

The Dalles Dam Fishway Status Report

2/16/23

Inspection Period 04/09-0415, 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: 46.2 °F
			Comments: Both fish units flow in east ladder		Weekly Ave. Secchi: 3.7

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	10.2	
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	11.6	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir E1	0	No criteria	Weekly average	6.9	
Entrance weir E2	0	depth (≥ 8')	Weekly average	12.4	
Entrance weir E3	0	depth (≥ 8')	Weekly average	12.4	
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'	Weekly average	1.4	
Entrance weir W1	0	depth (≥ 8')	Weekly average	10.4	
Entrance weir W2	0	depth (≥ 8')	Weekly average	10.4	
Entrance weir W3	0	No criteria	Weekly average	-1.6	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	0	depth (≥ 8')	Weekly average	10.2	
Entrance weir S2	0	depth (≥ 8')	Weekly average	10.1	

JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18			
Turbine trashrack drawdown	0	<1.5', biwkly			
Spill volume/pattern	0	1 to 22			
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly			

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

Reviving fish unit intake trashrack rake to be prepared if debris issues come up.
Entrance calibration some slightly off. All in criteria
Planning spill gates 9 and 10 cable and gearbox swap after bulkhead seal repair.
North count station crowder fixed.
Spillway assessment; Spillgates 1- 9 rehab 2034. Spillway crane replace is first priority. Reviewing gate operation frequency.

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
4 Peaks fish counters started 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

