

CENWP-OP-B

MEMORANDUM FOR THE RECORD

SUBJECT: BONNEVILLE DAM WINTER FISHWAY MAINTENANCE 2004/2005.

1. This is a working document detailing Bonneville Dam winter fishway maintenance, 2004/2005. Reviewers can expect changes as we approach the winter maintenance season.

2. ADULT FISHWAYS

2.1. Fish Unit Outages

- 2.1.1. Fish Unit 1: 11/27/04 – 02/28/05, annual overhaul.
- 2.1.2. Fish Unit 2: 11/27/04 – 02/28/05, annual overhaul.

2.2. Adult Fish Collection and Monitoring Facility (22 Nov 04- 28 Feb 05)

- 2.2.1. Go to minimum flow on 11/22/04.
- 2.2.2. Dewater exit section on 11/24/04.
- 2.2.3. Dewater entrance on 11/29/04.
- 2.2.4. Routine maintenance.
- 2.2.5. PM entrance gate cranks, pulleys as necessary.
- 2.2.6. PM bridge crane.
- 2.2.7. Clean count station window. (Project Fisheries)
- 2.2.8. Repair/Replace netting over flumes (Project Fisheries).
- 2.2.9. Repair AFF lamprey winch (cable needs to be replaced)
- 2.2.10. Repair large double doors. Doors get stuck and won't close all the way.
- 2.2.11. Re-glue the existing neoprene in the flumes.
- 2.2.12. Replace the drain fitting on the anesthetic tank (difficult to open now).
- 2.2.13. Clean out main floor drain so water and anesthetic can drain to the water treatment facility rather than the river.
- 2.2.14. Replace light in Valve #12 indicators.
- 2.2.15. Tighten all handrails.

2.3. Washington Shore Ladder

UMT: 24 Nov 04- 28 Feb 05
North Monolith: ?? Jan 04- 28 Feb 05
South Monolith: 13 Dec 04- 28 Feb 05

- 2.3.1. Install UMT bulkhead on **north** end on 11/24/04
- 2.3.2. Open Cascades Island exit on 11/24/04 (raise lamprey barrier prior to opening exit).
- 2.3.3. Switch to PH1 priority on 11/27/04
- 2.3.4. Go to orifice flow on 11/27/04.
- 2.3.5. Drain ladder to tailwater on 11/29/04.
- 2.3.6. Install UMT bulkhead on **south** end on 11/29/04
- 2.3.7. Pump water and chase fish out of UMT on 11/30/04
- 2.3.8. Drain **north monolith** completely on 12/13/04.
- 2.3.9. Drain **south monolith** after the north monolith has been drained and repaired.
- 2.3.10. Inspect AWS.
- 2.3.11. Clean staff gauges.
- 2.3.12. Calibrate fishway entrance gates at SA-24 board and at the gates.
- 2.3.13. Replace/repair PIT tag equipment. (PSMFC/NOAA FISH)
- 2.3.14. Install new slot weir PIT tag detectors (contract)

- 2.3.15. Remove/repair antennas and PVC tubing in monoliths. (Univ. of Idaho) *Will require some assistance from the riggers.*
- 2.3.16. Install new lamprey passage system in Washington Shore. (NOAA Fish)
- 2.3.17. Repair north monolith. (contract?) *funding from operations.*
- 2.3.18. Remove old staff gauge frames from NDE, North upstream tailwater, SDE.
- 2.3.19. Repair picket leads in triangle section.
- 2.3.20. Install new velocity meter at South Monolith.
- 2.3.21. Remove UMT fish crowder and count window cleaner. *Funding from Gary J. WO#*

2.4. Cascades Island Ladder not going OOS this year.

- 2.4.1. Open fish exit on 11/24/04.
- 2.4.2. Open barrier at count station on 11/24/04
- 2.4.3. Install UMT bulkhead on **south** end on 11/29/04.
- 2.4.4. Inspect fishway on 01/12/05. (ROV inspection)

2.5. Bradford Island Ladder (A&B-Branches) not going OOS this year.

- 2.5.1. Calibrate collection channel, tailwater, orifice gate, and entrance gate transducers.
- 2.5.2. Clean staff gauges.
- 2.5.3. Inspect PH1 PCC and B-Branch fishway 01/12/05. (ROV inspection)
- 2.5.4. Drain and repair FV1-1 in February or whenever WS comes back.
- 2.5.5. Weed maintenance around the PIT tag building at the junction pool. (garage crew?)

3. JUVENILE FISHWAYS

3.1. Juvenile Monitoring Facility (29 October 04 – 01 February 05)

- 3.1.1. Blow out hydro cannon lines on 09/01/04
- 3.1.2. Drain sample side completely and inspect on 10/29/04. (Project Fisheries)
- 3.1.3. Inspect and PM equipment
- 3.1.4. Inspect flume joints. Re-caulk as needed.
- 3.1.5. Repair (shocks, cracks, etc.) and Winterize 2 and 3 way rotating gates.
- 3.1.6. Replace charcoal filters.
- 3.1.7. Drain bypass side completely and inspect on 12/20/04. (Project Fisheries)
- 3.1.8. Inspect/Repair lifting cables for the fish lifts.
- 3.1.9. Install heaters at the PDS. Run power from the building to the PDS first. *Funding from operations.*
- 3.1.10. Install booster pump inside SMF for water in fish lifts. *Funding from operations.*
- 3.1.11. Modify the bypass flume to prevent water from pooling. *Funding from B2 Follow on.*
- 3.1.12. Modify perf plate in bypass flume to prevent debris blockages. *Funding from B2 Follow on.*
- 3.1.13. Replace flapper cover on the project drain pipe for the SMF.
- 3.1.14. Seal off drain pipe to western wildlife pond.

3.2. Second Powerhouse JBS (20 December 04 – 01 February 05)

- 3.2.1. Pull STSs 12/15/04.

- 3.2.2. Dewater DSM on 12/20/04.
- 3.2.3. PM equipment.
- 3.2.4. Replace or thoroughly clean orifice lenses.
- 3.2.5. Inspect/Repair screen cleaners. These need to be operable as a back-up system.
- 3.2.6. Survey flume ovality in Jan '05 (District surveyors)
- 3.2.7. Inspect transport flume from wave area to outfalls on 12/21/04 (Rerecich and Dave Benner-FPC)

3.3. First Powerhouse JBS (15 December 04 – 15 September 2005)

- 3.3.1. Pull STSs 12/15/04.
- 3.3.2. Close orifices, pull bulkhead and walk channel 12/16/04
- 3.3.3. Drain north end completely, inspect and PM equipment.

4. SPILLWAY

- 4.1. Test all gates.

KEY TO COLORS-

Black- normal/routine dewatering work

Orange- work to be done by contractors or researchers.

Blue- work to be done by Fisheries

Pink- highlights special requests or non-routine work items.

Gray- work that has been completed