

The Dalles Dam Fishway Status Report

4/11/23

Inspection Period 4/2 - 4/8, 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: 44.7 °F
			Comments: Falconry abatement		Weekly Ave. Secchi: 4.7
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	9.6	
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.3	
N2	0	Closed			
PUD Intake differential	0	≤ 0.5'			
EAST FISHWAY					
Exit differential	0	≤ 0.5'			
Removable weirs 154-157	0	Per forebay			
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	10.0	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	7.5	
Entrance weir E2	0	depth (≥ 8')	Weekly average	10.8	
Entrance weir E3	0	depth (≥ 8')	Weekly average	10.8	
Collection channel velocity	0	1.5 - 4 fps	3.3fps 3/20/23		
East Entrance velocity	1	1.5 - 4 fps	4.59fps 4/8/23		
North channel velocity	0	1.5 - 4 fps			
South channel velocity	1	1.5 - 4 fps	5.02fps 3/31/23		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir W1	0	depth (≥ 8')	Weekly average	10.1	
Entrance weir W2	0	depth (≥ 8')	Weekly average	10.1	
Entrance weir W3	0	No criteria	Weekly average	-3.8	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	0	depth (≥ 8')	Weekly average	10.0	
Entrance weir S2	0	depth (≥ 8')	Weekly average	9.8	
JUVENILE BYPASS					
Sluiceway operation	0	Units 1, 8, 18	Intakes MU1, 8, 16 open. Endgate open.		
Turbine trashrack drawdown	0	<1.5', biwklly	Nothing to report. FU differential .5' 4/8/23		
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

Maintenance

Reviving fish unit intake trashrack rake to be prepared for use if debris issues come up.
Calibration of fishway entrances done 4/8/2023. Some slightly out of calibration. All in criteria
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. Spillway crane replace is first priority. Reviewing gate operation frequency.
North count station crowder fixed. Brush to be operated by Operations.

Predators

Some gulls in count zones. Cormorants attempting to nest on BPA towers. ~20 individuals hazed off by falconry and air horn.
Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Waiting on WDFW permit process.
Falconry abatement at 10 days, to deter DCCO nesting on BPA towers. Success so far at stopping nesting.

