

# The Dalles Dam Fishway Status Report

4/21/24

Inspection Period 4/14 - 4/20, 2024

## THE DALLES DAM



US Army Corps  
of Engineers  
Portland District

The Dalles Project-Fisheries  
P.O. Box 564  
The Dalles, OR 97058-9998  
Phone: 541-506-3800

<b>The Dalles Dam</b>	Inspections OOC	Criteria Limit	<b>Total Number of Inspections:</b> 14		<b>Temperature:</b> 51.0
			<b>Comments:</b> Fishways in full operation		<b>Weekly Ave. Secchi:</b> 4.0

### NORTH FISHWAY

Exit differential	0	≤ 0.5'	Aquatic weeds and large wood accumulating.		
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	1.3	
N2		Closed			
PUD Intake differential	5	≤ 0.5'	Lots of weed mass accumulating on intake		

### 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	12.1	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.6	
Entrance weir E1	0	No criteria	Weekly average	4.1	
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.7	
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.7	
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	10.7	
Entrance weir W2	0	depth (≥ 8')	Weekly average	10.8	
Entrance weir W3	0	No criteria	Weekly average	-1.3	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.3	
Entrance weir S1	0	depth (≥ 8')	Weekly average	10.7	
Entrance weir S2	0	depth (≥ 8')	Weekly average	10.6	

### 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 – 4/25/24 6yr O/H

MU19 & MU20 FOOS 10/07/2018 1205 – 10/31/2025 1700 T10 ACETYLENE

T7 OOS 4/15/24 0800 – 4/22/24 1200 Transformer warranty work

Fish unit 1 outage scheduled 29 April (6hr)

## 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.

Maintenance modified extension with lamprey plate for weir E1. Excessive gap from plate to wall. Working with PDT and project maintenance for options.

## 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. Results pending.

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

No eagles on project. DCCO moving back onto BPA towers. ~35 gulls on project increasing daily.

Falconry contract awarded. Expecting start April 26th. Projecting to use RC boat as well in difficult to reach areas.

4 pair of osprey have arrived for nesting. PIT tags recovered under nest platforms indicate significant juvenile salmon predation.

## Research/Construction/Contractors

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.

## Operations

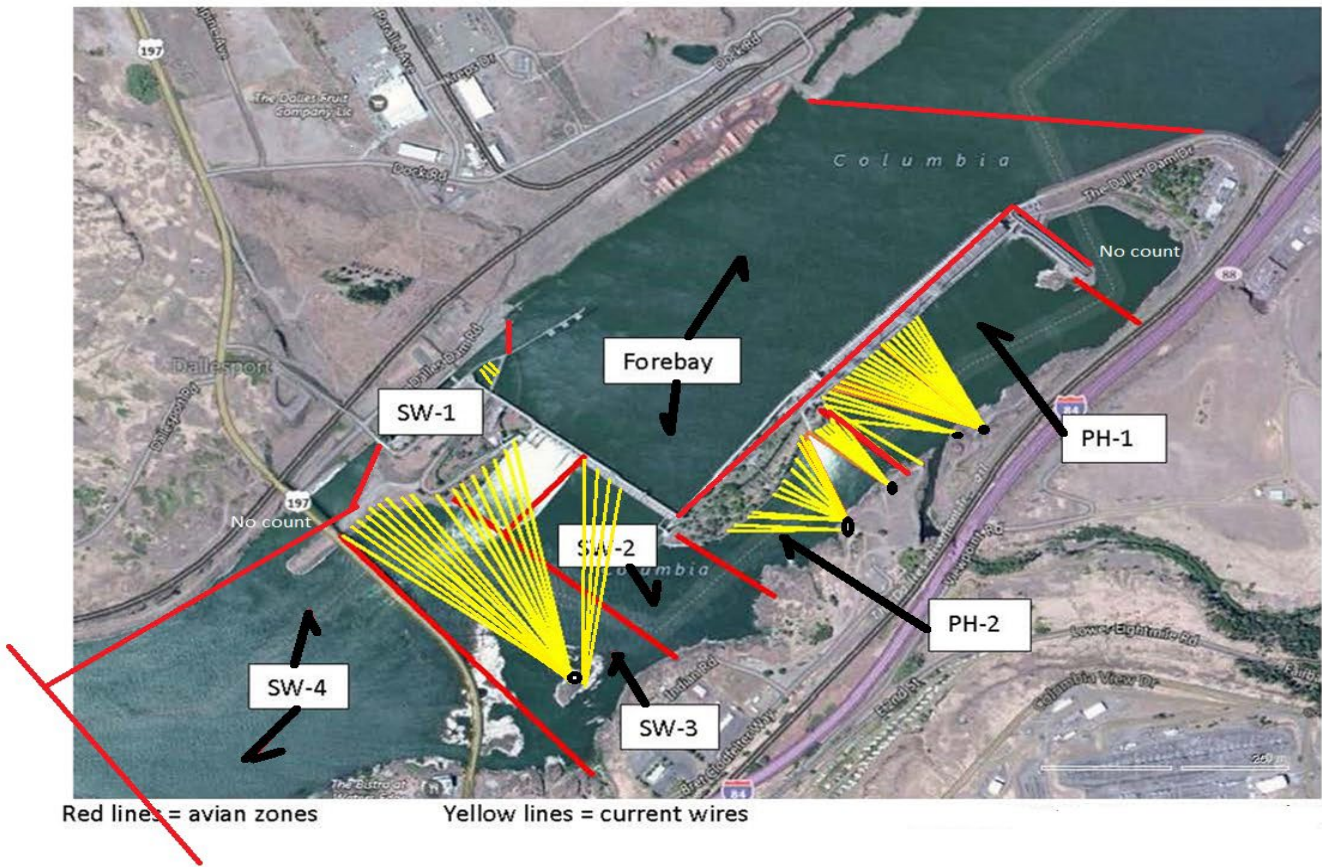
Sluice endgate opened 3/1.

