

The Dalles Dam Fishway Status Report

3/26/23

Inspection Period 3/19-3/25, 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: 14 | | Temperature: 42.1 °F |
| | | | Comments: | | Weekly Ave. Secchi: 4.8 |

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 | 9.2 | |
| 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 | 9.4 | |
| East entrance differential | 0 | 1.0' - 2.0' | Weekly average | 1.5 | |
| Entrance weir E1 | 0 | No criteria | Weekly average | 8.3 | |
| Entrance weir E2 | 0 | depth (≥ 8') | Weekly average | 10.3 | |
| Entrance weir E3 | 0 | depth (≥ 8') | Weekly average | 10.3 | |
| Collection channel velocity | 0 | 1.5 - 4 fps | 3.3fps 3/20/23 | | |
| Transportation channel velocity | 0 | 1.5 - 4 fps | 4.71fps 3/8/23 | | |
| North channel velocity | 0 | 1.5 - 4 fps | 2.41fps 3/11/23 | | |
| South channel velocity | 0 | 1.5 - 4 fps | No data | | |
| West entrance differential | 0 | 1.0' - 2.0' | Weekly average | 1.4 | |
| Entrance weir W1 | 0 | depth (≥ 8') | Weekly average | 10.2 | |
| Entrance weir W2 | 0 | depth (≥ 8') | Weekly average | 10.2 | |
| Entrance weir W3 | 0 | No criteria | Weekly average | -4.0 | |
| South entrance differential | 0 | 1.0' - 2.0' | Weekly average | 1.5 | |
| Entrance weir S1 | 0 | depth (≥ 8') | Weekly average | 9.6 | |
| Entrance weir S2 | 0 | depth (≥ 8') | Weekly average | 9.6 | |

JUVENILE BYPASS

| | | | | | |
|----------------------------|---|----------------|---|--|--|
| Sluiceway operation | 0 | Units 1, 8, 18 | Intakes MU1, 16 open. Endgate open. | | |
| Turbine trashrack drawdown | 0 | <1.5', biwklly | Nothing to report. FU differential .3' 3/9/23 | | |
| Spill volume/pattern | 0 | 1 to 22 | ITS spill 4kcfs estimated. | | |
| Turbine Unit Priority | 0 | per FPP | | | |
| Gatewells | 0 | Weekly | no salmonid fish mortality | | |

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
-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
-MU13 FOOS 02/14/2023 1112 - 04/06/2023 1700 LOW GOV OIL

Maintenance

Reviving fish unit intake trashrack rake to be prepared for use if debris issues come up.

AWS intake trashrack debris management - PDT reviewing alternatives.

Planning spill gates 9 and 10 cable and gearbox swap. Bulkhead seal replacement needed. Estimate complete April.

Spillway assessment; Spillgates 1- 9 rehab 2034. Includes spillbay 9 trunnion pin repair. Spillway crane replace is first priority

North count station crowder failed. Maintenance working on repair.

Predators

Scout gulls in count zones. Cormorants consistently attempting to nest on BPA towers. ~50 to 80 individuals hazed off.

Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Waiting on WDFW permit process.

Falconry abatement contract to start next week to deter DCCO nesting on BPA towers.

Research/Construction/Contractors

USGS river temperatures link [USGS ladder-river temperatures](#)

Conducting prework logistics for 4 Peaks fish counters. Start Apr 1.

Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, Investigating mods for entrance weirs

