draft EA was made available for 30 days, ending on December 12<sup>th</sup>, 2014. One comment/question was received from a media outlet inquiring about the cost of construction.

Public comments were summarized, and the Corps' responses are detailed in Appendix D in the EA. No new or additional information was provided during the public comment period that suggested a need to change or modify the *Preferred Alternative*, as described in the draft EA. As a result, the draft EA was finalized, and the *Preferred Alternative* remains the Corps' proposed action. ✓

## **ENVIRONMENTAL CONSEQUENCES**

While acknowledging the impacts discussed in the EA, the Corps is required by NEPA to determine if the impacts of the selected alternative are significant. The term "significantly" is defined in NEPA's implementing regulations, which requires consideration of both the context and intensity of the impact. Consideration of context includes social, affected regional and local interests, as well as short and long-term effects. Consideration of intensity refers to the severity of impact. Title 40 of the Code of Federal Regulations (C.F.R.) § 1508.27 lists ten tests of significance (identified and addressed below) to evaluate with regards to intensity.

1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

*As demonstrated in the analyses in the EA, the range of impacts from the Preferred Alternative poses no significant effects, either adverse or beneficial, to the human environment and natural resources. The Preferred Alternative will improve fish passage conditions through Fall Creek Dam, resulting in increased survival of ESA-list species for spawning. The existing fish facility provides passage, but fish are stressed and injured when navigating the current facility, and the existing facility does not provide water-to-water transport. The upgraded facility will reduce stress and injury to adult fish, and it will provide water-to-water transport from the collection facility to transport trucks.*

2. The degree to which the proposed action affects public health or safety.

*Upgrading the Fall Creek Dam fish collection facility poses no risks or impacts to public health or safety. Implementation of the Preferred Alternative will not influence the operations or maintenance of Fall Creek Dam or impact reservoir elevations. The Corps*

*regularly operates the dams in the Willamette River basin to maintain downstream flows, resulting in fluctuating reservoir elevations throughout the year. As a result, the degree to which public health and safety will be adversely affected by the Preferred Alternative does not rise to a level of significance.*

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

*No unique geographical features were identified within the project area during the evaluation of effects. Furthermore, the Preferred Alternative will not result in measurable changes to any physical, chemical, biological, cultural, or historic resources in the project area. For these reasons, the potential effects to the Fall Creek and Middle Fork Willamette River watershed do not rise to the level of significance.*

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

*Based on the paucity of comments received during the public review of the draft EA, the Corps determined that the effects of the Preferred Alternative on the quality of the human environment were not highly controversial. Only one entity inquired about the cost of construction of the Preferred Alternative. For these reasons, the intensity of the effects does not rise to a level of significance.*

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

*There are few-to-no risks involved with upgrading the fish collection facility at Fall Creek Dam to improve fish passage conditions. Furthermore, the possible effects on the human environment are neither highly uncertain nor unique. As a result, the intensity of risk does not rise to a level of significance.*

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

*The Preferred Alternative does not establish a precedent for future actions which will result in significant effects and neither does the Corps' decision on this particular facility influence future considerations for fish passage. Any future requests to improve fish passage conditions in the Willamette River valley will undergo a similar evaluation to determine the effects of the action, per the Corps' guidelines and NEPA regulations. Therefore, the precedence of implementing the Preferred Alternative does not rise to the level of significance for future actions.*

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

*The cumulative effects of the Preferred Alternative were considered in the draft EA in relation to past, present, and reasonably foreseeable future actions within and adjacent to the project area. It was determined that the Preferred Alternative is a separate activity that is fully independent from the reasonably foreseeable proposed future actions to improve fish passage conditions throughout the Willamette River basin. While implementation of the RPA in the 2008 NMFS BiOp is a reasonably foreseeable future action, future actions will undergo an independent analysis to evaluate all potential effects per NEPA requirements, and each will be made publicly available during the decision-making process. As a result, it was determined that the cumulative effects of the Preferred Alternative will not rise to a level of significance.*