Both fishladder in full operation.

Spillway opened 4/10 40%

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

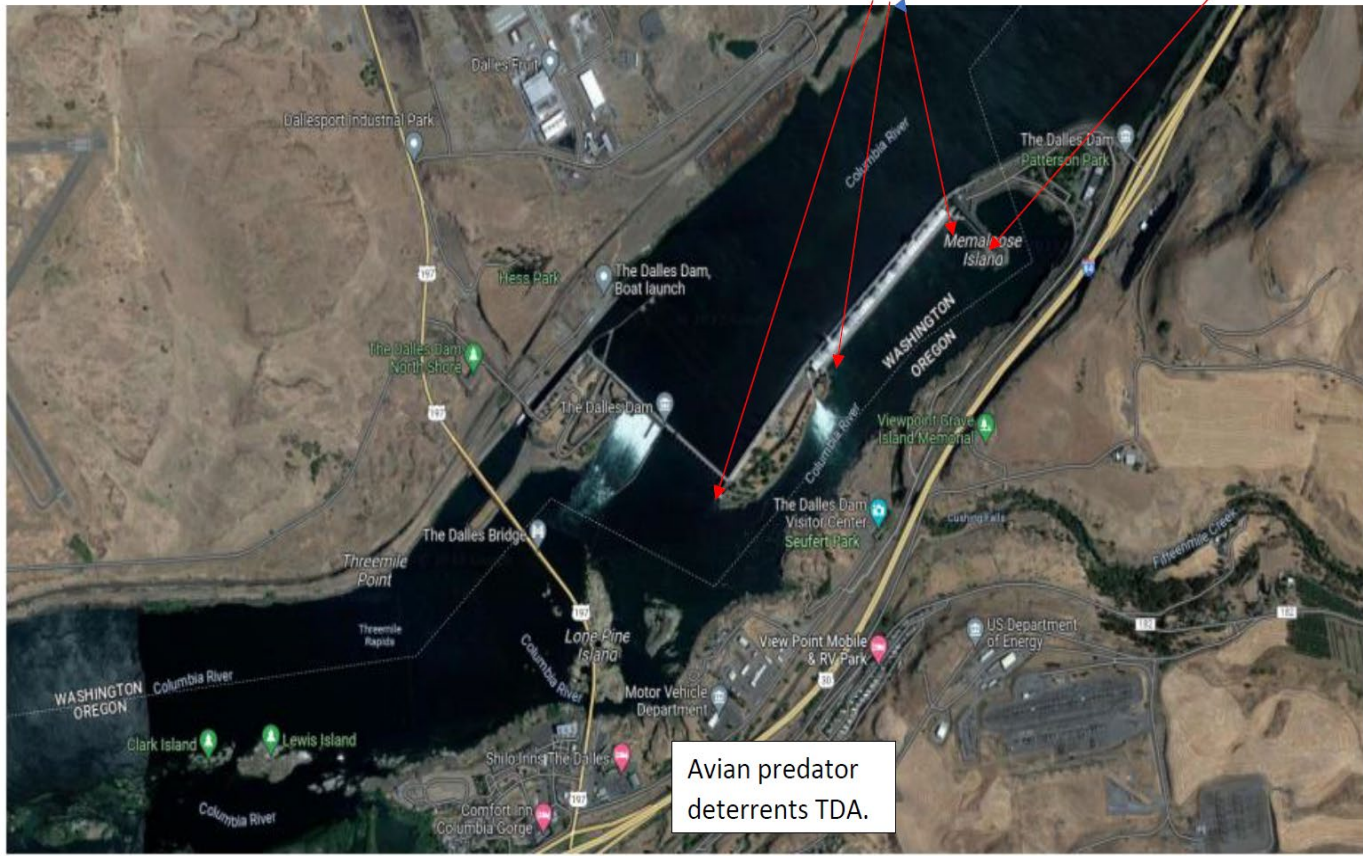
# Bird Count Zones, Avian Lines and Deterrent Sites