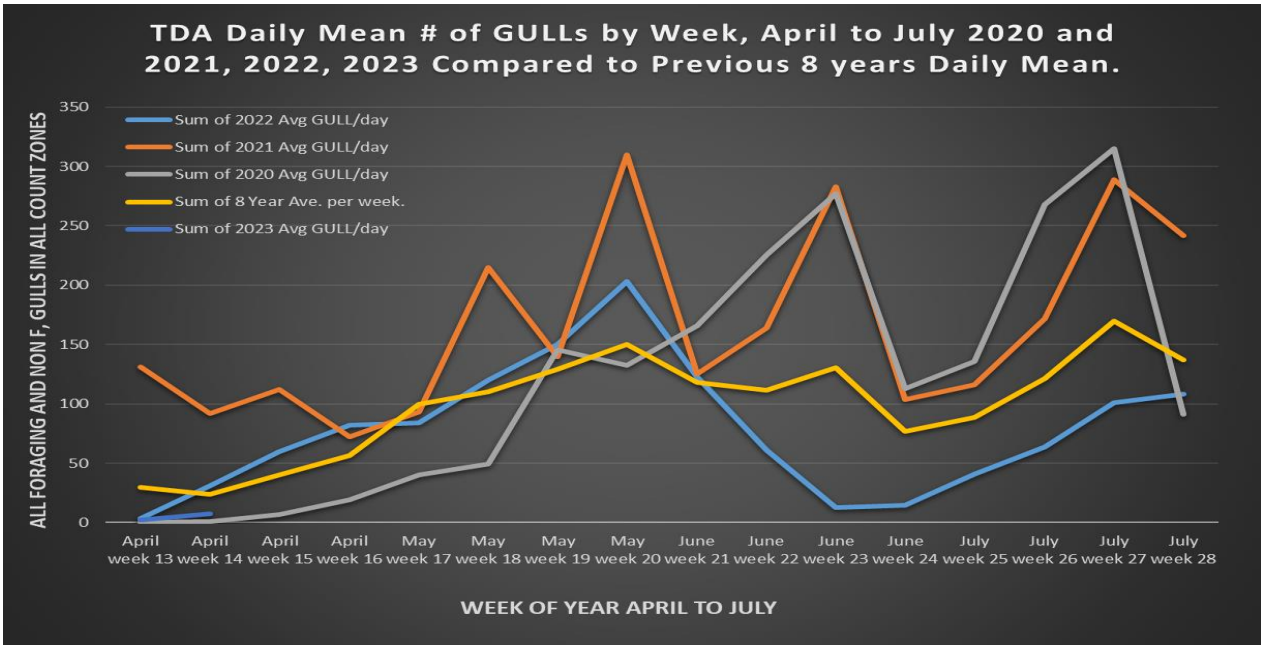
Operations

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

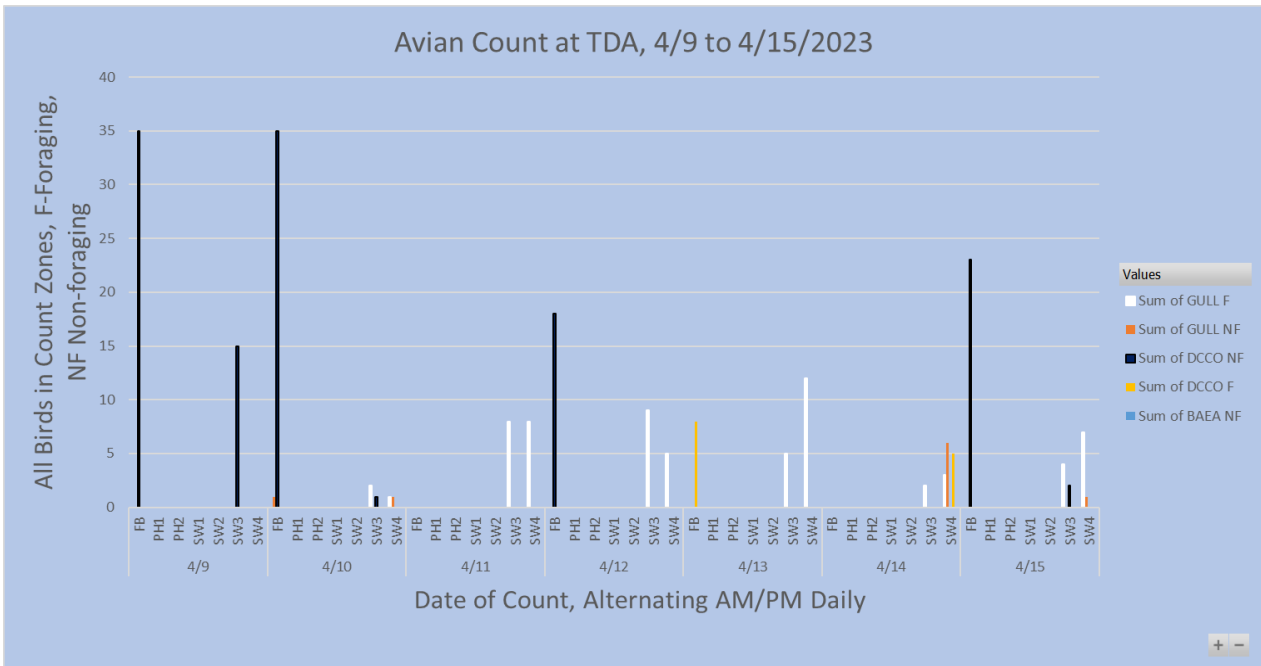
Approved by: Bryan Hert for Ron Twiner, Operation Project Manager, The Dalles Dam

