

The Dalles Dam Fishway Status Report

2/4/2018

Inspection Period: 01/28/2018-02/03/2018

THE DALLES DAM



The Dalles Project-Fisheries
 P.O. Box 564
 The Dalles, OR 97058-9998
 Phone: 541-506-3800

| The Dalles Dam | Inspections Out of Criteria | Criteria Limit | Total Number of Inspections: | Temperature: |
|---|-----------------------------|----------------|------------------------------------|------------------|
| | | | Comments | 41.0 °F |
| | | | | Secchi: 5.0 feet |
| NORTH FISHWAY Out of service Jan 16 - Jan 30 | | | | |
| Exit differential | 0 | ≤ 0.5' | | |
| Count station differential | 0 | ≤ 0.3' | | |
| Weir crest depth | 0 | 1.0' ± 0.1' | | |
| Entrance differential | 0 | 1.0' - 2.0' | 1.4 | |
| Entrance weir N1 | 0 | depth (≥ 8') | 9.1 | |
| Entrance weir N2 | 0 | Closed | | |
| PUD Intake differential | 0 | ≤ 0.5' | | |
| EAST FISHWAY Out of service Dec1 - Feb28 | | | | |
| Exit differential | 0 | ≤ 0.5' | | |
| Removable weirs 154-157 | 0 | Per forebay | Gearbox rehab start on 155 and 156 | |
| Weir 158-159 differential | 0 | 1.0' ± 0.1' | Gearbox rehab start on 158 | |
| Count station differential | 0 | ≤ 0.3' | | |
| Weir crest depth | 0 | 1.0' ± 0.1' | | |
| Junction pool weir JP6 | 0 | 0.0 | | |
| East entrance differential | 0 | 1.0' - 2.0' | | |
| Entrance weir E1 | 0 | No criteria | | |
| Entrance weir E2 | 0 | depth (≥ 8') | | |
| Entrance weir E3 | 0 | depth (≥ 8') | | |
| Collection channel velocity | 0 | 1.5 - 4 fps | | |
| Transportation channel velocity | 0 | 1.5 - 4 fps | | |
| North channel velocity | 0 | 1.5 - 4 fps | | |
| South channel velocity | 0 | 1.5 - 4 fps | | |
| West entrance differential | 0 | 1.0' - 2.0' | | |
| Entrance weir W1 | 0 | depth (≥ 8') | Weir removed for caps and rehab | |
| Entrance weir W2 | 0 | depth (≥ 8') | Weir removed for caps and rehab | |
| Entrance weir W3 | 0 | No criteria | Weir removed for caps and rehab | |
| South entrance differential | 0 | 1.0' - 2.0' | | |
| Entrance weir S1 | 0 | depth (≥ 8') | Weir removed for caps and rehab | |
| Entrance weir S2 | 0 | depth (≥ 8') | Weir removed for caps and rehab | |
| JUVENILE PASSAGE | | | | |
| Sluiceway operation | 0 | Units 1, 8, 18 | | |
| Turbine trashrack drawdown | 0 | <1.5', wkly | range: 0.1-0.8' | |
| Spill volume/pattern | 0 | | Spillway closed midnight Aug31 | |
| Turbine Unit Priority | 0 | per FPP | MU 13-16 oos 13 RTS 12/20 | |
| Turbine 1% Efficiency | 0 | per FPP | | |

OTHER ISSUES:

Birds and Sea lions:

No sea lion sightings this week. Eagles numbers dropping precipitously
Gull numbers <20 near dam. Gull seen in the hundreds near The Dalles Marina. ~80 Cormorant resting in SW3

Operations

Sluiceway closed.
East fishway out of service through Feb28
North fishway return to service Jan 16

Current Outages;

T8 (MU15 & MU16) out for transformer failure. Transformer replacement 6/28/18.
MU17 and MU18 out for overhaul. Return 4/26/18.
Fish unit 1 and 2 out 12/1/17 for annual fishway outage. East fishladder dewatered 12/1/17.

Maintenance;

East exit weir electrical panel FCQ7 partially installed. Final design drawings near complete. Installation to continue in Feb.
West, south and north entrance weirs removed and lamprey weir caps install underway.
East exit oil boom installation by AWS contract reviewed. Estimate too high. Determining alternative plan.
Fish lock upper and lower bulkhead replacement delayed due to budget.
East exit 155, 156, 158 weir gearboxes removed for rehab.
Work starting on a collection diffuser valve rehab for scoping purposes on remaining valves
Collection channel removal of stuck dewater pump end Jan.
North ladder diffuser valves preventative maintenance underway. One broke valve being repaired.
Long term repair items; 154 -157 rehab/weir wheel replace, diffuser valve overhaul (rehab and decommission).
Fish related /non-fish funded items; Spillway assessment, spillway crane replace and spillgate 9. All awaiting funding.
All spillway items on Critical Infrastructure. Spillgate 9 on large cap list, projected for 2022. Charter in place for comprehensive spillway assessment.

