

The Dalles Dam Fishway Status Report

2/16/23

Inspection Period 04/16-04/22, 2023

THE DALLES DAM



US Army Corps
of Engineers
Portland District

The Dalles Project-Fisheries
P.O. Box 564
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The Dalles Dam	Inspections OOC	Criteria Limit	Total Number of Inspections: 14		Temperature: 47.7 °F
			Comments: Both fish units flow in east ladder		Weekly Ave. Secchi: 3.1

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	10.5	
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.3	
N2		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	11.4	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	3.4	
Entrance weir E2	0	depth (≥ 8')	Weekly average	13.0	
Entrance weir E3	0	depth (≥ 8')	Weekly average	13.0	
Collection channel velocity	0	1.5 - 4 fps	fps 11/3		
Transportation channel velocity	0	1.5 - 4 fps	fps 11/3		
North channel velocity	0	1.5 - 4 fps	fps 11/5		
South channel velocity	0	1.5 - 4 fps	fps		
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	-1.8	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	0	depth (≥ 8')	Weekly average	10.1	
Entrance weir S2	0	depth (≥ 8')	Weekly average	10.0	

JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18	1-8-18 gates open.		
Turbine trashrack drawdown	0	<1.5', biwklly	Nothing to report.		
Spill volume/pattern	0	1 to 22	1-8 bays in operation daily		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	No fish in gatewells to report. No trash.		

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
-MU3 OOS 04/17/2023 0630 – 04/27/2023 1700, ANNUAL
-MU4 OOS 04/17/2023 0630 – 04/27/2023 1700, ANNUAL
-MU3/4 OOS 04/17/2023 1200 – 04/27/2023 1230, T-2 MAINTENANCE

Maintenance

Plan in place for fish unit intake trashrack rake in preparation for potential debris issues.

Planning spill gates 9 and 10 cable and gearbox swap.

Spillway assessment; Spillgates 1- 9 rehab 2034. Spillway crane replace is first priority. Reviewing gate operation frequency.

Predators

10-35 foraging gulls in tailwater/FB count zones. Cormorants persisting on BPA towers. ~35+ individuals hazed off.
Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Waiting on WDFW permit process.
Falconry abatement at 3 weeks, focus now on gulls in tailwater. One falcon died during work, under investigation.

