

The Dalles Dam Fishway Status Report

4/28/24

Inspection Period 4/21 - 4/27, 2024

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: 52.5
			Comments: Fishways in full operation		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 10.8
Entrance Differential	0	1.0' - 2.0'	Average for the week 1.2
N2		Closed	
PUD Intake differential	5	≤ 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' ± 0.1'	1.2' per FPP.
Junction pool weir JP6	0	> 7.0'	Weekly average 10.4
East entrance differential	0	1.0' - 2.0'	Weekly average 1.5
Entrance weir E1	0	No criteria	Weekly average 3.1
Entrance weir E2	0	depth (≥ 8')	Weekly average 11.6
Entrance weir E3	0	depth (≥ 8')	Weekly average 11.6
East channel velocity	0	1.5 - 4 fps	4.21 fps 4/20/24
Transportation channel velocity	0	1.5 - 4 fps	3.47 fps 4/15/24
North channel velocity	0	1.5 - 4 fps	2.52 fps 4/13/24
South entrance velocity	0	1.5 - 4 fps	4.02 fps 4/20/24
West entrance differential	0	1.0' - 2.0'	Weekly average 1.4
Entrance weir W1	0	depth (≥ 8')	Weekly average 10.0
Entrance weir W2	0	depth (≥ 8')	Weekly average 10.4
Entrance weir W3	0	No criteria	Weekly average -3.0
South entrance differential	0	1.0' - 2.0'	Weekly average 1.3
Entrance weir S1	0	depth (≥ 8')	Weekly average 10.6
Entrance weir S2	0	depth (≥ 8')	Weekly average 10.4

JUVENILE BYPASS

Sluiceway operation	0	Units 1,8,22	22 sluiceway open while MU18 is OOS. Endgate open.
Turbine trashrack drawdown	0	<1.5', biweekly	4/11/24 all in criteria
Spill volume/pattern	0	1 to 22	ITS open, spilling gates 1-8
Turbine Unit Priority	0	per FPP	MU1 and MU22 in criteria due to MU18 OOS. RTS 4/25/24
Gatewells	0	Weekly	Chinook fry, yearling Chinook, and Steelhead in gatewells as of 4/20/24

Current Outages

MU11 OOS 3/25/24 0630 – 5/30/24 1700 – Annual and Thrust Bearing Oil Cooler

MU18 OOS 3/11/24 – 5/1/24 6yr O/H

MU19 & MU20 Forced-OOS 10/07/2018 1205 – 10/31/2025 1700 T10 ACETYLENE

Maintenance

Calibrations performed on 4/18, all within limits

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

Lamprey LPS contractor installed flumes and holding tank complete and tested. Planning operation start mid May pending OM manual.

DC lower guide bearing pump replaced on FU1

Predators

No recent otter sign or sea lion sightings.

Bird Gard sound system installed on BPA towers 3/14. Set to cycling on this week during 24 hours a day for cormorants.

Tori lines installed at east, west and south. Mobile Bird Gard operating at north spillway on DCCO.

No eagles on project. DCCO moved back onto BPA towers. ~50 gulls on project increasing daily.

Falconry started 27 April. Projecting to use RC boat as well in difficult to reach areas.

Researchers

USGS temperature link- [April](#)

4 Peaks fish count Resumed 4/1

Perform stomach removal on 12 gull takes to sample avian GI/Stomach contents.

USDA began using pyrotechnics 4/17.