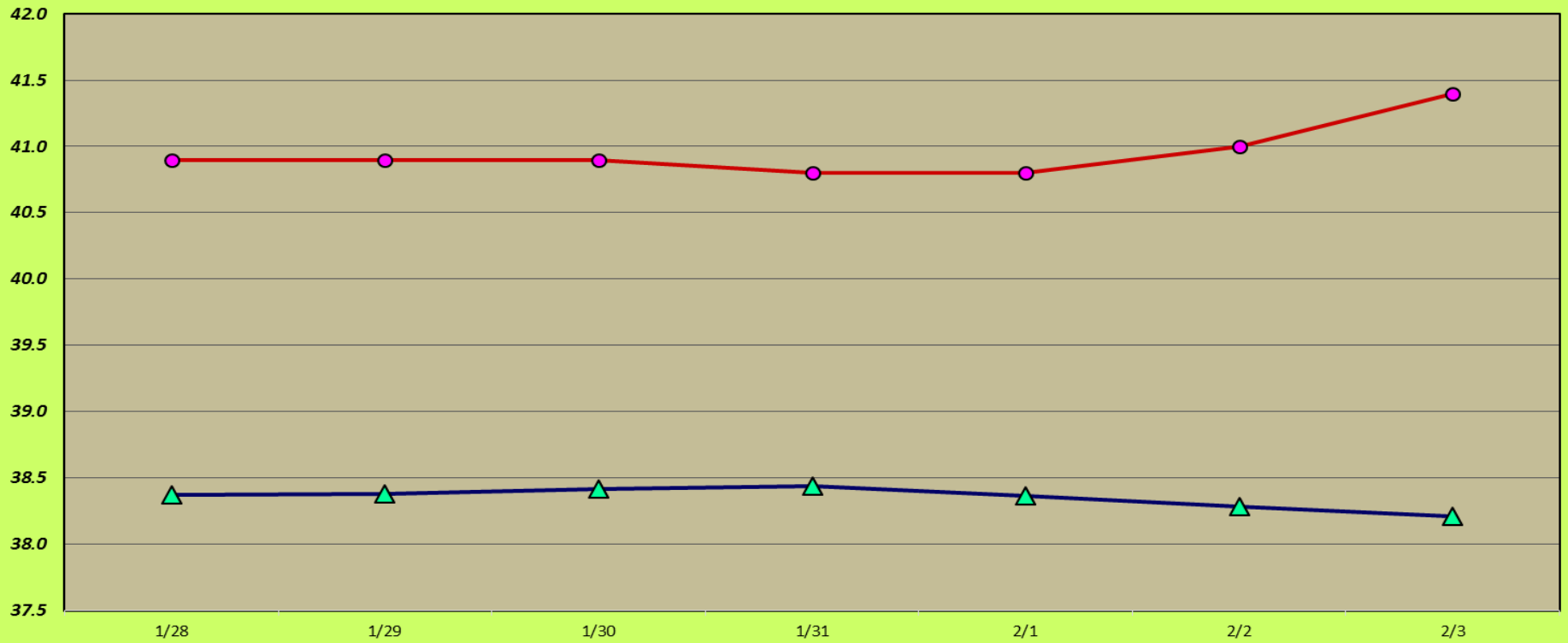
Research/Construction/Contractors:

Fish Counters - Normandeau video review counting through the winter.
Pikeminnow dam angling - Done for season with a total catch at 1776. Highest invasive walleye by-catches do date being released. Concern brought to FPOM.
AWS construction - Construction progress continues. Commissioning testing Mar 31.
Lamprey minor mods - Rounded entrance weir caps on sight. Working on attaching to west weirs. South and north to follow.
Railroad track removal - Tailrace deck rail removal approx. half completed.
Fish unit breaker replace.- Work in progress. Completion Feb18, 2018. Two weeks commission testing required.
Fish unit rehab - Phase 1A report Jan 2018. Award 2020. Completion 2022.
Transformer replacement - Install start May 2018.

Approved by: Ron Twiner
Operation Project Manager The Dalles Dam

The Dalles Dam River Temperatures

● Current USGS Daily Average ▲ USGS Daily Average (2007-2017)



| | Secchi: | | USGS: Temperatures |
|------|---------|-------|-----------------------|
| 1/28 | 5.0 | Sun | 40.9 |
| 1/29 | 5.0 | Mon | 40.9 |
| 1/30 | 5.0 | Tue | 40.9 |
| 1/31 | 5.0 | Wed | 40.8 |
| 2/1 | 5.0 | Thurs | 40.8 |
| 2/2 | 5.0 | Fri | 41.0 |
| 2/3 | 5.0 | Sat | 41.4 |
| | 5.0 | AVG | 41.0 |

[Lower Columbia River Temperature Report for January 2018](#)
[Lower Columbia River Temperature Report for February 2018](#)

The Dalles Dam Daily Readings and Averages for
 Temperatures, Secchi, Entrances, and Spill

= Out of criteria

| Date: | North Ladder | | | East Ladder | | | | | | | | | | |
|-------------|----------------|------------|---|-------------|----------|----------|------|---------------|----------|----------|----------|----------------|----------|----------|
| | North Entrance | | East Entrance | | | | | West Entrance | | | | South Entrance | | |
| | Differential | N1 Depth | Differential | E1 Depth | E2 Depth | E3 Depth | JP 6 | Differential | W1 Depth | W2 Depth | W3 Depth | Differential | S1 Depth | S2 Depth |
| 1/28 | | | <i>East Ladder dewatered for winter</i> | | | | | | | | | | | |
| 1/29 | | | | | | | | | | | | | | |
| 1/30 | | | | | | | | | | | | | | |
| 1/31 | 1.4 | 8.8 | | | | | | | | | | | | |
| 2/1 | 1.3 | 9.3 | | | | | | | | | | | | |
| 2/2 | 1.4 | 9.1 | | | | | | | | | | | | |
| 2/3 | 1.3 | 9.3 | | | | | | | | | | | | |
| AVG: | 1.4 | 9.1 | | | | | | | | | | | | |

Fishways are inspected twice daily plus one SCADA inspection.