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

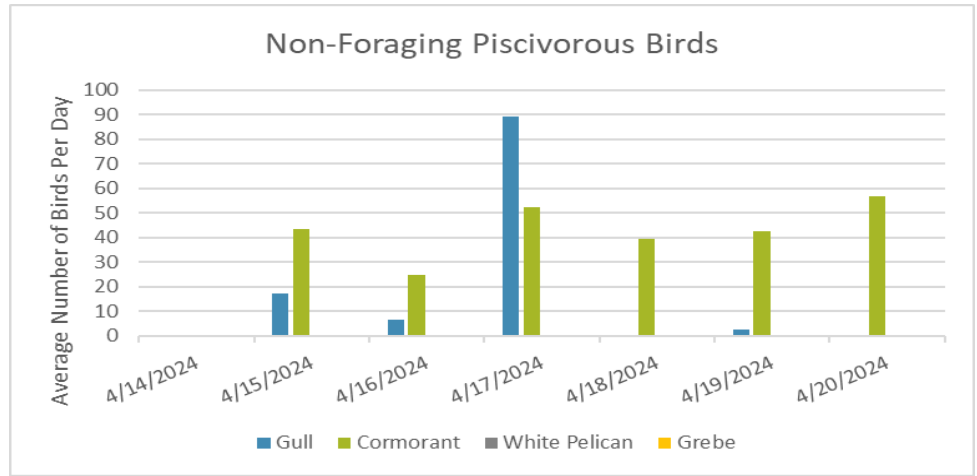
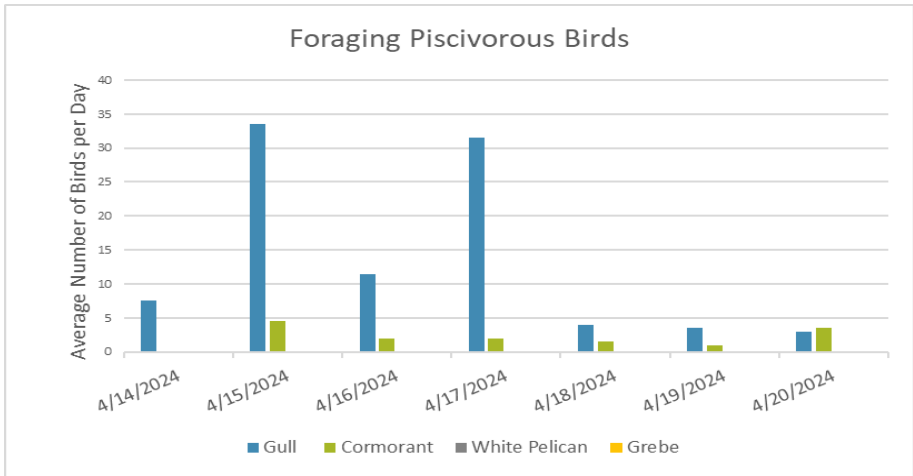
Tori lines at East Ladder entrances.

Bird Gard audio deterrent.