Research/Construction/Contractors

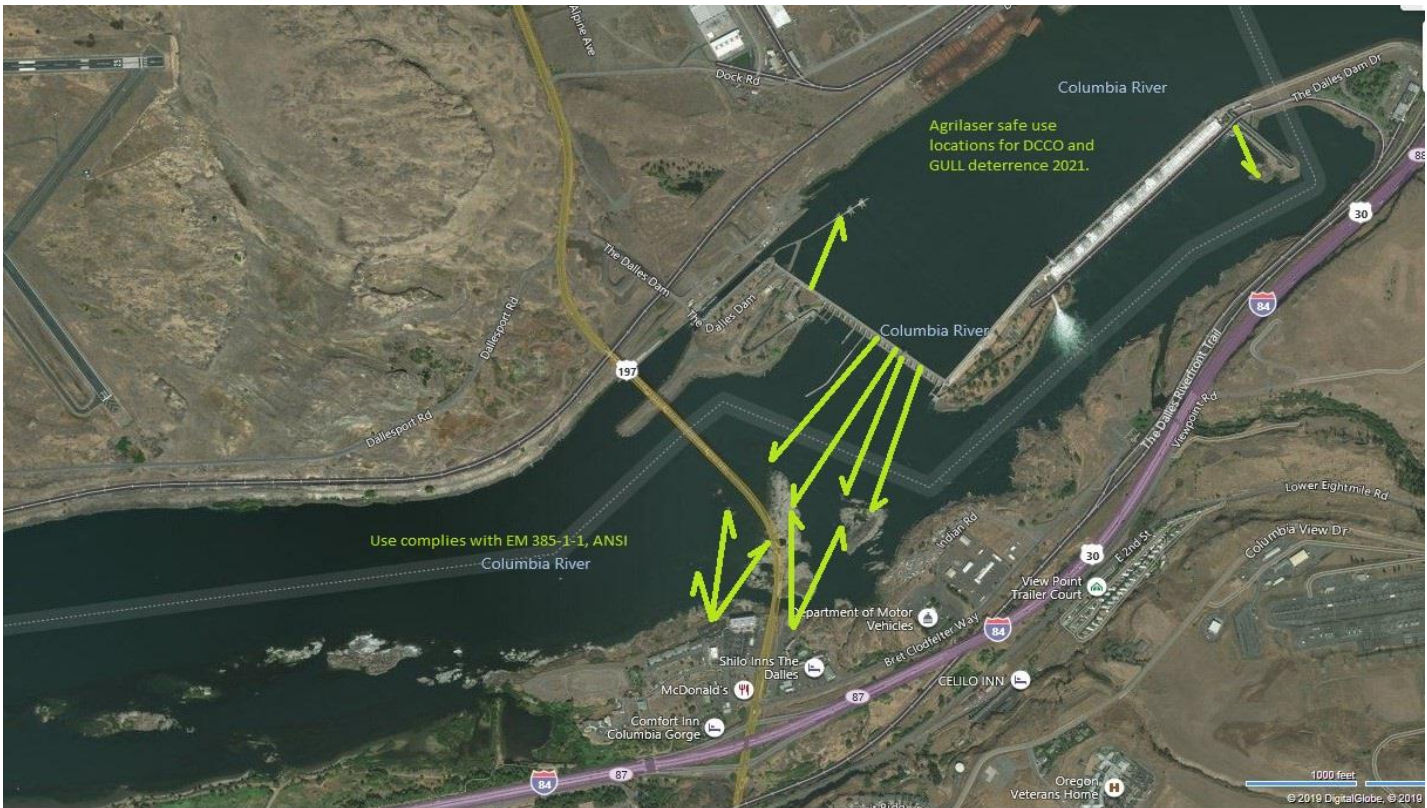
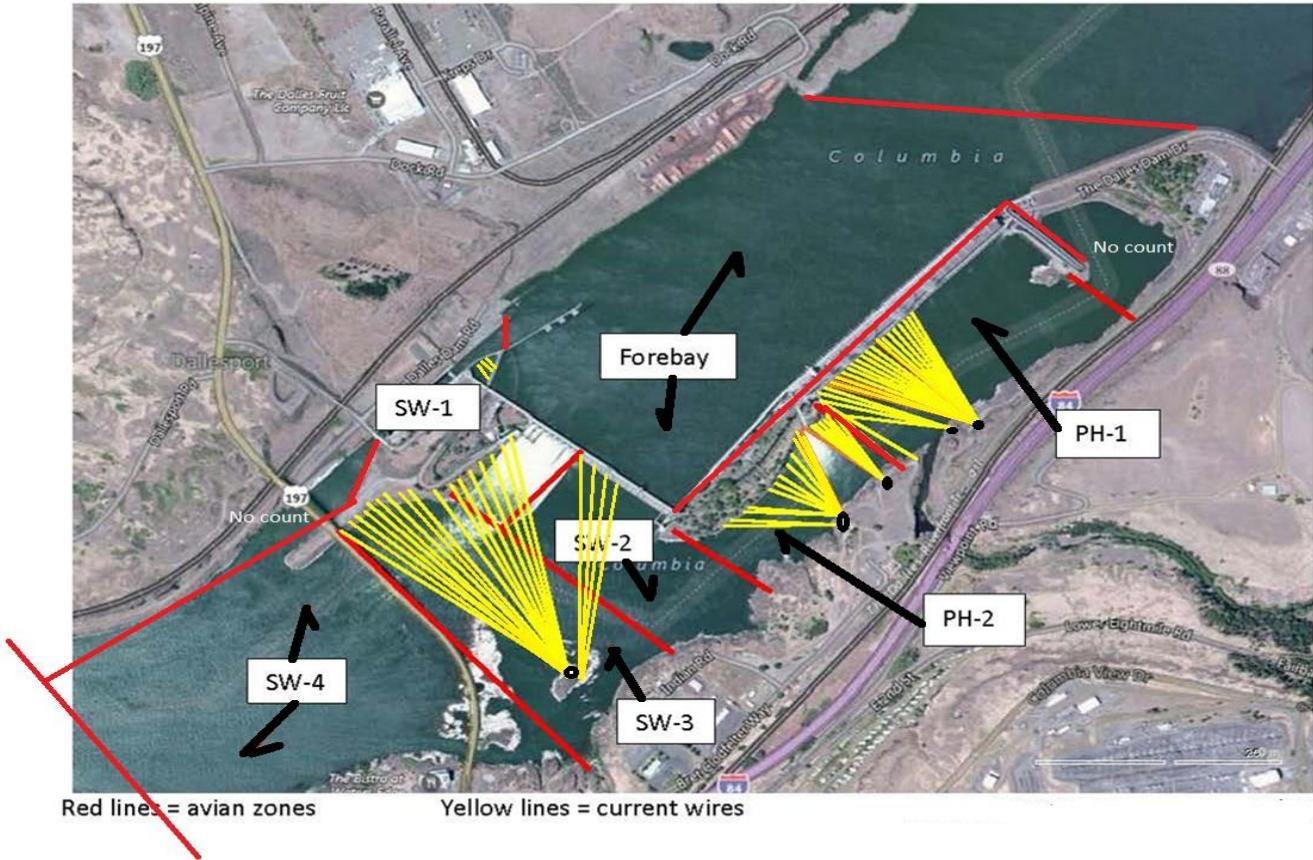
USGS river temperatures link
4 Peaks fish counters started Apr 1.
Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, other 2 next winter.
Investigating mods for entrance weirs
PTAGIS fishladder data collection at count stations continues

