

**OFFICIAL COORDINATION REQUEST  
FOR  
NON-ROUTINE OPERATIONS AND MAINTENANCE**

**COORDINATION TITLE:** 14LWG 03 AWS Pump #3 Test - **RETESTING**

**COORDINATION DATE:** April 8, 2014 **UPDATED:** April 15, 2014

**PROJECT:** Lower Granite Dam

**RESPONSE DATE –** April 21, 2014

**Description of the problem:** The Lower Granite project utilizes three auxiliary water supply (AWS) pumps to supply auxiliary water to the adult fishway channel. The project operates with two AWS pumps in service and a third pump held in reserve should a problem develop with one of the operating pumps. The project currently has AWS pumps #1 and #2 operating. AWS pump #3 was recently brought back from delayed winter maintenance. AWS pump #3 needs to be brought on line to ensure operational reliability. The first test was performed on April 14 and failed, fish pump #3 failed to start. The problem was found to be a linkage issue in the breaker for fish pump #3, and the problem is believed to be fixed. Lower Granite would like to re-test fish pump #3 at this time.

**Type of outage required:** The requested outage would take place on **Monday, April 21, 2014** from 12:00 am to approximately 14:00 am. After the switch takes place, AWS pump #1 and AWS pump #3 would remain in continuous operation (assuming successful pump 3 operation).

**Impact on facility operation:** Minimal due to a two hour switch-out. AWS pumps #1 & #2 would be shut down and bulkheads put in place to switch from AWS pump #2 over to AWS pump #3.

**Length of time for repairs:** The estimated length of time to make the switch should be two hours or less.

**Expected impacts on fish passage:** Impacts to adult fish passage should remain minimal since the planned AWS pump switch will be taking place later in the morning after the main movement of adult fish up the ladder has taken place. See the attached graph. **From April 8 through April 14 a total of 9 adult Chinook passed the ladder. The trend for Chinook passage is upward and waiting much longer into the spring to perform the test has the potential to negatively impact adult spring Chinook. Adult steelhead passage through the ladder over the same period ranged from a high of 81 to a low of 39 and the trend is downward. We anticipate little or no impact to juvenile fish passage during the outage since only the adult fish ladder system will be impacted when the pumps are switched.**

**Comments from agencies:**

**FPOM minutes of April 10, 2014:** 14LWG03 fish pump 3 test. **FPOM attendees reluctantly agreed with the testing.**

**Final results of the first test:**

-----Original Message-----

From: Hilt, Richard NWW  
Sent: Monday, April 14, 2014 2:37 PM  
To: Moody, Gregory P NWW; Setter, Ann L NWW; Bailey, John C NWW; Fone, Kenneth R NWW  
Cc: Halter, Mike J NWW; Brooks, Francis C NWW  
Subject: LWG FP#3 test run (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Greg,

Update on our FP #3 test run.

Initial condition: Discharge bulkhead in FP #3, FP #1&2 running  
12:28 FP #1&2 shutdown  
(FP #3 Discharge bulkhead being pulled)  
12:53 Started FP #1&3, FP1 started, FP3 failed to start  
(Attempted to troubleshoot FP3 failure to start, could not determine, lowered FP3 discharge bulkhead)  
13:48 Started FP#1&2  
Final condition: Same as initial condition, Additional troubleshooting of FP3's failure to start to follow.

Will coordinate another test when failure to start condition is fixed.

Any questions give me a call.

Thanks,

Rich Hilt  
U.S. Army Corps of Engineers,  
Chief of Operations  
Lower Granite Dam

### **April 21, Retesting Comments from Agencies:**

-----Original Message-----

From: Bill Hevlin - NOAA Federal [mailto:bill.hevlin@noaa.gov]  
Sent: Thursday, April 17, 2014 11:58 AM  
To: Moody, Gregory P NWW; Setter, Ann L NWW; Bailey, John C NWW  
Cc: Bill Hevlin - NOAA Federal; Trevor Conder - NOAA Federal  
Subject: [EXTERNAL] Re: MOC 14 LWG 03 Fish Pump#3 operation test - update and retest (UNCLASSIFIED)

Greg & Ann,  
NOAA Fisheries does not have a problem with the temporary outage of the adult ladder pumps that the Corps is proposing.

Thanks for keeping us updated.  
Bill Hevlin

**From:** Tom Lorz [mailto:lorz@critfc.org]  
**Sent:** Thursday, April 17, 2014 1:47 PM  
**To:** Moody, Gregory P NWW

**Subject:** [EXTERNAL] RE: MOC 14 LWG 03 Fish Pump#3 operation test - update and retest (UNCLASSIFIED)

No I agree that we need to get this done and waiting until noon should be ok. If there is anyway to do sooner, preferred, but can wait until Monday. Would be willing to let it stay out a little longer if needed to get work done, since we can not wait much longer and this might be one of the last attempts we get until the next lull in the runs.

tom lorz

**Final results:**

-----Original Message-----

From: Hilt, Richard NWW

Sent: Wednesday, April 30, 2014 2:19 PM

To: Moody, Gregory P NWW

Cc: Halter, Mike J NWW; Holdren, Elizabeth A NWW

Subject: RE: 14 LWG 03 Fish Pump#3 operation test.docx (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Sorry Greg for the slow response and I forgot to get back to you last week as I was out on the date it happened.

On Apr 21,

12:34 FP #1,2 shut off for bulkhead swap from 3 to 2.

13:26 FP#1,3 running, #2 in stby with discharge bulkhead installed

No problems, all FP's available (w/ bulkhead installed) or running at LWG.

RAH