WDFW Dam Angline began 30 April

Operations

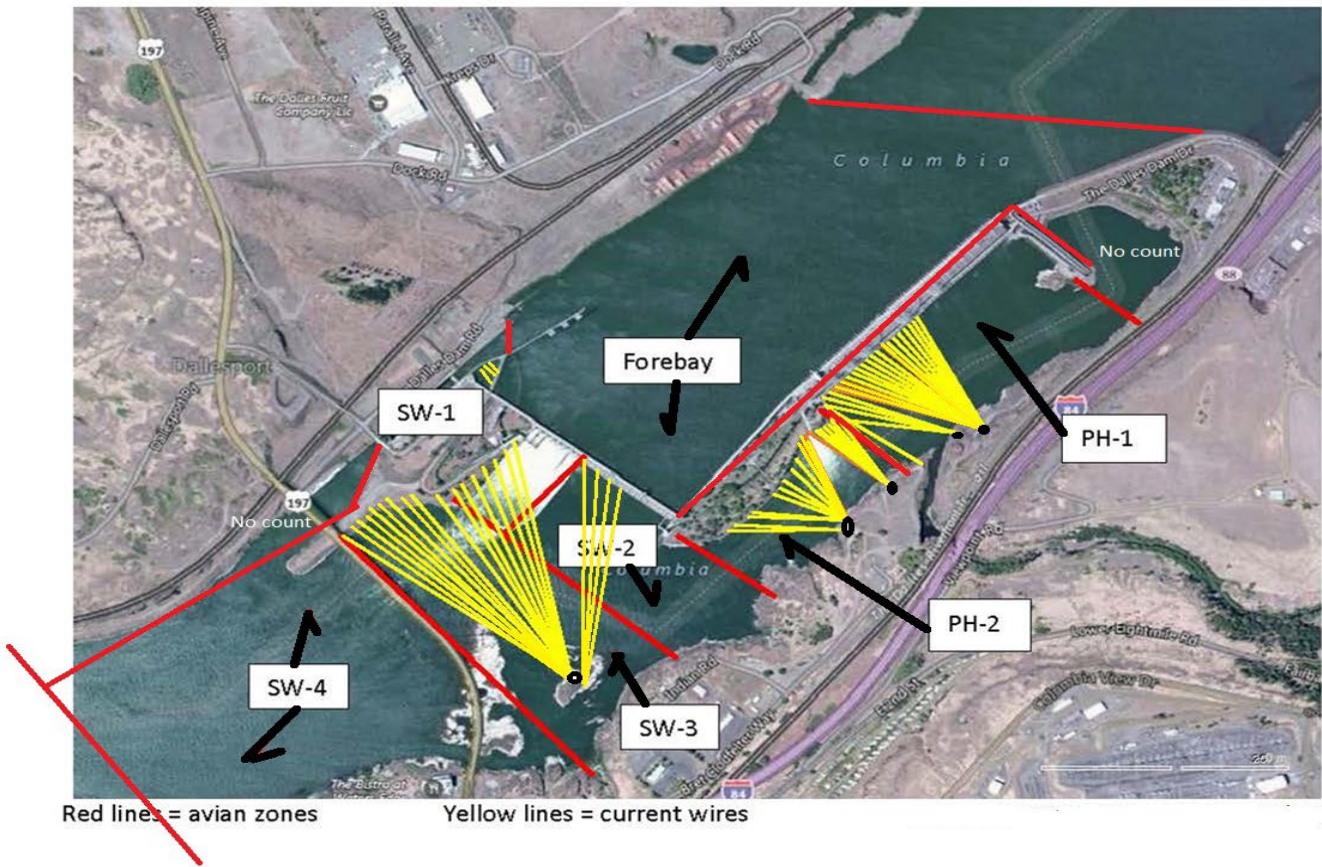
Both fishladders in full operation.