Operations

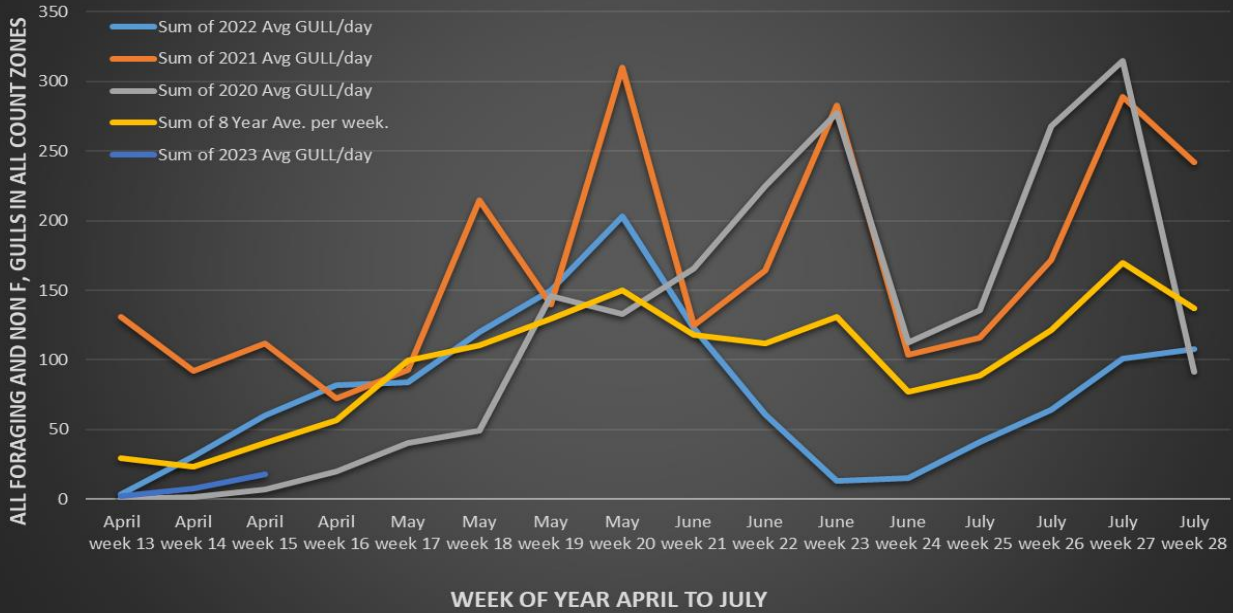
Sluice gates 1-1, 1-2, 1-3, 8-1, 8-3, 16-1 open

