OFFICIAL COORDINATION REQUEST FOR NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE - 17 LWG 04 AWS Pump 1 Return to Service **COORDINATION DATE -** 19 April 2017. Updated 1 May 2017. **PROJECT-** CENWW-ODL Lower Granite Dam **RESPONSE DATE -** 26 April 2017

Description of the problem: Lower Granite Dam normally operates the fish ladder with two auxiliary water supply (AWS) pumps in service and one in standby mode. Currently pumps 2 and 3 are in operation with pump 1 in standby pending bulkhead swap. Pump 1 needs to be brought on line and tested to ensure operational reliability following winter maintenance.

Type of outage required: AWS pumps will be taken out of service to swap discharge bulkheads from pump 3 to pump 1. If the test of pump 1 is successful, AWS pumps 1 and 2 will remain in operation.

Impact on facility operation (FPP deviations): Reduced adult fish ladder collection channel elevation and flow for about one hour.

Impact on unit priority: N/A

Impact on forebay/tailwater operation: N/A

Impact on spill: N/A

Dates of impacts/repairs: April 27, 2017 from 1200-1700.

Length of time for repairs: The swap and test are estimated to be completed in less than one hour if no unforeseen events occur.

Analysis of potential impacts to fish

- 1. The ten year average passage for Lower Granite ladder on April 27 is 219 adult Chinook, 4 jack Chinook, and 49 steelhead. Little or no impact to juvenile fish passage is expected.
- 2. Estimated exposure to impact by species and age class (i.e., number or percentage of run exposed to an impact by the action): Based on ten year average at Lower Granite, about 0.19% of adult Chinook, 0.01% of jack Chinook, and 0.03% of steelhead are expected to be counted April 27.
- 3. Type of impact by species and age class (increased delay, exposure to predation, exposure to a route of higher injury/mortality rate, exposure to higher TDG, etc.): AWS pumps are expected to be out of service for about 1-3 hours to complete the bulkhead swap and reliability testing of AWS pump 1. The potential impact is

reduced adult fish ladder collection channel elevation and flow for about one hour.

Summary statement - expected impacts on:

Downstream migrants: N/A

Upstream migrants (including Bull Trout): Minimal

Lamprey: N/A

Comments from agencies

From: Bill Hevlin - NOAA Federal [mailto:bill.hevlin@noaa.gov] Sent: Friday, April 21, 2017 10:30 AM To: Peery, Christopher A CIV (US) <Christopher.A.Peery@usace.army.mil> Cc: Trevor Conder <trevor.conder@noaa.gov>; Bill Hevlin <bill.hevlin@noaa.gov> Subject: [Non-DoD Source] Re: Coordination. Lower Granite Unit 2 and AWS 1 RTS (UNCLASSIFIED)

Chris,

Thanks for letting us know that pump one is going back in service and that there will now be a spare pump. It is very important to have three working pumps available over the next several months, it reduces the risk to adult passage.

Bill Hevlin

Final coordination results

MOC was approved.

After Action update

AWS pumps 2 and 3 were removed from service at 1220 hours. AWS pump 1 was run tested from 1312-1457 hours. At 1457 hours AWS pumps 1 and 3 were returned to normal operation.

Please email or call with questions or concerns. Thank you,

Elizabeth Holdren Supervisory Fisheries Biologist Lower Granite Lock and Dam Ph. 1(509) 843-2263 Cell. 1(509) 592-6109 Elizabeth.a.holdren@usace.army.mil