

FISH PASSAGE O&M COORDINATION TEAM
Adult and Juvenile Fish Facilities Status Report
U.S. Army Corps of Engineers
Walla Walla District
September 13, 2007

Construction

McNary:

- Turbine units 11 and 12 placed out of service for transformer replacement.
- Turbine units 13 and 14 placed out of service for transformer replacement Sep 4.
- Turbine unit 4 taken out service Aug 27 for thrust bearing cooler replacement.
- Turbine unit 1 taken out of service Sep 5 for 9 year overhaul.
- Short term turbine unit outages still taking place in support of powerhouse roof work (Outage dates are as follows: turbine units 5-6: Aug 10-11; turbine units 3-4: Aug 13 – 18; turbine units 7-8: Aug 20 – 26; turbine units 9-10: began Aug 27).

Ice Harbor:

- Annual maintenance - turbine unit 4 is currently out of service.
- Annual maintenance and blade welding -turbine unit 2 started July 30.

Lower Monumental:

- Turbine units 1 and 2 out of service since 01Aug for breaker replacement.
- Turbine units 3-6 briefly out of service (< 1 hour) Aug 29 because of line outage.
- Doble tests took place Sep 4.
- RSW: bulkheads were removed from spillbay 1 and installed in spillbay 7 so spillgate 1 would be available for service during RSW construction. The spillgate storage pit continues to be used for sandblasting STSs.

Little Goose:

- Turbine unit 1 returned to service Aug 24 following fire protection upgrades.
- Turbine unit 2 returned to service Aug 23 following annual maintenance, taken out of service Sep 4 for fire protection upgrade.
- Turbine unit 3 - forced outage Sep 9 – severe “at risk” ground fault failure, previously out of service Aug 27 - Sep 6 for fire protection system upgrade. Repairs expect to take 1-3 weeks.
- Turbine unit 4 – forced outage Aug 29 – severe “at risk” ground fault failure shortly after being returned to service from fire protection system upgrade. Repairs expect to take 1-3 weeks.
- Turbine unit 5 returned to service August 10 following fire protection upgrades.
- Doble tests took place Aug 13 – 17. Spill was increased to maintained river flow during outage.

Lower Granite:

- Turbine units 1, 4, and 6: one day outage Sep 5 to remove a transmission line from service.
- Turbine unit 2 remains out of service for rewind and 6-year overhaul, with completion is not expected until January 2008.
- Turbine unit 3: 6 year maintenance and cavitation repair. Estimated return to service: Jan. 2008.
- Turbine unit 5: Annual maintenance began Aug 28.
- Turbine unit 6: breaker replacement began Sep 10.
- Doble tests took place Aug 20 – 23.

Operations and Maintenance - Juvenile Fish Facilities

McNary:

- Transport Facility: Primary and secondary bypass took place on alternate days until the start of collection for transport on August 17. Fish truck were sent out daily August 18-22, every-other-day transport began Aug 23.

- Aug 14 ESBS camera inspections at turbine units 4 and 9 revealed no problems. VBS monitoring revealed 1 screen outside criteria, 3 VBSs cleaned August 16, 4 VBSs cleaned Aug 17.
- TSWs closed August 30.

Ice Harbor:

- Sampling Operations: Last sample was July 10 due to water temperatures.
- Draft tube turbine unit 2 unwatered Aug 13 because of planned extended outage.
- No problems were found on the STS inspection.
- Slot 5C – oil found Aug 27. Oil was removed via absorbants and cause is under investigation.
- STS Inspections: conducted Aug 27 in turbine units 1, 2, 5, and 6. All slots satisfactory except for oil found in slot 5C.
- RSW producing unusual intermittent vibrations in August. A/E investigation for source of vibration in progress. RSW ceased operation Sep 1.
- JBS inclined screen cleaner: Cleaner software program caused the cleaning brush to travel past set limits. Temporary repairs performed Sep 3, no problems since final repairs Sep 5.

Lower Monumental:

- Spill gate 1 is out of service so that the spill gate bulkhead storage pit can be used for overhaul, maintenance and sandblasting of STSs.
- STS inspections took place July 31 and Aug 6. No problems found.
- Facility mortality rate has been above 6% since Aug 12, most likely due to fish diseases and elevated water temperatures.
- Barge transport ended August 16; transport by midi-tanker began August 18.
- Primary Dewaterer Screen Cleaner: cleaning brush cable failed Aug 24. Brush was raised and taken out of service as repairs will not be possible until the winter maintenance period. Air burst system cycle time decreased to keep inclined screen clean.

Little Goose:

- ESBSs and VBSs video inspected August 13, no problems found.
- Turbine unit 3 ESBS drawdown tests conducted Aug 21, all satisfactory.
- Last fish barge left Little Goose Aug 16. First truck sent out Aug 18.
- Bird hazing activities completed Aug 17.

Lower Granite:

- RSW testing for the year was completed on July 10.
- Last fish barge left Lower Granite Aug 16. First truck sent out Aug 18.
- Separator inclined screen partially dewatered for cleaning Aug 21 and 30 after invertebrates and algae clogged the screen. Extra cleaning required Aug 31 and early Sep after high winds produced forebay tumbleweed accumulations

Operations and Maintenance - Adult Fish Facilities

McNary:

- Oregon Ladder: Fish pump 3 remains out of service for overhaul. The return to service date is uncertain due to shaft alignment problems. Ladder is monitored daily for woody debris accumulations.
- Washington Ladder: The Wasco PUD turbine unit interrupted 1 hour for maintenance on Aug 22. Ladder operation has been satisfactory.
- South traveling screen on the Oregon shore ladder, returned to service August 16. No problems noted during August 13 video inspection (bulkheads were installed and pulled that day).

Ice Harbor:

- North Shore fish pump #1 out of service for warranty work. Gear reducer repairs in progress. Completion expected 3rd week of September.

Little Goose:

- On Aug 13 fish pump 3 briefly shut down at 1030 hours due to cooling water problems. The pumps was immediately returned to normal operation.
- SSE 1&2: preventative maintenance and brake shoe replacements performed Aug 29 on both weirs.

Lower Granite:

- Diffuser / trashrack for the adult fish trap was noted to be 80% debris coverage and reducing flows. Project cleaned the diffuser August 10.
- Fish pump 1 frequently trips a breaker due to low tailwater conditions. In every case, normal operations resume after the breaker is reset and the pump is restarted.

Research

Lower Monumental:

- LoMo summer acoustic study initiated. Plan to receive up to 2800 Fall Chinook subs from Little Goose. Study forebay velocities and smolt passage before RSW installation.
- Aug 14: Battelle/NOAA Fisheries researchers installed temperature and flow monitoring equipment turbine units 3-6 in support of Fall Chinook study.
- NOAA Fisheries personnel removed radio telemetry equipment Sep 4.

Little Goose:

- NOAA Fisheries subyearling Chinook study in progress.
- USGS Telemetry: Trash/shear boom antennas removed Aug 23.
- University of Idaho: collection and tagging of adult lamprey in progress.

Lower Granite:

- Adult trap operations suspended July 23 due to high water temperatures. Trap operations briefly resumed August 30, but was shut down for several days due to excessive drop in ladder weir differential as required per Fish Passage Plan. Two adult holding tanks are currently in operation. The other holding tanks will not be available until forebay elevations are raised.