Bird Count Zones, Avian Lines and Laser Deterrent Sites



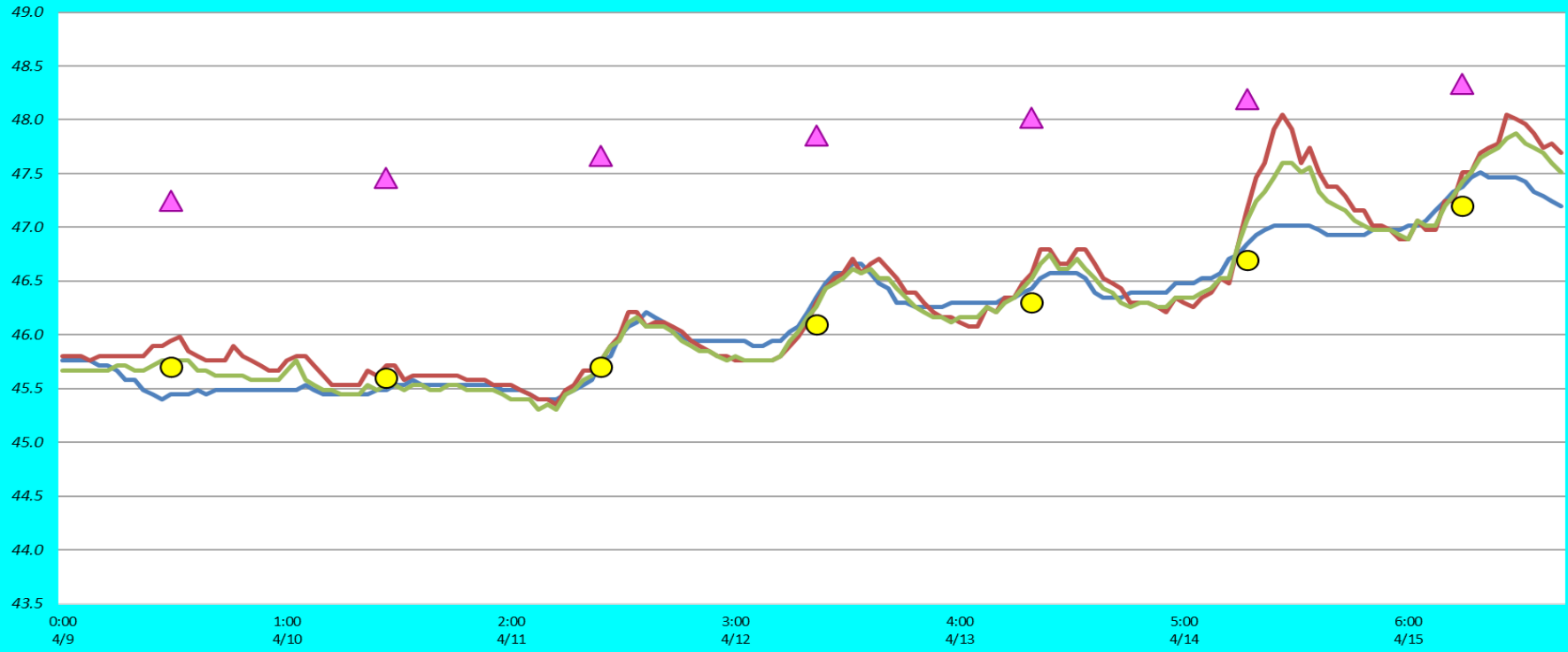


Slow gull start on gulls so far.



Adult Fish Ladders-River Temperatures

— East Count Station — North Count Station — North Entrance ● Current USGS Daily Average ▲ USGS Daily Average (2007-2022)



Secchi:		USGS F°
4.0	Sun	14-Feb-00
4.0	Mon	14-Feb-00
4.0	Tue	14-Feb-00
3.5	Wed	15-Feb-00
3.5	Thurs	15-Feb-00
3.5	Fri	15-Feb-00
3.5	Sat	16-Feb-00
3.7	AVG	46.2

Reporting week data

Date:	North Ladder		East Ladder											
	Differential	N1 Depth	East Entrance					West Entrance			South Entrance			
			Differential	E1 Depth	E2 Depth	E3 Depth	JP 6	Differential	W1	W2	W3	Differential	S1	S2
4/9	1.5	9.3	1.3	6.8	11.8	11.6	10.8	1.4	10.5	10.6	-2.7	1.3	10.6	10.4
	1.5	9.2	1.5	6.7	11.4	11.3	10.7	1.3	10.4	10.5	-2.7	1.3	10.5	10.3
4/10	1.4	10.1	1.5	6.8	12.0	11.9	10.8	1.3	10.5	10.5	-2.3	1.3	10.2	10.1
	1.2	10.0	1.4	7.0	12.2	12.1	11.0	1.3	10.6	10.7	-2.1	1.4	10.4	10.2
4/11	1.4	10.1	1.4	7.8	12.4	12.3	11.8	1.5	10.3	10.3	-1.5	1.4	10.2	10.2
	1.3	10.4	1.5	7.3	11.9	11.8	11.3	1.5	10.1	10.1	-1.8	1.4	10.4	10.3
4/12	1.3	10.5	1.4	8.3	12.7	12.5	12.3	1.3	10.9	10.9	-1.0	1.4	10.0	9.9
	1.3	10.0	1.4	8.3	12.7	12.5	12.3	1.4	10.5	10.6	-0.8	1.4	10.0	9.9
4/13	1.4	10.5	1.5	8.6	12.4	12.2	12.6	1.4	10.5	10.6	-0.6	1.4	10.2	10.1
	1.4	10.5	1.4	8.8	12.5	12.3	12.8	1.3	10.7	10.7	-0.5	1.3	10.3	10.1
4/14	1.3	10.7	1.4	6.9	13.0	12.9	11.9	1.5	9.9	9.9	-1.3	1.5	9.9	9.9
	1.3	10.6	1.3	7.0	13.0	13.0	12.0	1.5	9.9	9.9	-1.3	1.4	10.4	10.3
4/15	1.3	10.6	1.5	3.4	12.9	12.9	11.4	1.5	10.3	10.3	-1.8	1.3	10.3	10.3
	1.3	10.6	1.6	3.4	12.9	12.9	11.4	1.4	10.3	10.4	-1.8	1.5	10.1	9.9
AVG:	1.3	10.2	1.4	6.9	12.4	12.3	11.6	1.4	10.4	10.4	-1.6	1.4	10.2	10.1

Fishways inspected daily