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

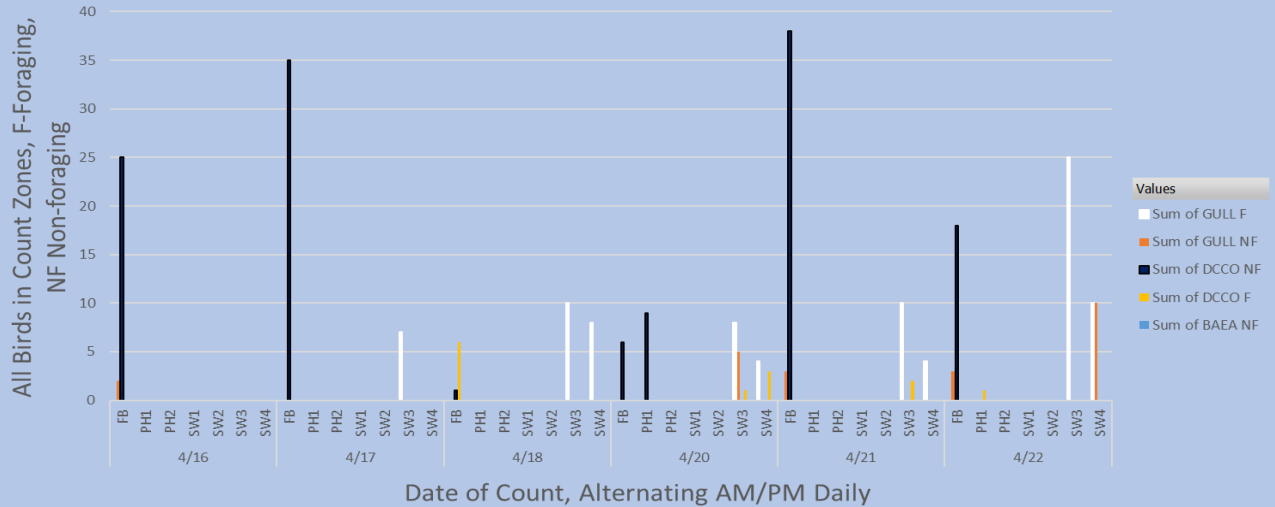
Bird Count Zones, Avian Lines and Laser Deterrent Sites



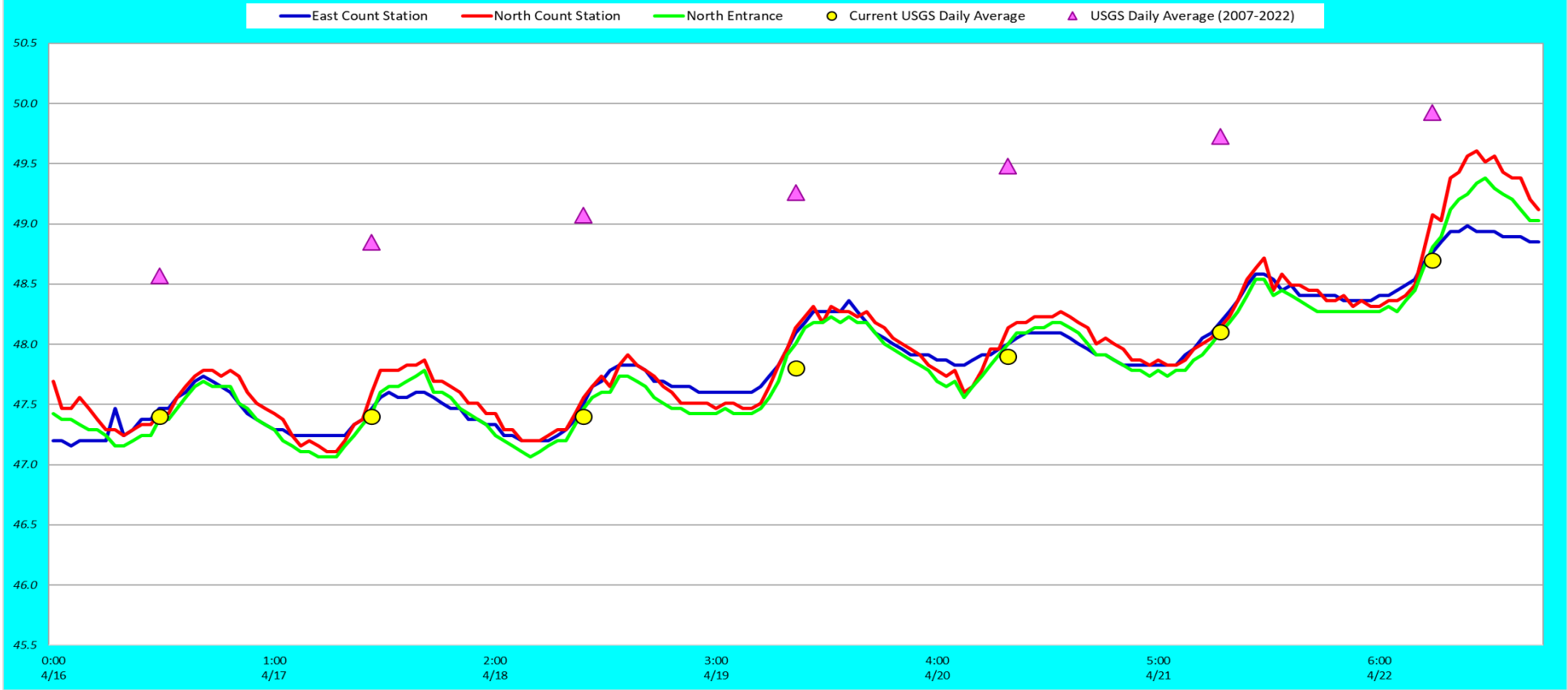
TDA Daily Mean # of GULLS by Week, April to July 2020 and 2021, 2022, 2023 Compared to Previous 8 years Daily Mean.