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

*As stated in the EA, the Fall Creek Dam is eligible for the National Register of Historic Places (NRHP). The Corps has determined that upgrading the adult fish collection facility at Fall Creek Dam will result in an adverse effect (via alteration) to the existing facility. Accordingly, the Corps is finalizing a Multiple Property Listing to document the dams and facilities in the Willamette River Valley. In addition, the Corps has completed consultation with the Oregon State Historic Preservation Office (SHPO) and interested Native American Tribes. The Corps finalized a Memorandum of Agreement (MOA) on 5 February 2015 with the Oregon SHPO to mitigate adverse effects through agreed-upon stipulations. The Corps will implement the stipulations in the MOA within two years to mitigate adverse effects to the NRHP eligible Fall Creek Dam, and therefore the effects of the Preferred Alternative will not rise to a level of significance for cultural or historic resources.*

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (ESA) of 1973.

*Chinook salmon (*Oncorhynchus tshawytscha*) is the only ESA-list threatened species present in the Fall Creek watershed which could be impacted by the Preferred Alternative. Construction of the upgraded fish collection facility proposed under the Preferred Alternative is consistent with project actions identified in NMFS' 2013 Programmatic Conference and Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Revisions to Standard Local Operating Procedures for Endangered Species to Administer Stream and Fish Passage Improvement Actions, Version 5 (SLOPES V) programmatic biological opinion, with the exception of screening the auxiliary water supply system (fish horns). In August 2014, the Corps drafted a variance request to implement the Preferred Alternative under SLOPES V without screening the fish horns and received NMFS' approval that the Preferred Alternative was consistent with the use of SLOPES on October 8, 2014. Consequently, the intensity of the effects do not rise to the level of significance for species or designated critical habitats listed on the ESA.*

*The operation and maintenance (O&M) of the upgraded Fall Creek Fish Facility and potential impacts to UWR Chinook salmon are consistent with the project actions analyzed in NMFS' 2008 BiOp (NMFS 2008). The NMFS considered the effects from operating and maintaining an upgraded fish passage facility at Fall Creek in lieu of volitional passage at the dam site and concluded that the continued O&M of the fish collection, handling and transport facilities throughout the Willamette River basin are an essential first step toward improving fish passage to historical habitat. Furthermore, the lack of access to spawning habitat above the dams has reduced the quality and quantity of designated critical habitat. The O&M of the upgraded fish collection and transport facility will address primary constituent elements for critical habitat by providing a migration corridor free of obstruction, despite the fact that it is a trap and haul facility.*

*Both the construction and O&M of the upgraded fish facility will restore the productivity and viability of ESA-listed fish, provide migratory corridors free of obstruction, and provide access to spawning habitats upstream of Fall Creek dam and reservoir.*

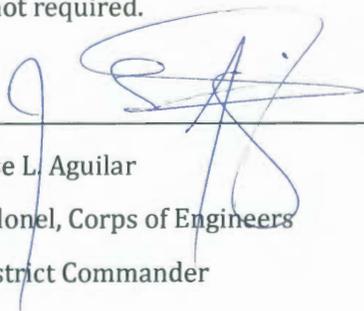
10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

*The Preferred Alternative does not threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment. The Corps coordinated with local, state, and other federal agencies during the evaluation and acquired all necessary permits for construction, including a 401 Water Quality Certification from the Oregon Department of Environmental Quality on February 24, 2015 and a removal/fill permit from the Oregon Department of State Lands in August 2014. As stated above, the Corps received concurrence from NFMS that the Preferred Alternative was consistent with the use of the SLOPES V biological opinion, and the operation of the upgraded facility will be in compliance with the 2008 BiOp. Therefore the Preferred Alternative is in compliance with the ESA. The Corps has completed a MOA with the Oregon SHPO to mitigate for adverse effects to historic properties for compliance under the National Historic Preservation Act. For these reasons, the Proposed Action does not rise to a level of significance in regards to compliance with other State and Federal laws.*

#### **DETERMINATION**

Based upon the EA prepared as described above, I find that the Preferred Alternative will not significantly affect the quality of the human environment and that an Environmental Impact Statement is not required.

Signature: \_\_\_\_\_



Jose L. Aguilar  
Colonel, Corps of Engineers  
District Commander

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

26 Feb 15