Research/Construction/Contractors

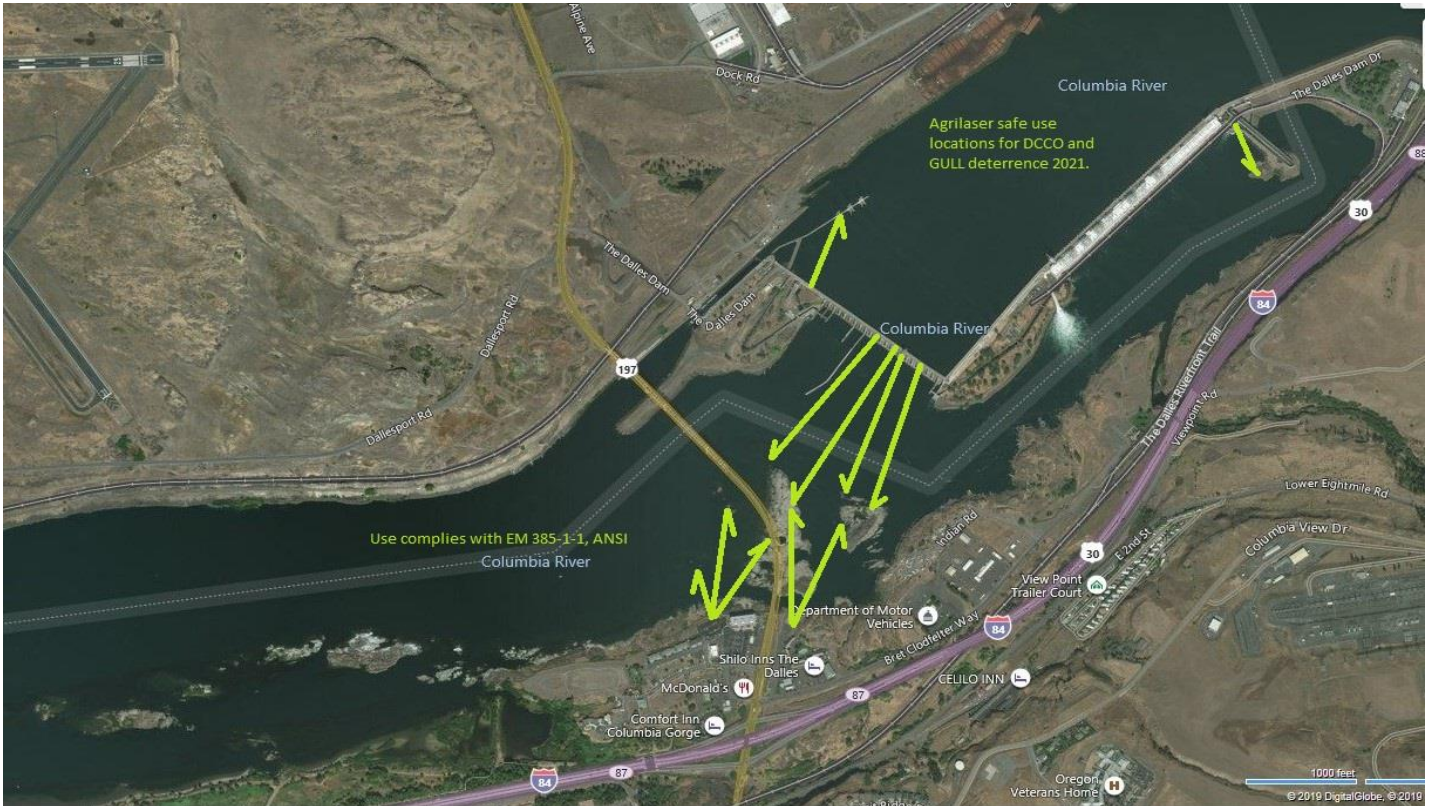
USGS river temperatures link [USGS ladder-river temperatures](#)
Conducting prework logistics for 4 Peaks fish counters. Start Apr 1.
Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, Investigating mods for entrance weirs
PTAGIS fishladder data collection at count stations continues