Avian Count at TDA, 4/16 to 4/22/2023



Adult Fish Ladders-River Temperatures



Secchi:		USGS F°
3.0	Sun	47.2
3.5	Mon	47.4
3.0	Tue	47.4
3.0	Wed	47.4
3.5	Thurs	47.8
3.0	Fri	47.9
3.0	Sat	48.7
3.1	AVG	47.7

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
4/16	1.2	10.6	1.5	3.4	12.9	12.9	11.4	1.5	10.4	10.4	-1.8	1.5	9.8	9.8
	1.3	10.6	1.6	3.9	13.4	13.4	11.9	1.4	10.8	10.8	-1.4	1.3	10.4	10.4
4/17	1.2	10.6	1.5	3.2	12.7	12.7	11.2	1.6	10.1	10.1	-2.0	1.4	10.1	10.1
	1.3	10.5	1.4	3.5	13.0	13.0	11.5	1.4	10.4	10.4	-1.8	1.3	10.4	10.2
4/18	1.3	10.5	1.4	4.0	13.5	13.5	12.0	1.2	10.5	10.5	-1.2	1.4	10.4	10.3
	1.4	10.4	1.6	3.2	12.7	13.2	11.2	1.6	9.7	9.7	-2.0	1.5	9.9	9.7
4/19	1.4	10.4	1.3	3.6	13.5	13.5	11.6	1.4	10.3	10.3	-1.6	1.4	10.0	10.0
	1.3	10.5	1.5	3.1	13.0	13.0	11.1	1.5	9.7	9.7	-2.2	1.5	9.9	9.8
4/20	1.3	10.5	1.4	3.3	13.2	13.2	11.3	1.5	10.2	10.2	-1.9	1.4	10.1	10.1
	1.3	10.5	1.5	2.9	12.8	12.8	10.9	1.5	9.9	9.9	-2.3	1.4	10.2	10.0
4/21	1.2	10.5	1.5	3.7	13.2	13.1	11.7	1.3	10.7	10.7	-1.5	1.5	10.1	9.9
	1.3	10.5	1.6	3.4	12.9	12.8	11.4	1.5	10.4	10.3	-1.8	1.5	10.0	9.8
4/22	1.4	10.5	1.5	3.3	12.8	12.8	11.3	1.4	10.3	10.3	-1.9	1.4	10.4	10.0
	1.3	10.5	1.5	3.5	13.0	13.0	11.5	1.4	10.4	10.4	-1.8	1.4	10.4	10.0
AVG:	1.3	10.5	1.5	3.4	13.0	13.1	11.4	1.4	10.2	10.2	-1.8	1.4	10.1	10.0

Fishways inspected twice daily