# Fish Passage Plan (FPP) Change Request Form

**Change Form # & Title**: 17LWG005 - Ladder AWS pump oil response operation

**Date Submitted**: 10 January 2017; Revised 1/26/2017

**Project**: Lower Granite

**Requester Name, Agency**: Elizabeth Holdren, USACE Lower Granite Dam

**Final Action:** **APPROVED as Revised 1/26/17**

**FPP Section**: LWG 3.3.2. Unscheduled Maintenance – Adult Facilities.

**Justification for Change**: Lower Granite three AWS pumps intakes are located in the southeast corner of the powerhouse tailrace at an elevation of 569.0 MSL with a flow design of 3,150 cfs. Oil or other contaminants in the powerhouse tailrace have the potential to be pumped into the AWS system and distributed through the diffusers into the lower ladder collection channel and junction pool. In the event oil or other contaminants are present in the tailrace, all AWS should be removed from service as a precautionary measure until the problem is identified, contained, and the potential for ladder contamination is eliminated.

**Proposed Change**: (edits to existing FPP text in track changes)

**3.3.2. Adult Facilities - Unscheduled Maintenance.**

**3.3.2.2. Ladder and Count Station.** If any part of the ladder fails or is blocked with debris during fish passage season, efforts will first be made to correct the problem without dewatering the ladder. Trashracks, picket leads, and counting stations can sometimes be repaired or maintained without dewatering the ladder. If the fish trap malfunctions or is damaged, fish may be passed around it until repairs are made. The decision to dewater the ladder and make repairs during fish passage season or wait until the winter maintenance period will be made after coordination with the fish agencies and tribes.

**3.3.2.2.a. Hazardous Materials Spill.** In the event of a hazardous materials spill, the Project Biologist has the authority to make fishway adjustments outside of operating criteria as necessary to prevent contamination of the ladder until unified command is formed and consultation is established with FPOM. NOAA Fisheries will be notified within 24 hours of a ladder closure.

**3.3.2.3. Auxiliary Water Supply (AWS).** Three electric pumps supply auxiliary water for the fish ladder and powerhouse collection system. Two pumps are capable of providing required flows during normal operations and most flow conditions.

**3.3.2.3.a.** If one pump fails during the two-pump operation, the pump on standby will be operated to make up flows.

**3.3.2.3.b.** If two pumps fail and the outage is expected to be long-term, the floating orifices will be closed and monitored in the following order: OG-4, OG-7, OG-10, OG-1. If fishway criteria still cannot be met, NSE-2 and NPE-2 will be closed and NPE-1 raised in 1' increments to provide the required 1'–2' head differential. If head cannot be maintained by the time the top of the weir reaches 5', then SSE-1 and SSE-2 should be raised in 1' increments until 5' below tailwater is reached.

**3.3.2.3.c.**If all three pumps fail, NSE-1 and NPE-1 should be closed, the powerhouse collection channel bulkheaded off at the junction pool, and SSE-1 and SSE-2 operated at 6' below tailwater regardless of head.

**3.3.2.3.d.** If oil or other contaminants are observed in the powerhouse tailrace, the AWS pumps will be removed from service until the substance is contained and there is no risk of contamination in the ladder collection channel and transition pool. The Project Biologist will notify CENWW-OD-T as soon as possible and CENWW-OD-T will notify NOAA Fisheries and FPOM. When the problem is resolved, the Project Biologist will submit a MFR to CENWW-OD-T for distribution to FPOM. See **section 3.3.2.2.a** above for more information.

**Comments**:

1/26/2017 FPOM: FPOM is ok with this language as long as it gives the Project Bio enough flexibility to be adequately responsive, but it brought up a larger question about project response to oil spills. Conder noted that language has already been coordinated and approved for BON and TDA (change forms [17BON005, 17TDA001](http://www.nwd-wc.usace.army.mil/tmt/documents/fpp/2017/changes/)). He requested adding this language to all other projects as well. Wright will draft up change forms to add the approved language to other projects.

**Record of Final Action**: Approved as revised at FPOM FPP meeting 1/26/2017. New section for “Hazardous Materials Spill” will be added to all other projects.