

#### MEMORANDUM FOR: FPOM MEMBERS

SUBJECT: Bonneville Lock and Dam Fishway and Construction Activities Report for December 2004 FPOM meeting.

## **1 CONSTRUCTION STATUS**

- 1.1 Adult PIT tag exit detectors. Washington Shore construction continues.
- 1.2 PH 1 Gantry Crane Delivery and Erection. Construction continues.
- 1.3 North Monolith repairs. Plans and specs not yet completed.
- 1.4 <u>B2 Follow on</u>. Mods to the perf plate and the bypass flume to be completed in February 2005.
- 1.5 <u>PH1 Gantry Crane Demolition.</u> Would like to begin in April/May and would require about 30 days. It would entail having a barge at south end of PH1 and having Units 0 and 1 down for entire work period (Unit 2 will also be OOS at this time). Moving work north would result in all units south of work location being down. In addition, a new bus needs to be brought in prior to the month long outage and this installation requires 4 consecutive days of PH1 being completely de-energized.
- 1.6 <u>PH2 Exciter replacement</u>. All exciters need replacement. They will be done one at a time with the initial unit taking approximately 6 weeks and each subsequent unit taking 4 weeks. Would like to begin in July 2007 and end in July of 2008. The fish units will be done during the in-water work period and units can be taken down in a manner to minimize impact to fish.

### 2 FISHWAY SUMMARY

- 2.1 Unit operation. PH1 is the priority powerhouse.
  - 2.1.1 Unit 0 remains out of service for a 5-year overhaul.
  - 2.1.2 Unit 2 remains out of service for turbine rehab
  - 2.1.3 Unit 10 remains out of service for gantry crane three construction.
  - 2.1.4 Unit 11 remains out of service for unit overhaul.
  - 2.1.5 F1 and F2 are out of service for winter maintenance.

### 2.2 Adult Fishways.

- 2.2.1 Cascades Island fishway PLC remains in manual and maintaining criteria. The exit is open.
  - 2.2.1.1 At low tailwater, the water elevation sensors do not read correctly.
  - 2.2.1.2 Cascades Island fishway computer also continues to show "lamprey mode active".
  - 2.2.1.3 As of 13 December, the electricians are working on the system.
- 2.3 Juvenile Fishways.
  - 2.3.1 DSM1 continues to run south with STSs and VBSs in Units 1 and 3.
  - 2.3.2 The F2 north orifices remain open to compensate for Unit 11 orifices being closed.

### 2.4 Dewatering and Fish Salvage.

- 2.1.1 Washington Shore fishway, UMT, and AFF were dewatered on 29 November. 13 adult steelhead, 280-300 lamprey and 78 peamouth, suckers, and sculpin, 12 adult shad, three adult steelhead, seven juvenile steelhead, and one rainbow were rescued.
- 2.1.2 South Monolith was dewatered on 14 December. Two juvenile chinook, four peamouth and three northern pikeminnow were rescued.
- 2.1.3 PH1 STSs and VBSs and PH2 STSs will be removed starting 15 December.
- 2.1.4 DSM1 channel was dewatering on 15 December.
- 2.5 UPCOMING ACTIVITIES
  - 2.5.1 DSM2/Two mile pipe dewatering and fish salvage on 20/21 December.

### 3 RESEARCH

3.1 <u>ERDC TDG</u>. Sensors remain installed in the tailrace.

- 3.2 <u>Warm Springs Tribes</u>. Collected 80 lamprey during the Washington Shore dewatering.
- 3.3 WDFW Fish Counting. 16-hr video counts at Cascades Island and Bradford Island.
- 3.4 WDFW chum. Concluded on 26 November

# 4 MISCELLANEOUS

- 4.1 We are maintaining tailwater elevations at a minimum of 11.7' during all hours and between 11.7' and 12.1' between the hours of 0700 to 1900 daily, with a target of 11.9'. This operation is to facilitate chum spawning around lves and Pierce Islands.
- 4.2 On 8-10 December we had tailwater fluctuate up to 10' in a 24 hour period. This exceedance of FPP criteria was permissible from 1900 on 08 December to 1900 on 13 December to ensure that required forebay and tailwater elevations could be maintained.
- 4.3 Embrace a Stream grant application for Bass Lake monitoring and public workshop to be submitted to Trout Unlimited by 20 December.

**Bonneville Fisheries**