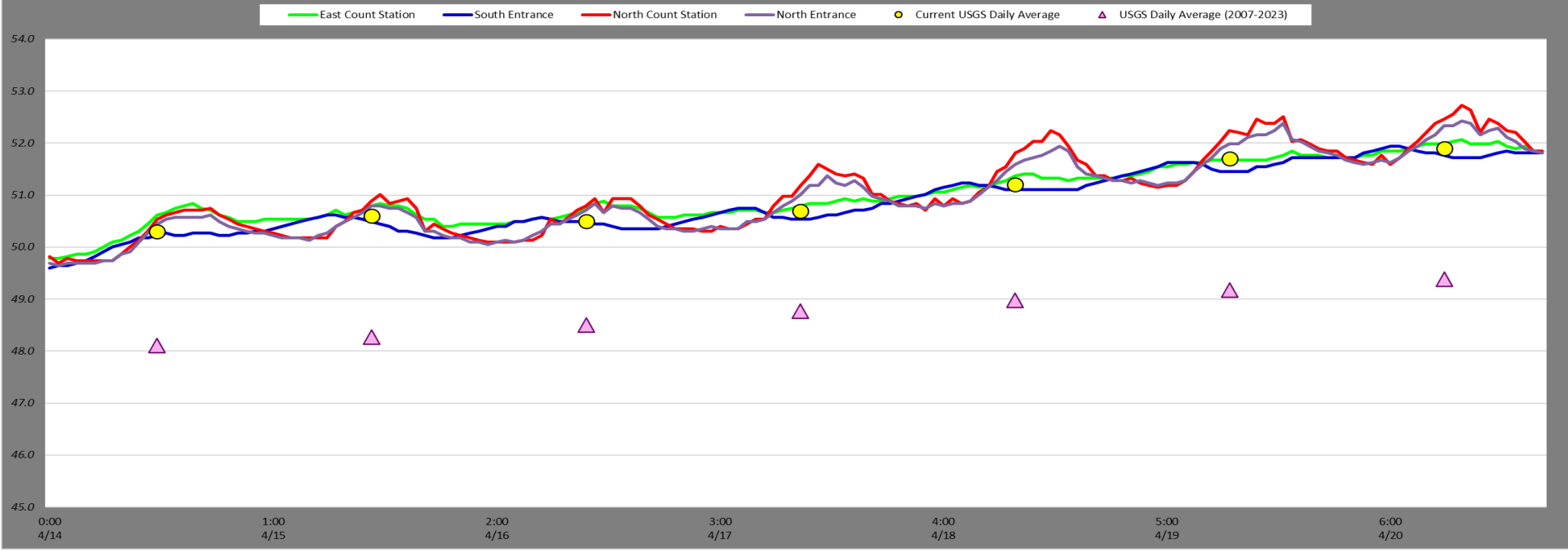
Avian predator deterrents TDA.





Gull counts reflect beginning of pyrotechnic hazing by USDA. Evening gull numbers remain high and are not accounted for. Falconry abatement to begin 4/26/24  
 Large numbers of cormorants continue to feed and congregate around the project structures in anticipation of breeding.

### Fish Ladders-River Temperatures



Secchi:		USGS
4.0	Sun	50.3
4.0	Mon	50.6
4.0	Tue	50.5
4.0	Wed	50.7
4.0	Thurs	51.2
4.0	Fri	51.7
4.0	Sat	51.9
4.0	AVG	51.0

## 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
4/14	1.4	10.8	1.4	4.5	12.3	12.2	12.5	1.4	11.2	11.3	-1.2	1.5	10.5	10.1
	1.3	10.7	1.5	3.2	11.0	11.0	11.2	1.5	10.0	10.0	-2.0	1.4	10.6	10.5
4/15	1.4	10.7	1.6	3.7	12.1	12.1	11.7	1.5	10.6	10.6	-1.6	1.3	10.7	10.6
	1.3	10.7	1.5	3.8	12.0	12.0	11.8	1.4	10.5	10.6	-1.7	1.4	11.6	11.4
4/16	1.2	10.8	1.6	5.1	11.7	11.5	13.0	1.3	11.2	11.2	-0.3	1.4	10.5	10.7
	1.4	10.4	1.6	3.6	11.8	11.7	11.6	1.5	10.4	10.5	-1.8	1.3	10.5	10.6
4/17	1.5	10.9	1.6	6.4	11.2	10.9	14.3	1.4	11.4	11.4	-0.3	1.4	10.9	11.1
	1.3	10.7	1.5	3.8	12.0	12.0	11.8	1.3	10.9	10.9	-1.6	1.3	10.9	10.6
4/18	1.3	10.4	1.6	3.7	11.5	11.7	11.6	1.4	10.8	10.8	-1.7	1.3	10.7	10.5
	1.3	10.8	1.6	3.5	11.6	11.7	11.5	1.5	10.5	10.5	-2.0	1.3	10.6	10.4
4/19	1.3	11.1	1.8	5.1	11.1	11.1	13.1	1.3	11.1	11.2	0.6	1.4	11.0	11.0
	1.2	10.9	1.5	3.0	11.9	12.2	11.0	1.4	10.3	10.4	-2.0	1.3	10.5	10.2
4/20	1.0	10.8	1.6	4.9	11.3	11.4	12.9	1.4	11.1	11.1	-0.6	1.3	10.9	10.9
	1.1	10.8	1.6	3.3	11.7	12.0	11.3	1.5	10.2	10.2	-2.1	1.3	10.6	10.3
<b>AVG:</b>	<b>1.3</b>	<b>10.8</b>	<b>1.6</b>	<b>4.1</b>	<b>11.7</b>	<b>11.7</b>	<b>12.1</b>	<b>1.4</b>	<b>10.7</b>	<b>10.8</b>	<b>-1.3</b>	<b>1.3</b>	<b>10.7</b>	<b>10.6</b>

*Fishways inspected twice daily*



USDA in bird zone SW4, working on gulls 4/20/24