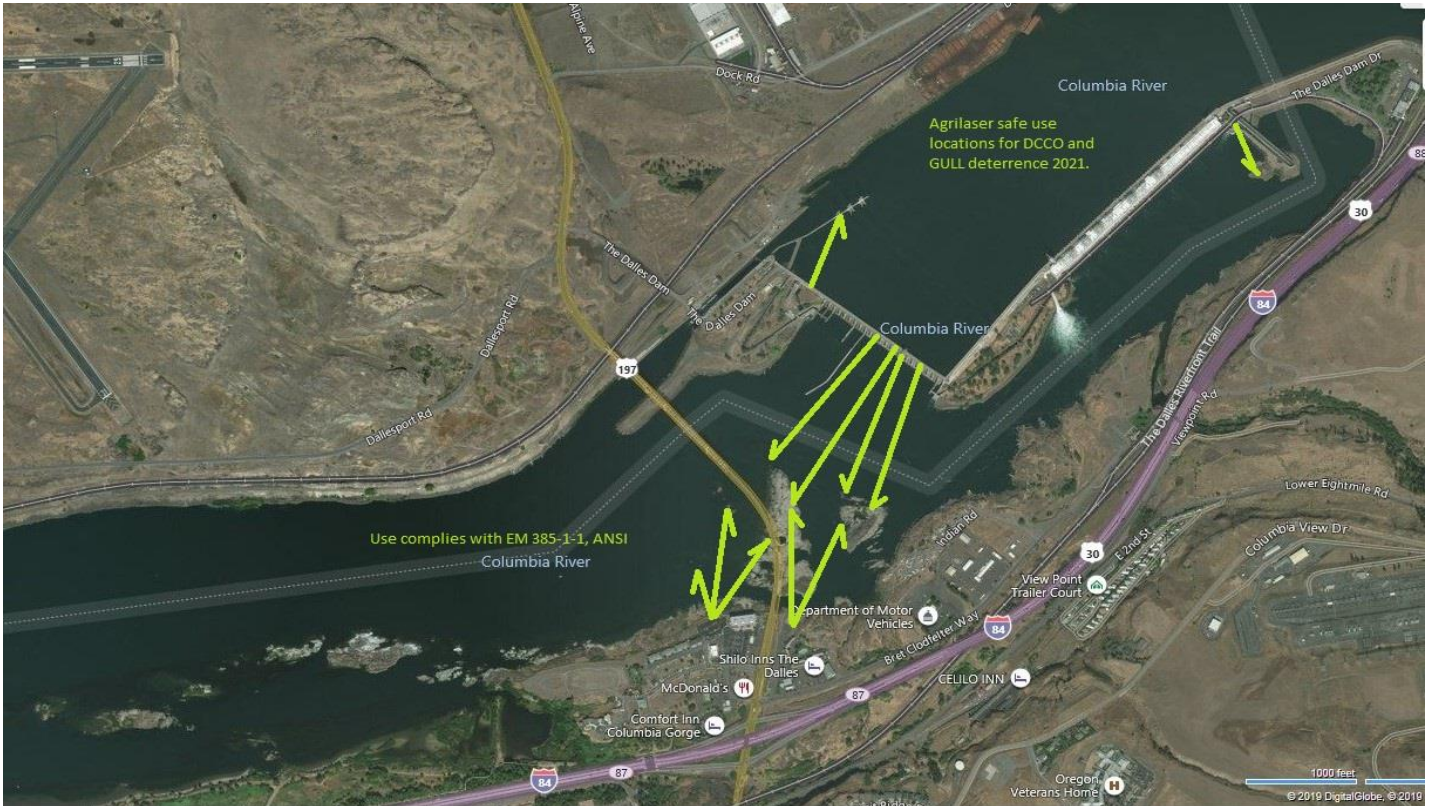
PTAGIS fishladder data collection at count stations continues

Operations

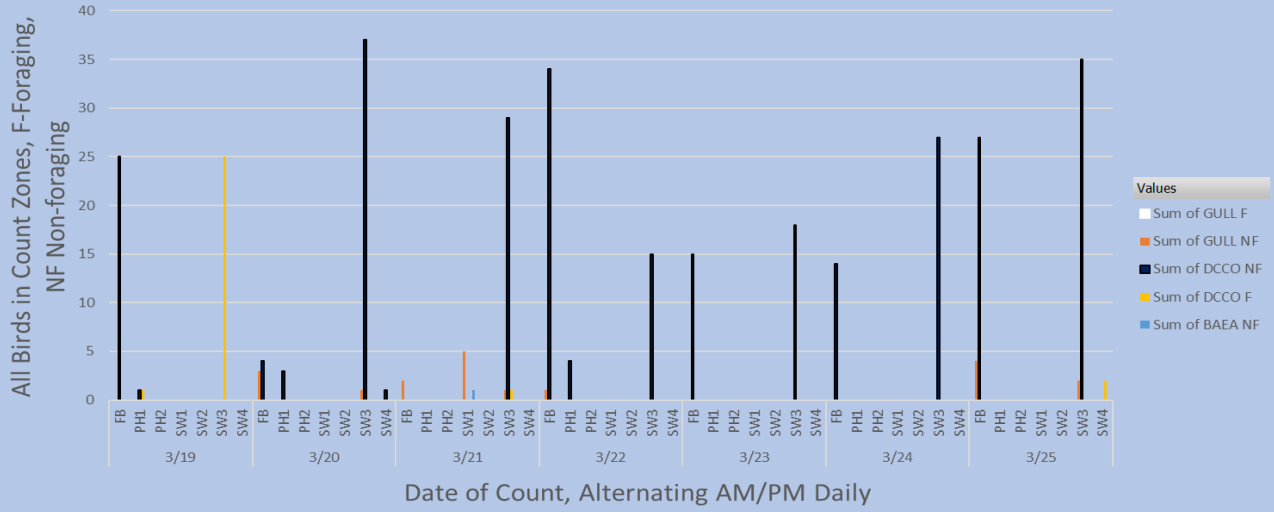
Sluice gates 1-2, 1-3, 16-1, 16-2. Moves to 6 gates open Apr1.