Spillway opened 4/10 40%

EFL AWS Backup opened 3 hours on 29 April

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

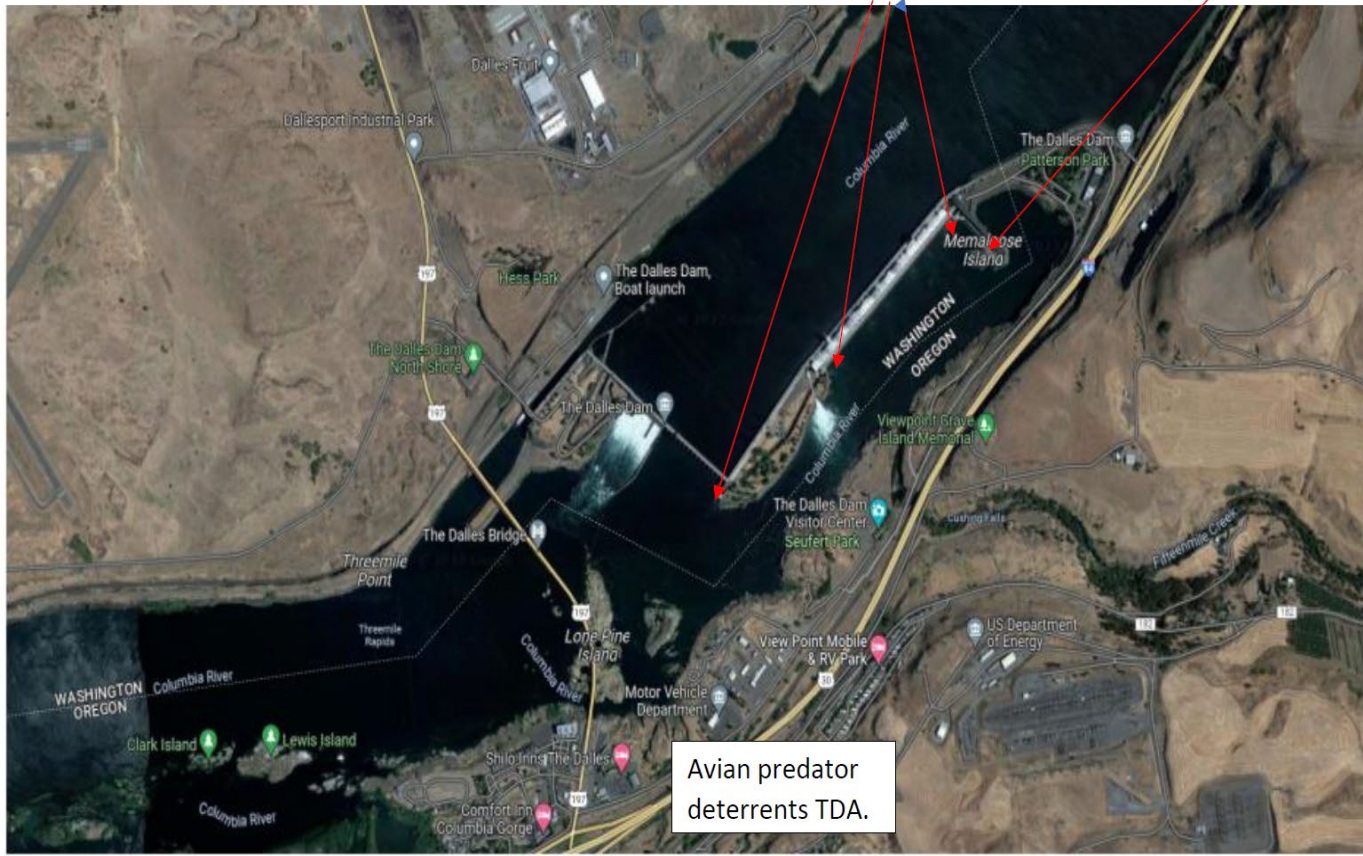
Bird Count Zones, Avian Lines and Deterrent Sites

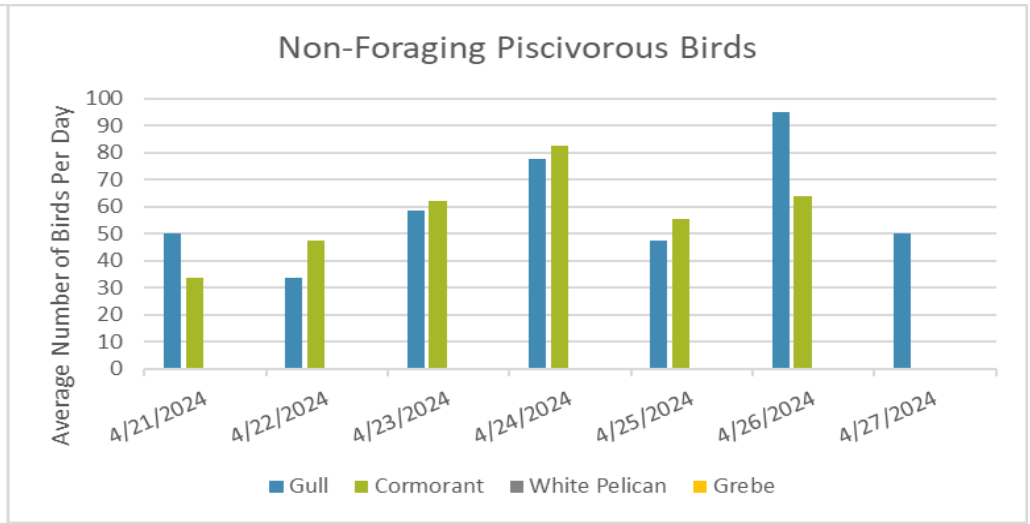
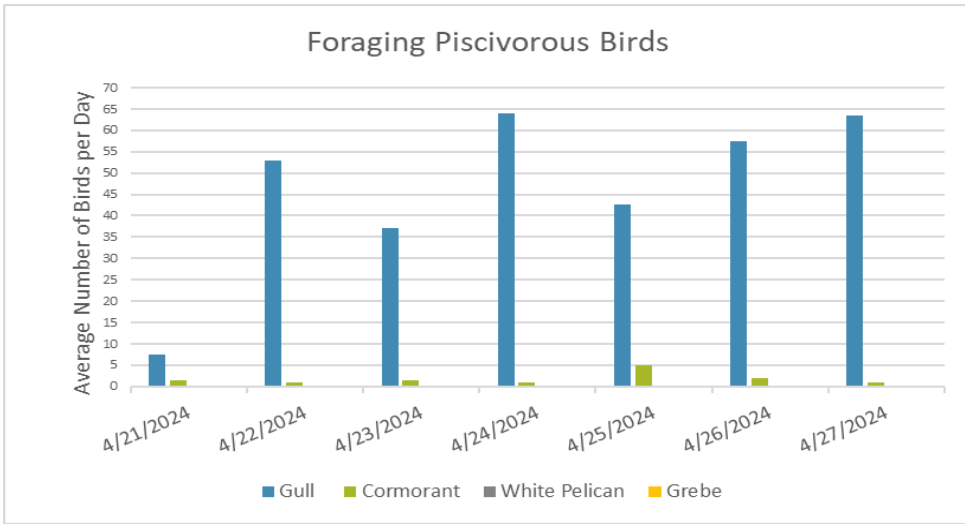


Avian predator tori lines and audio distress Bird Gard. 10/2023

Tori lines at East Ladder entrances.

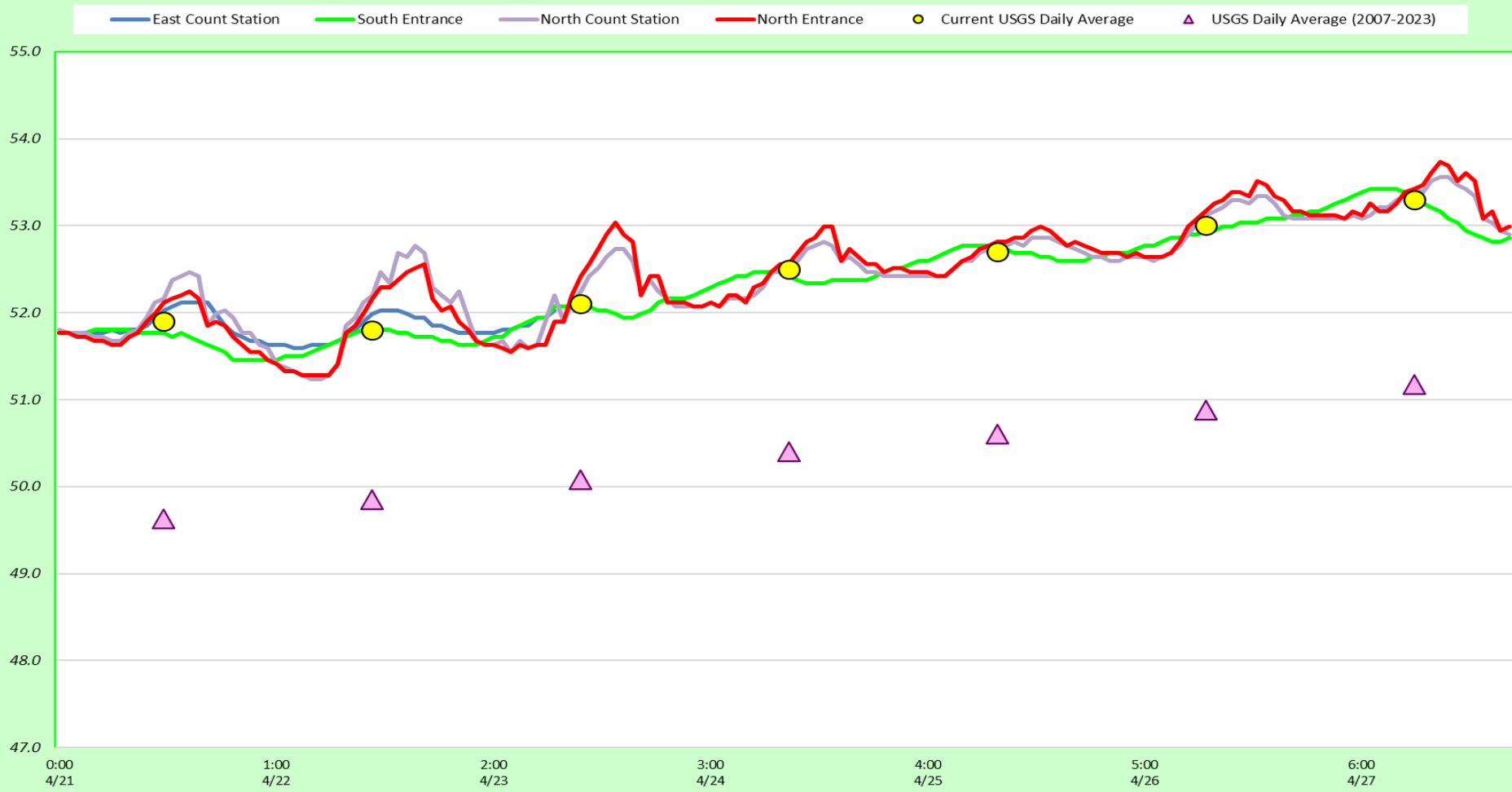
Bird Gard audio deterrent.





Bird numbers very erratic. Significant numbers of gulls appear to be staying overnight on rocks in SW4 and may be feeding in the dark. Pyro boat work is very effective but gulls return rapidly after boat work ends about 1330 hrs.

Fish Ladders-River Temperatures



Secchi:		USGS
5.0	Sun	51.9
4.0	Mon	51.8
5.0	Tue	52.1
5.0	Wed	52.5
4.0	Thurs	52.7
5.0	Fri	53.0
5.0	Sat	53.3
4.7	AVG	52.5

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
4/21	1.0	10.9	1.5	2.8	11.6	12.0	10.7	1.4	10.3	10.4	-2.6	1.2	11.1	11.0
	1.0	10.9	1.6	2.6	11.5	11.9	10.6	1.4	10.2	10.3	-2.8	1.3	10.6	10.4
4/22	1.0	10.7	1.6	1.9	11.5	11.9	9.9	1.5	9.9	10.0	-3.5	1.4	10.3	10.0
	1.2	10.6	1.6	1.5	11.4	11.9	9.5	1.5	9.8	9.9	-3.6	1.3	10.6	10.3
4/23	1.4	10.7	1.5	2.3	11.6	12.0	10.3	1.4	10.4	10.5	-3.0	1.3	10.8	10.8
	1.1	10.7	1.6	1.9	11.4	11.9	9.9	1.5	9.8	9.9	-3.5	1.4	10.4	10.0
4/24	1.3	10.7	1.4	3.3	12.0	12.4	11.3	1.3	10.6	10.7	-2.2	1.3	10.6	10.5
	1.3	10.7	1.5	2.3	11.6	12.2	10.3	1.5	9.8	9.9	-3.0	1.3	10.6	10.3
4/25	1.3	10.7	1.6	1.5	11.3	12.0	9.5	1.5	9.8	10.9	-3.8	1.4	10.3	10.2
	1.3	10.7	1.5	3.6	12.1	11.3	9.6	1.4	9.9	10.7	-3.7	1.4	10.4	10.1
4/26	1.3	10.8	1.5	5.1	11.6	11.5	11.1	1.3	10.7	10.8	-2.3	1.3	11.0	10.9
	1.2	10.8	1.6	4.0	11.4	11.4	10.1	1.4	10.2	10.3	-3.2	1.3	10.6	10.2
4/27	1.3	10.7	1.4	5.1	11.7	11.6	11.2	1.3	8.6	10.7	-2.2	1.4	10.5	10.4
	1.2	10.8	1.5	4.9	11.4	11.3	10.9	1.4	10.3	10.4	-2.5	1.3	10.7	10.6
AVG:	1.2	10.8	1.5	3.1	11.6	11.8	10.4	1.4	10.0	10.4	-3.0	1.3	10.6	10.4

Fishways inspected twice daily