

**FINDING OF NO SIGNIFICANT IMPACT
DOWNSTREAM FISH ENHANCEMENT FOR JUVENILE SALMONIDS
FALL CREEK DAM
LANE COUNTY, OREGON**

I find that the selected course of action will not significantly affect the quality of the human environment. The selected course of action is for the drawdown of Fall Creek Reservoir to occur annually on a permanent basis as described as the *Preferred Alternative* in the *Final Environmental Assessment, Downstream Fish Enhancement for Juvenile Salmonids at Fall Creek Dam, Lane County, Oregon* (November 2014). The EA also addresses the effects of the *Preferred Alternative*. Late fall/early winter drawdown has occurred as an interim measure since 2010 and has shown to be very beneficial to juvenile salmonids.

Project purpose and need

The purpose of the proposed action is to drawdown the reservoir of Fall Creek Dam below the usual late fall/early winter drawdown elevations to facilitate downstream volitional migration of juvenile salmonids, particularly Chinook salmon listed as threatened under the Endangered Species Act. Drawdown will be conducted in a manner that is anticipated to result in a decrease in fish injury and mortality that can occur during fish passage under previous operations. This change in reservoir drawdown will permanently implement Reasonable and Prudent Alternative measure 4.8 of the National Marine Fisheries Service and US Fish and Wildlife Service Biological Opinions, both dated July 11, 2008 (*Consultation on the Willamette River Basin Flood Control Project*, NMFS; *Continued Operation and Maintenance of the Willamette River Basin Project*, FWS). RPA 4.8 in the BiOp is an interim measure, and with research and monitoring, the Corps has found this to be an effective operational measure to improve fish passage.

Under normal operations, Fall Creek reservoir is drawn down to an elevation of approximately 728 feet mean sea level in preparation for winter flood control operations. Fish attempting to volitionally migrate downstream must be able to sense the exit, which are the regulating outlets occurring at approximately 680 feet MSL, and then dive down approximately 48 feet to exit the reservoir. Recent data has shown that fish in Fall Creek reservoir more readily find the exit when they are required to dive down 30 feet or less. Also, recent data has indicated that fish injury and mortality decreases during downstream migration when the gate opening of the regulating outlet is maintained at approximately six feet wide.

Final determination

The Corps of Engineers is required by the National Environmental Policy Act to determine if the impacts of a project rise to the level of "significantly affecting the human environment." (40 CFR 1508.27). Below is a summary of that determination using the 10 tests of significance:

1. Significant effect(s) even though the overall effect is beneficial: The proposed drawdown of Fall Creek reservoir will benefit multiple fish species, including Chinook salmon that are listed under the ESA. The proposed action will maximize the number of fish migrating downstream through the dam by reducing the depth that the fish must dive to locate the regulating outlets, through which they exit. The proposed action also will evacuate nonnative,

warm water fish from the reservoir that would otherwise predate on juvenile ESA-listed salmonids and compete with them for resources. Take of Chinook salmon during their evacuation through the dam was estimated within the Incidental Take Statements of the 2008 NMFS and FWS BiOps. No significant adverse effects to the quality of the human environment were identified during the NEPA process.

2. The degree to which the action affects public health and safety: The Corps has issued a public notice and posted signage stating that the Fall Creek reservoir is restricted to boaters until the reservoir returns to an appropriately filled elevation. The Preferred Alternative will have no adverse impact on public health and safety.

3. Unique characteristics of geographical area: There are no significant anticipated impacts to park lands, prime farmlands, wetlands, wild and scenic rivers, known historical or cultural resources, or ecologically critical areas. The Corps intends to develop a Programmatic Agreement with the State Historic Preservation Office and interested Native American tribes that would assist in both future management of cultural resources and potential mitigation for any adverse effects within the Willamette Valley Projects .

4. Highly controversial effects on the quality of the human environment: The effects to the human environment from the selected course of action are not highly controversial. The proposed action is generally supported by the fish and wildlife resource agencies and will result in benefits to ESA-listed Chinook salmon and other salmonid species, as shown through research on fish during drawdowns since 2010.

5. Highly uncertain, unique, or unknown risks: The risks associated with the proposed action do not rise to the level of highly uncertain, unique, or unknown. Data collection activities that have taken place in association with drawdowns since 2010 have aided the Corps and resource agencies in justifying drawdown as an annual measure. There is uncertainty of effects to properties that may be eligible to the National Register of Historic Places and the project's effects to them (see number eight below).

6. Future precedents: The proposed action is designed to improve salmonid passage and survival at Fall Creek dam. It may inform improvements to potential future drawdowns at other WVP dams, but does not set a precedent as each dam has its own set of environmental circumstances and constraints.

7. Significant cumulative impacts: The EA considers the effects of implementing the proposed action in association with past, present, and reasonably foreseeable future actions in the study area. No significant cumulative adverse effects were identified during the NEPA process.

8. National Register of Historic Places and other historical and culturally significant places: The proposed project has potential to impact known and unknown cultural resources within the Fall Creek reservoir drawdown zone. The Corps has completed both determinations of eligibility and of effect for five archeological resources within the reservoir and determined that three of the sites are eligible for the NRHP. The Corps has also determined that reservoir operations have an adverse effect upon these resources and, as noted under point three above, is pursuing a PA

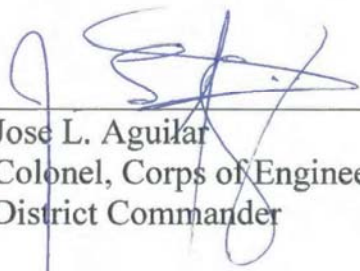
for the WVP as a whole to address adverse effects to NRHP eligible or listed properties. The Corps has initiated consultation with the SHPO and local Native American tribes for the Fall Creek drawdown. The Corps anticipates the PA will satisfactorily resolve the adverse effects to any eligible properties.

9. Endangered or threatened species or critical habitat: There may be some adverse impacts to endangered species in the proposed project area. In particular, there is the potential for the take of some juvenile Chinook salmon as they pass through the dam and to impact Oregon chub habitat due to siltation. However, NMFS and FWS have issued an Incidental Take Statement to the Corps for take in the pursuit of fulfilling the RPAs outlined in the 2008 Biological Opinion, and it is anticipated that Oregon chub will be removed from ESA listing during fall of 2014.

10. Other legal requirements: The proposed action does not violate Federal, State, or local law requirements, as noted in the attached EA. The proposed action is consistent with the requirements of the American Indian Religious Freedom Act, the Bald and Golden Eagle Protection Act, the Clean Air Act, the Federal Water Pollution Control Act, Coastal Zone Management Act, the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, the National Historic Preservation Act, the Safe Drinking Water Act, the Wild and Scenic Rivers Act, Executive Order 11990, Executive Order 12898, and Executive Order 11988. The EA addresses these in detail.

Based on the analysis described above and provided in more detail in the EA, this project is not a major federal action significantly affecting the quality of the human or natural environment, and therefore does not require preparation of an Environmental Impact Statement.

19 Nov 14
Date



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District Commander