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

Bird Count Zones, Avian Lines and Laser Deterrent Sites



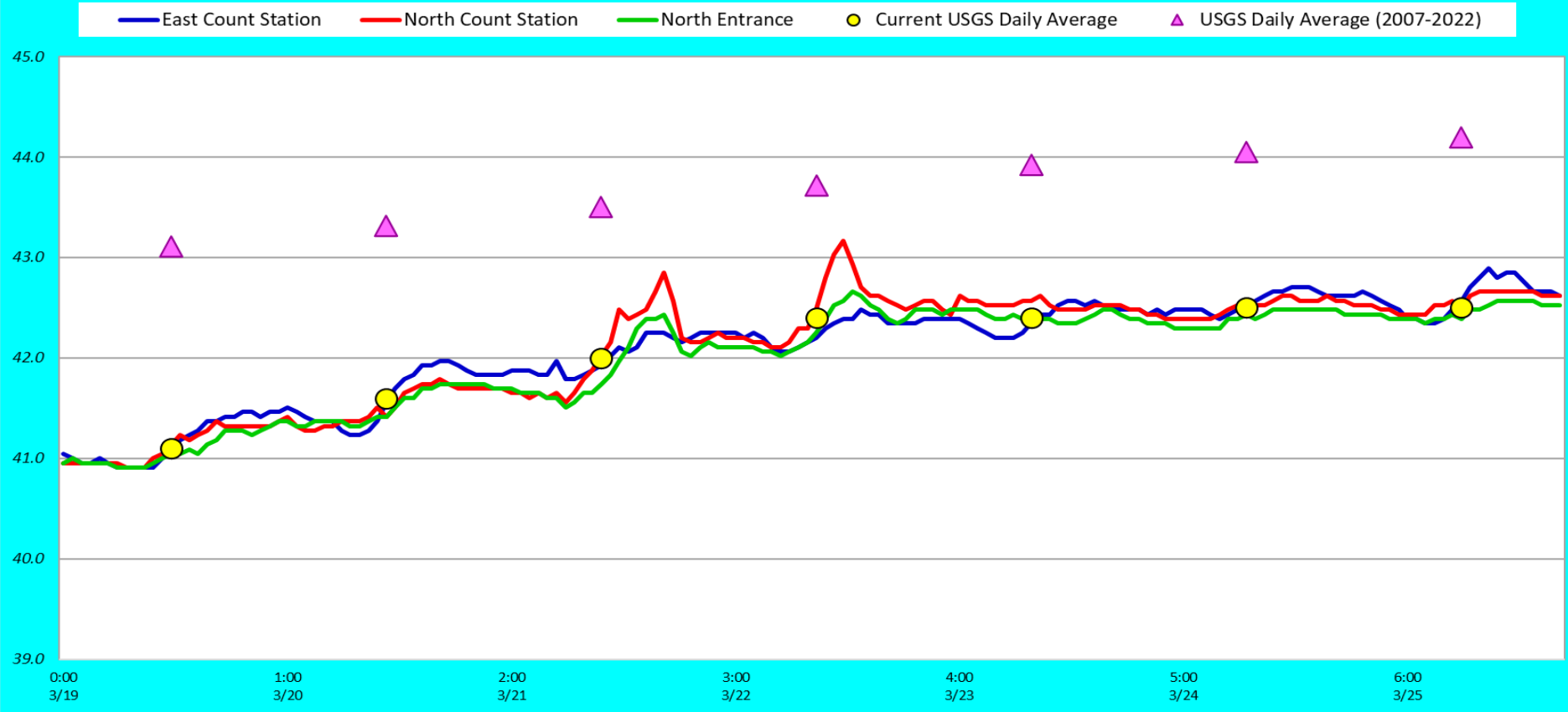
Avian Count at TDA, 3/19 to 3/25/2023



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Adult Fish Ladders-River Temperatures