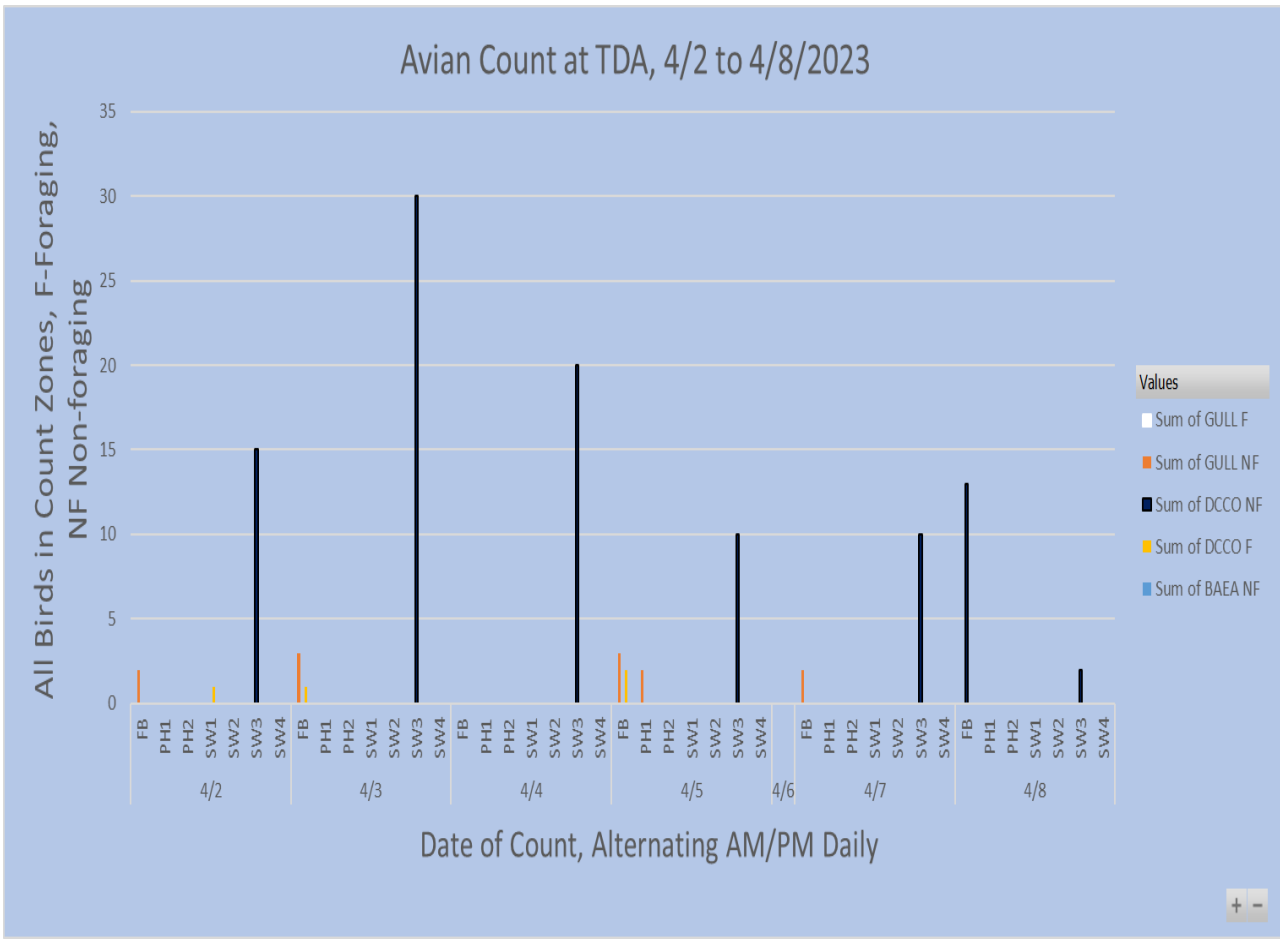
Operations

Sluice gates 1-1, 1-2, 1-3, 8-1, 8-3, 16-1. Moved to 6 gates open Apr1.

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

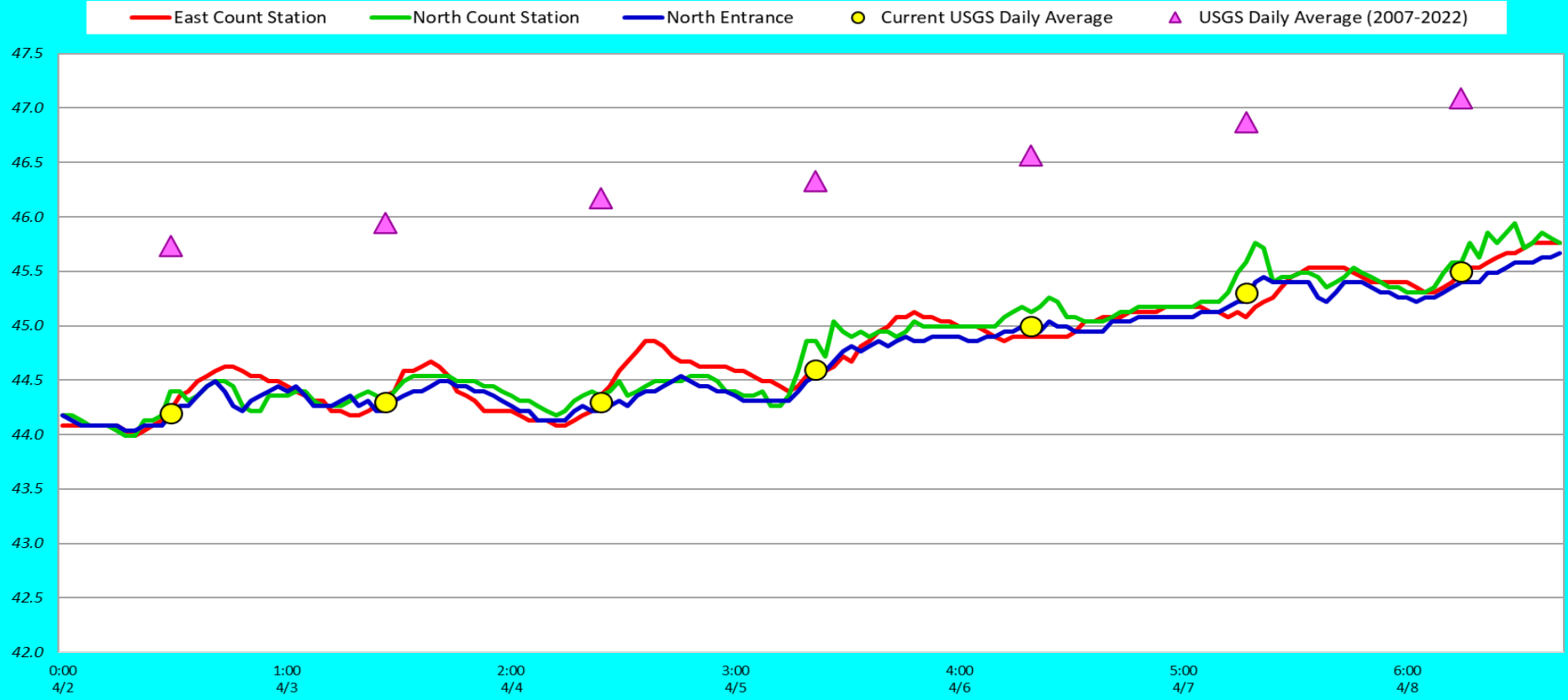
Bird Count Zones, Avian Lines and Laser Deterrent Sites





