# Fish Passage Plan (FPP) Change Request Form

**Change Form # & Title**: 17DWR001 – Add new Project Section

**Date Submitted**: 2/7/17

**Project**: Dworshak

**Requester Name, Agency**: Ann Setter, Corps

**Final Action:**

**FPP Section**: New project section and dissolve Appendix I.

**Justification for Change**: need guidance to manage operations to protect adult fish during operational testing and maintenance

**Proposed Change**:

Adult Fish Passage:

Background

No adult fish passage facilities were constructed for Dworshak dam, the fish passage impacts were mitigated with the construction of Dworshak Fish Hatchery. The hatchery raises 2.1 million B-run steelhead smolts annually for release. The Lower Snake Compensation Program also raises both spring Chinook and B run steelhead at Dworshak and Clearwater hatcheries annually. The Nez Perce tribe raises coho at Dworshak hatchery. The Dworshak hatchery has a small fish ladder used to collect broodstock for various hatchery programs. Fish often move up into the North Fork Clearwater to hold as they physiologically stage for later spawning. Steelhead are found in the area immediately below the dam primarily during October – March annually. Spring Chinook are generally present July – August.

Routine testing of turbine units generally occurs during fall, winter when generation needs are minimal following preventative turbine maintenance. Testing which involves repeated start/stop sequences or extended periods of speed no load have been associated with steelhead mortality incidents.

Annual Maintenance Period:

On an annual basis, each of the turbine units is removed from service for preventative maintenance. When this maintenance is complete, testing needs to occur to validate that the unit is functioning properly. Because of the uncertainty associated with the exact mechanism during testing which instigates a mortality incident, precautionary measures are necessary. The precautionary measures required will be biological monitoring during any testing activity and FPOM coordination. Annual maintenance period is generally Sept 15 – Dec 15.

Cyclical Maintenance:

WECC/NERC testing for model validation testing needs to occur every five years. This involves running a unit for an hour at max power in an overexcited mode, then running throughout the operating range for a variety of steady state and transient testing. This testing generally takes 1-2 days per turbine unit.

Overall Operational Requirement:

All turbine testing activity when adults are present in the tailrace will require prior Regional coordination and the prepared coordination request will provide a sequence of proposed operations that can be reviewed for potentially negative adult fish impacts. While any testing is underway, a fisheries biologist will be present to observe for fish impacts and document findings for dissemination back to FPOM. The monitoring Fisheries biologist will have ability to immediate contact Chief of Operations and suspend testing should fish mortality become evident.

In addition, bring Appendix I, Unwatering procedure section for turbine maintenance into this project section, and delete Appendix I. Sub-section title will be Unwatering and Salvage Procedures for Turbine maintenance.

**Comments**:

**Record of Final Action**: