

The Dalles Dam Fishway Status Report

2/19/23

Inspection Period 2/12-2/18, 2023

THE DALLES DAM



US Army Corps
of Engineers
Portland District

The Dalles Project-Fisheries
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| | | | | | |
|-----------------------|----------------------------|---------------------------|--|--|--------------------------------|
| The Dalles Dam | Inspections OOC | Criteria Limit | Total Number of Inspections: 7 | | Temperature: 37.6 °F |
| | | | Comments: Both fish units flow in east ladder | | Weekly Ave. Secchi: 4.9 |

NORTH FISHWAY

| | | | | | |
|----------------------------|---|--------------|----------------------|-----|--|
| Exit differential | 0 | ≤ 0.5' | | | |
| Count station differential | 0 | ≤ 0.3' | | | |
| Weir crest depth | 0 | 1.0' ± 0.1' | | | |
| Entrance weir N1 | 0 | depth (≥ 8') | Average for the week | 9.1 | |
| Entrance Differential | 0 | 1.0' - 2.0' | Average for the week | 1.4 | |
| N2 | 0 | Closed | | | |
| PUD Intake differential | 0 | ≤ 0.5' | | | |

EAST FISHWAY

| | | | | | |
|---------------------------------|---|--------------|------------------------------|------|--|
| Exit differential | 0 | ≤ 0.5' | | | |
| Removable weirs 154-157 | 0 | Per forebay | Note; 155 weir hoist failed. | | |
| Weir 158-159 differential | 0 | 1.1' ± 0.1' | | | |
| Count station differential | 0 | ≤ 0.3' | | | |
| 153 Weir crest depth | 0 | 1.3' ± 0.1' | | | |
| Junction pool weir JP6 | 0 | > 7.0' | Weekly average | 9.3 | |
| East entrance differential | 0 | 1.0' - 2.0' | Weekly average | 1.4 | |
| Entrance weir E1 | 0 | No criteria | Weekly average | 2.0 | |
| Entrance weir E2 | 0 | depth (≥ 8') | Weekly average | 9.5 | |
| Entrance weir E3 | 0 | depth (≥ 8') | Weekly average | 9.5 | |
| Collection channel velocity | 0 | 1.5 - 4 fps | 1.6 fps 11/3 | | |
| Transportation channel velocity | 0 | 1.5 - 4 fps | 4.3 fps 11/3 | | |
| North channel velocity | 0 | 1.5 - 4 fps | 3.32 fps 11/5 | | |
| South channel velocity | 0 | 1.5 - 4 fps | 4.47 fps 10/15 | | |
| West entrance differential | 0 | 1.0' - 2.0' | Weekly average | 1.4 | |
| Entrance weir W1 | 0 | depth (≥ 8') | Weekly average | 10.4 | |
| Entrance weir W2 | 0 | depth (≥ 8') | Weekly average | 8.9 | |
| Entrance weir W3 | 0 | No criteria | Weekly average | -4.2 | |
| South entrance differential | 0 | 1.0' - 2.0' | Weekly average | 1.5 | |
| Entrance weir S1 | 0 | depth (≥ 8') | Weekly average | 9.5 | |
| Entrance weir S2 | 1 | depth (≥ 8') | Weekly average | 7.2 | Oil pressure failure FU1. Brief single fish unit operation |

JUVENILE BYPASS

| | | | | | |
|----------------------------|---|----------------|--|--|--|
| Sluicgate operation | 0 | Units 1, 8, 18 | Intakes MU1, 8, 16 and 18 open to recirculate. Endgate closed. | | |
| Turbine trashrack drawdown | 0 | <1.5', biwkly | Nothing to report. | | |
| Spill volume/pattern | 0 | 1 to 22 | NO SPILL. | | |
| Turbine Unit Priority | 0 | per FPP | | | |
| Gatewells | 0 | Weekly | No fish seen. | | |

Current Outages

MU19 & MU20 FOOS 10/07/2018 1205 – 10/27/2023 1700 T10 ACETYLENE
MU12 OOS 04/12/2021 0001 – 9/22/2023 ANNUAL
MU18 OOS 08/29/2022 0630-2/16/2023 1700, ANNUAL
T9 OOS 02/06/2022 0630 – 02/16/2022 1700, T9 TESTING
MU17 OOS 02/06/2023 0630 – 03/30/2023 1700, TURBINE BEARING
MU17 & MU18 OOS 02/06/2023 0630 – 03/30/2023 1700 FOR STRAINER
MU2 OOS 02/08/2023 1132-02/16/2023@1700 LOW GOV OIL
Navlock OOS 3/6/23
MU13 FOOS 02/14/2023 1112 - 03/01/2023 1700 LOW GOV OIL

Maintenance

Plan for fish unit intake trashrack rake to be usable by March 1
Weir 155 replacing gearbox bearings. Completion by March 1.
AWS intake trashrack debris management - PDT reviewing alternatives.
Planning spill gates 9 and 10 cable and gearbox swap. Now bulkhead seals replacement needed. Completion estimate March
Spillway assessment; Spillgates 1- 9 rehab 2034. Includes spillbay 9 trunnion pin repair. Spillway crane first priority
North count station brush motor replaced. Still not making contact with rear crowder.
North fishladder intake trashrack minor repairs completed.
North count station crowder drive repaired.
East entrance having trouble with low tailwater, resulting in slack cable. Working on limits. Running in manual.

Predators

Bald eagles greatly reduced with mild air temp. Only individual scouting gulls on project briefly. DCCO numbers greatly reduced.
Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Presently in WDFW permit process.

Research/Construction/Contractors

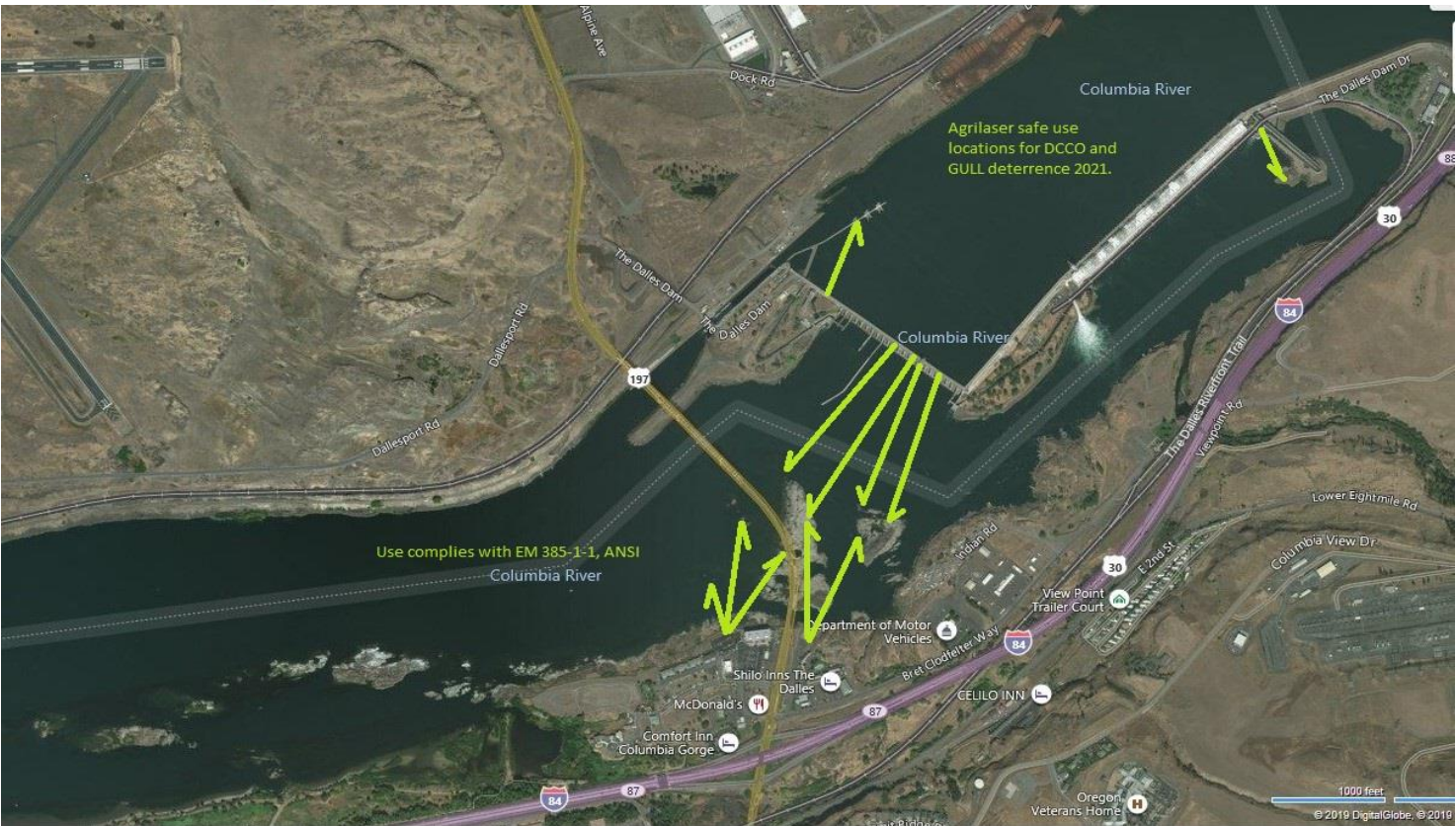
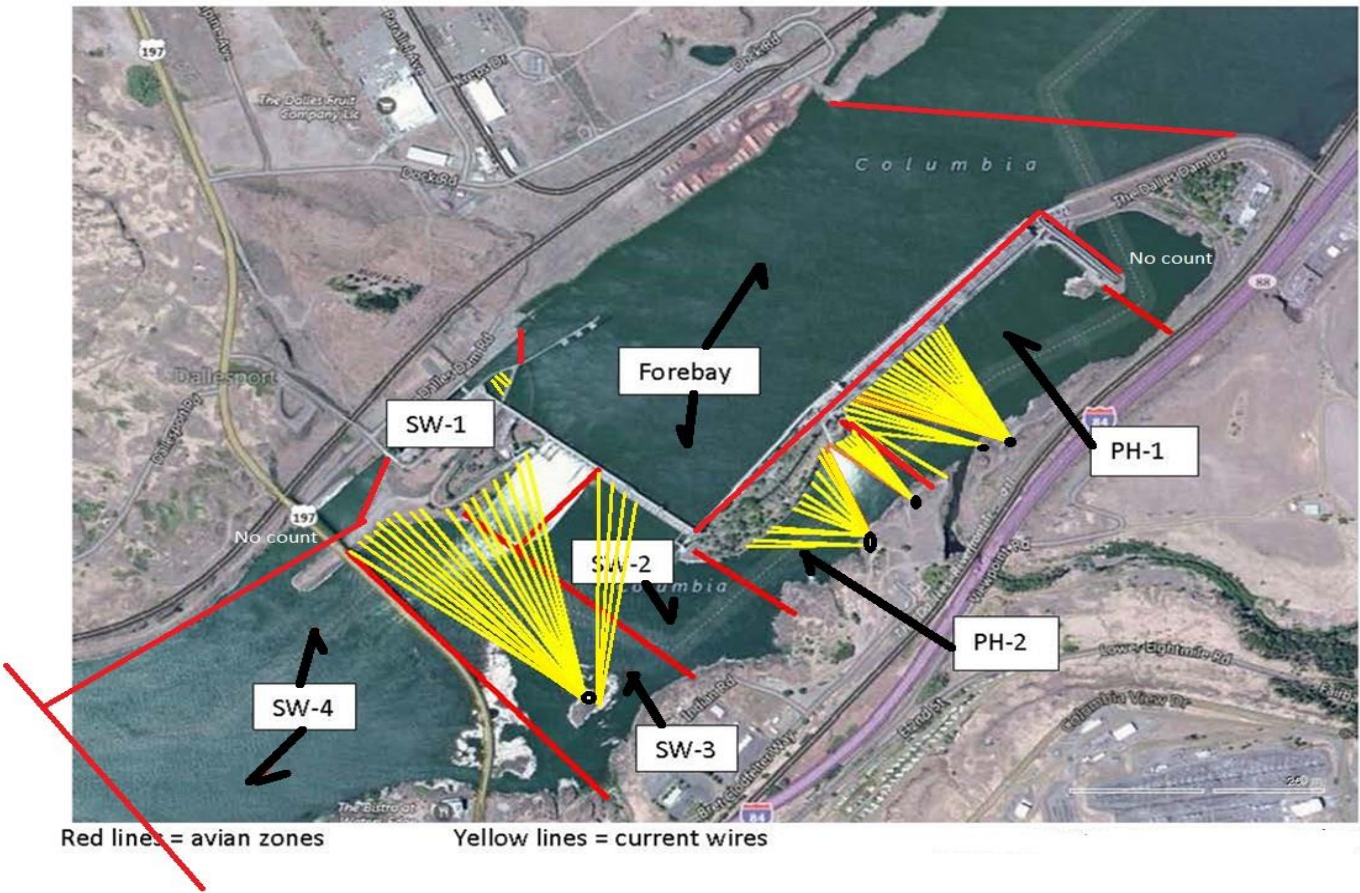
USGS river temperatures link [USGS ladder-river temperatures](#)
4 peaks video counting will occur through winter.
Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, Investigating mods for entrance weirs
PTAGIS fishladder data collection at count stations continues

Operations

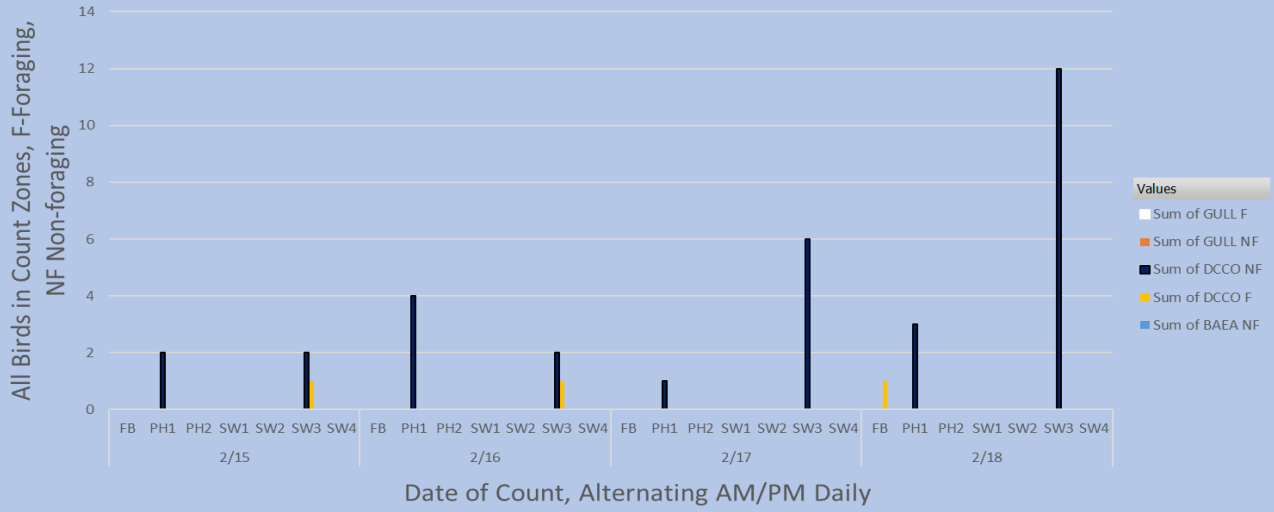
Ice Trash sluiceway endgate closed. Sluiceways open to forebay.
East fishway in service with 1 fish unit #2. North fishladder in service with no attraction flow for maintenance.

Approved by: Ron Twiner, Operation Project Manager, The Dalles Dam

Bird Count Zones, Avian Lines and Laser Deterrent Sites



Avian Count at TDA, 2/15 to 2/118/2022



+ -

| Secchi: | | USGS F° |
|---------|-------|---------|
| 5.0 | Sun | 37.5 |
| 5.0 | Mon | 37.5 |
| 5.0 | Tue | 37.5 |
| 5.0 | Wed | 37.5 |
| 5.0 | Thurs | 37.6 |
| 5.0 | Fri | 37.8 |
| 4.0 | Sat | 38.1 |
| 4.9 | AVG | 37.6 |

Reporting week data

| Date: | North Ladder | | East Ladder | | | | | | | | | | | |
|-------------|--------------|------------|---------------|------------|------------|-------------|------------|---------------|-------------|------------|----------------|--------------|------------|------------|
| | | | East Entrance | | | | | West Entrance | | | South Entrance | | | |
| | Differential | N1 Depth | Differential | E1 Depth | E2 Depth | E3 Depth | JP 6 | Differential | W1 | W2 | W3 | Differential | S1 | S2 |
| 2/12 | | | | | | | | | | | | | | |
| | | | 1.4 | 2.3 | 11.3 | 11.3 | 9.3 | 1.4 | 10.4 | 10.5 | -4.2 | 1.5 | 9.3 | 9.4 |
| 2/13 | | | | | | | | | | | | | | |
| | 1.5 | | 1.4 | 2.2 | 12.6 | 11.4 | 9.2 | 1.5 | 10.3 | 10.3 | -4.4 | 1.4 | 8.9 | 8.9 |
| 2/14 | | | | | | | | | | | | | | |
| | 1.3 | 9.1 | 1.5 | -3.3 | -3.3 | 10.8 | 9.8 | 1.4 | 11.2 | 0.3 | -3.8 | 1.5 | 11.1 | -4.2 |
| 2/15 | | | | | | | | | | | | | | |
| | 1.3 | 9.2 | 1.5 | 0.5 | 12.0 | 12.0 | 9.4 | 1.5 | 10.0 | 10.0 | -4.1 | 1.5 | 9.4 | 9.4 |
| 2/16 | | | | | | | | | | | | | | |
| | | | 1.5 | 3.8 | 10.9 | 12.3 | 8.8 | 1.6 | 9.8 | 9.9 | -4.6 | 1.4 | 9.2 | 8.3 |
| 2/17 | | | | | | | | | | | | | | |
| | 1.3 | 9.1 | 1.4 | 3.8 | 10.9 | 12.3 | 8.8 | 1.4 | 10.3 | 10.4 | -4.5 | 1.5 | 9.1 | 9.2 |
| 2/18 | | | | | | | | | | | | | | |
| | 1.5 | 9.1 | 1.1 | 4.7 | 12.1 | 12.1 | 9.7 | 1.3 | 10.7 | 10.7 | -4.0 | 1.5 | 9.5 | 9.5 |
| AVG: | 1.4 | 9.1 | 1.4 | 2.0 | 9.5 | 11.7 | 9.3 | 1.4 | 10.4 | 8.9 | -4.2 | 1.5 | 9.5 | 7.2 |

Fishways inspected daily