| Secchi: | | USGS F° |
|---------|-------|---------|
| | Sun | 41.1 |
| 4.0 | Mon | 41.6 |
| 5.0 | Tue | 42.0 |
| 5.0 | Wed | 42.4 |
| 5.0 | Thurs | 42.4 |
| 5.0 | Fri | 42.5 |
| 5.0 | Sat | 42.5 |
| 4.8 | AVG | 42.1 |

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 |
| 3/19 | 1.3 | 9.1 | 1.3 | 7.8 | 10.8 | 10.8 | 9.3 | 1.3 | 10.2 | 10.3 | -4.2 | 1.4 | 9.2 | 9.3 |
| | 1.3 | 9.2 | 1.7 | 7.3 | 10.3 | 10.3 | 8.8 | 1.4 | 10.0 | 10.1 | -4.5 | 1.5 | 9.2 | 9.2 |
| 3/20 | 1.3 | 9.1 | 1.6 | 7.7 | 10.5 | 10.5 | 9.2 | 1.3 | 10.2 | 10.3 | -4.1 | 1.4 | 9.2 | 9.2 |
| | 1.6 | 9.1 | 1.4 | 7.8 | 10.7 | 10.7 | 9.3 | 1.4 | 10.0 | 10.1 | -4.3 | 1.5 | 9.5 | 9.4 |
| 3/21 | 1.5 | 9.3 | 1.5 | 8.6 | 10.2 | 10.1 | 10.1 | 1.3 | 10.8 | 10.9 | -3.4 | 1.4 | 10.0 | 10.1 |
| | 1.3 | 9.1 | 1.6 | 7.5 | 10.4 | 10.4 | 9.0 | 1.4 | 10.0 | 10.1 | -4.3 | 1.5 | 9.5 | 9.5 |
| 3/22 | 1.3 | 9.2 | 1.5 | 7.8 | 10.6 | 10.6 | 9.6 | 1.5 | 10.1 | 10.1 | -4.0 | 1.5 | 9.5 | 9.5 |
| | 1.2 | 9.3 | 1.6 | 6.8 | 10.3 | 10.3 | 8.7 | 1.5 | 9.6 | 9.6 | -4.7 | 1.5 | 9.2 | 9.1 |
| 3/23 | 1.5 | 9.2 | 1.4 | 9.6 | 10.3 | 10.2 | 10.0 | 1.3 | 10.7 | 10.7 | -3.4 | 1.4 | 9.9 | 9.9 |
| | 1.4 | 9.1 | 1.5 | 9.0 | 10.8 | 10.8 | 9.5 | 1.4 | 10.3 | 10.3 | -3.7 | 1.5 | 9.9 | 9.7 |
| 3/24 | 1.3 | 9.2 | 1.4 | 9.4 | 10.4 | 10.4 | 9.8 | 1.3 | 10.6 | 10.7 | -3.7 | 1.5 | 9.8 | 9.8 |
| | 1.3 | 9.1 | 1.6 | 8.3 | 8.3 | 10.2 | 8.8 | 1.6 | 9.9 | 9.9 | -4.4 | 1.5 | 9.4 | 9.3 |
| 3/25 | 1.4 | 9.1 | 1.6 | 8.9 | 10.4 | 10.4 | 9.3 | 1.4 | 10.1 | 10.1 | -3.7 | 1.4 | 9.8 | 9.8 |
| | 1.4 | 9.2 | 1.6 | 9.3 | 10.0 | 10.0 | 9.8 | 1.5 | 10.2 | 10.2 | -3.6 | 1.4 | 10.1 | 10.0 |
| AVG: | 1.4 | 9.2 | 1.5 | 8.3 | 10.3 | 10.4 | 9.4 | 1.4 | 10.2 | 10.2 | -4.0 | 1.5 | 9.6 | 9.6 |

Fishways inspected twice daily



Deterring cormorants before nesting starts with air horns and frequent yelling curse words.