

CENWP-OD-B

MEMORANDUM FOR THE RECORD

SUBJECT: BONNEVILLE DAM WINTER NON-ROUTINE FISHWAY MAINTENANCE 2018/2019.

This is a working document; reviewers can expect changes as we approach the winter maintenance season.

1. OREGON SIDE**1.1. Bradford Island Ladder – Not dewatering**

Rov inspection in Dec

1.1.1. On hold until 2017: Set lower limit on B-branch entrance gate 4S

B-branch erosion repair in spillway:

FV4-3, FV4-4, and spill bay 18 closed (Dec-Jan)

1.1.2. Remove B2CC and spillway avian wires in Nov-early Dec (Riggers)**1.2. PH1CC and Entrances – Not dewatering**

Rov inspection in Dec

1.3. Navigation Lock – Extended outage (12 Dec 2016 – 9 Feb 2017)

1.3.1. Riggers, mechanics, electrician crews required

2. WASHINGTON SIDE**2.1. Cascades Island – Not dewatering, exit will be open when UMT bulkhead in (03 Dec?)**

2.1.1. Replace Cascades Island crowder (sandbag/pump out count station area) (Riggers/Mechanics) in Oct-Nov.

2.1.2. On hold until 2018: Repair grating in FG6-20 diffuser pit (Riggers)

2.1.3. 2018: Debris-proofing upstream side of CI crowder, which currently catches debris

2.2. Washington Shore Ladder (03 Dec 2018 – 27 Feb 2019)

Orifice flow on 1 Dec

Dewater to tailwater on 03 Dec – includes final exit section

UMT south bulkhead will remain, dewater UMT on 03 Dec

2.2.1. Lamprey orifice cutting in serpentine weirs (NWP Contractor)

2.2.2. New lamprey pumps and cages near FV6-9 (NWP Contractor)

2.2.3. New lamprey flumes from below count station (NWP contractor)

2.2.4. PIT antenna swap in serpentine section week of 28 Nov (PSMFC/Riggers)

2.2.5. FGE hydroacoustic study at PH2 +90 gatewells (PNNL) – barge install and equipment mounting to STS, track racks (Rigger support) and trailer electrical hookup (Electricians)

2.2.6. Place screen on square opening between AWS and crowder area (GAR)

2.2.7. Reverse lower picket leads to correct position and eliminate any new gaps (Riggers)

2.2.8. Rehab FV6-9 (Mechanics) and inspect trash racks

2.2.9. Fix UMT bulkhead seals if time allows (Riggers)

2.2.10. Inspect and repair weir 37, hitting torque limits (Mechanics)

2.2.11. Remove NOAA lamprey boxes and associated systems (Mechs)

2.3. PH2CC, North and South entrances (03 Dec 2018 – 27 Feb 2019)

Place transverse bulkheads between 12 and 13, place stab plates in FOGs, F2 tail logs in

Dewater past tailwater on ~5 Dec

2.3.1. Refasten RT conduit at NDE – vibrates at certain tailwaters.

2.3.2. Lamprey plating in lower ladder (NWP Contractor)

2.3.3. LFS hatch repair (NWP dive contractor – 21-24 Nov)

2.3.4. Replace diffuser B5 gate, remove a different gate for rehab (Riggers, Mechanics)

2.3.5. Replace diffuser gate (B4?) with new gate if time allows (Riggers, Mechanics)

- 2.3.6. Fix diffuser gate A2 (Mechanics, Riggers)
- 2.3.7. Assess and repair PH2CC grating (Riggers)
- 2.3.8. Assess and remove sand in AWS, suck truck if necessary (Riggers)
- 2.3.9. Rehab C-valves, focus on C5-C10 (Mechanics, Riggers)
- 2.3.10. Lamprey weir caps on NDE, NUE entrance gates (Riggers)
- 2.3.11. Remove NDE, NUE entrance gates, repair wheels, blast, paint if time allows (Riggers, Painters)

2.4. B2 Corner Collector (01 Sep 18 – Mar 2019)

- 2.4.1. Caulk PIT antenna joints (Painters)

2.5. DSM 2 (15 Dec 2018 – 29 Feb 2017)

Turn off orifice lights on 13 Dec 18.

Dewater DSM on 17 Dec.

- 2.5.1. Pull STSs week of 19 Dec 18.
- 2.5.2. STS repairs / maintenance.
- 2.5.3. Overhaul of screen cleaner #3 (Mechanics)
- 2.5.4. Rehab plumbing of orifice gates 11A-S and 11A-N (Mechanics)
- 2.5.5. Overhaul of ERG hydraulics, remove and reseal, blast/paint (Mechanics, Painters)
- 2.5.6. Install STSs starting Feb 2018. (Riggers)

3. RESEARCH FACILITIES

3.1. Adult Fish Facility (Nov 2018 – April 2019)

Go to orifice flow on 01 Nov 18

Dewater on 05 Nov 18

- 3.1.1. New netting over fish flumes (Fisheries)
- 3.1.2. Repair weirs, shims (Mechanics)
- 3.1.3. Repair Valve 3 (Mechs)
- 3.1.4. Repair fishway exit bulkhead leak (Mechs)
 - 3.1.4.1. Fix seals on bulkhead before dewatering?!
- 3.1.5. Inspect area under brail pool (Mechs and Fisheries)
- 3.1.6. Valve 15 trash rack "trap door" for dead shad (Mechs)

3.2. Smolt Monitoring Facility (31 Oct 18 – 28 Feb 19)

Switch to bypass, drain and inspect sample flume on 31 Oct 16. (PSMFC)

- 3.2.1. Repair fractures in 2- and 3- way rotating gates and repair shock absorbers to both (Mech)
- 3.2.2. Replace rubber seal on bottom of sample tank crowder
- 3.2.3. Replace air gauges and leaking ¾" ball valves around facility
- 3.2.4. Inspect switchgate valve/spring when dewatered, replace handles for lid
- 3.2.5. Repair leaking seal on oil/water trap at upstream switchgate
- 3.2.6. Enlarge inspection ports at downstream switchgate
- 3.2.7. Replace rivets in flume lids
- 3.2.8. Fabricate hook for sample take curtain, lids for charcoal barrels if time allows
- 3.2.9. Replace burnt-out lights in parking lot, walkway, and exterior of building (Elec)
- 3.2.10. Repair downspout on W side of building, investigate/repair leaky roof (GAR)
- 3.2.11. Caulk flume joints (painters)

KEY TO COLORS-

Red - Painters

Blue – Mechanics

Pink – Riggers

Green – Garage

Orange – Electricians

Aqua- Fisheries

Yellow- contractors or researchers