Cormorants still trying to nest on BPA towers. Hazing continues.

Adult Fish Ladders-River Temperatures



Secchi:		USGS F°
5.0	Sun	44.2
5.0	Mon	44.3
5.0	Tue	44.3
5.0	Wed	44.6
5.0	Thurs	45.0
4.0	Fri	45.3
4.0	Sat	45.5
4.7	AVG	44.7

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
4/2	1.3	10.3	1.3	8.8	10.5	10.7	9.8	1.3	10.7	10.8	-3.6	1.4	10.2	10.0
	1.2	9.3	1.7	7.3	10.0	10.2	9.3	1.7	9.4	9.5	-3.6	1.4	9.5	9.4
4/3	1.4	9.8	1.3	10.7	10.2	10.2	11.8	1.4	10.7	10.7	-3.5	1.3	11.0	10.9
	1.4	9.7	1.7	9.1	9.6	9.8	10.1	1.7	9.7	9.7	-3.8	1.5	10.1	10.0
4/4	1.3	10.0	1.4	8.4	11.2	11.1	11.4	1.4	10.5	10.5	-3.6	1.4	10.3	10.3
	1.3	9.9	1.8	7.1	10.2	10.2	10.1	1.6	9.7	9.7	-4.4	1.0	10.2	10.1
4/5	1.3	9.8	1.3	7.7	11.2	11.2	10.7	1.4	10.5	10.5	-2.9	1.4	10.1	10.1
	1.2	9.8	1.6	6.7	10.9	10.9	9.7	1.5	9.8	9.8	-2.7	1.0	9.6	9.4
4/6	1.3	9.4	1.5	6.6	10.8	10.8	9.6	1.5	10.2	10.2	-4.3	1.4	9.5	9.3
	1.3	9.2	1.6	5.9	10.7	10.9	8.9	1.5	9.8	9.8	-4.4	1.6	9.3	9.1
4/7	1.4	9.0	1.5	6.8	10.8	10.9	9.8	1.6	10.0	10.0	-4.1	1.5	9.7	9.5
	1.3	9.2	1.5	5.7	11.3	11.3	8.7	1.5	9.5	9.5	-4.3	1.5	9.3	9.1
4/8	1.5	9.2	1.3	7.4	11.8	11.7	10.4	1.4	10.3	10.4	-3.5	1.3	10.5	10.2
	1.5	9.1	1.3	6.1	11.7	11.6	10.1	1.5	10.1	10.1	-4.2	1.3	10.4	10.1
AVG:	1.3	9.6	1.5	7.5	10.8	10.8	10.0	1.5	10.1	10.1	-3.8	1.4	10.0	9.8

Fishways inspected twice daily



Cormorants trying to nest BPA towers. Hazing off daily. Falcons also working them.