### The Dalles Dam Fishway Status Report

8/25/24

Inspection Period 8/18 - 8/24, 2024

#### THE DALLES DAM



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

	The Dalles Dam  Inspections OOC  Criteria Total Number of Inspections: Comments: Fishways in ful					14	Temperature:	70	0.5	
The Dalles Dam										
NORTH FISHWAY										
			NOKIHFI	SHVVAI						
Exit differential	0	≤ 0.5'								
Count station differential	0	≤ 0.3'								
Weir crest depth	0	1.0' ± 0.1'								
Entrance weir N1	0		Average for the week		10.0					
Entrance Differential	0		Average for the week		1.4					
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' ± 0.1'	1.2' per FPP.							
Junction pool weir JP6	0	> 7.0'	Weekly average	10.3						
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5						
Entrance weir E1	0	No criteria	Weekly average	4.3						
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.4						
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.4						
Collection channel velocity	0	1.5 - 4 fps	2.69 fps 8/2	23						
Transportation channel velocity	0	1.5 - 4 fps	3.75 fps 8/2	23						
North channel velocity	0	1.5 - 4 fps	3.23 fps 8/1	18						
South entrance velocity	0	1.5 - 4 fps	4.18 fps 8/2	24						
West entrance differential	0	1.0' - 2.0'	Weekly average	1.4						
Entrance weir W1	0	depth (≥ 8')	Weekly average	10.3						
Entrance weir W2	0	depth (≥ 8')	Weekly average	10.3						
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	10.4						
Entrance weir S2	0	depth (≥ 8')	Weekly average	10.4						
JUVENILE BYPASS										
Sluicegate operation	0	Units 1,8,22	22 sluicegate to rema	in open through	h the 202	4 fish pas	sage season			
Turbine trashrack drawdown	0									
Spill volume/pattern	0	1 to 22	ITS open, spilling gates 1-8 and 8/9 at times.							
Turbine Unit Priority	0	per FPP	MU1 and MU22 in criteria							
Gatewells	0	Weekly	Juvenile salmonids observed in small numbers as of 8/20							

#### **Current Outages**

- -MU19 & MU20 FOOS 10/07/2018 1205 10/31/2025 1700 T10 ACETYLENE
- -MU11 OOS 3/25/24 0630 12/12/24 1700 Annual and Thrust Bearing Oil Cooler
- -MU12 OOS 6/24/24 0630 3/15/25 1700 6 YR O/H and fin repair
- -MU2 OOS 7/15/24 0630 8/29/24 1700 Annual/Blade seal replacement

#### Maintenance

Calibrations performed on 8/22/24, 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.

DC lower guide bearing pump replaced on FU1

#### **Predators**

No recent sea lion sightings. Avian numbers decreased along with decreasing shad fallback, foraging in SW4.

Nocturnal avian feeding not being monitored.

Tori lines installed at east, west and south. Mobile Bird Gard turned off.

Approx. 20 DCCO on BPA towers. Feeding in SW4  $\sim$  15 just under bridge in sw4.

~50 gulls present daily loafing west of count zones and foraging in SW4 as USDA deterrents and lethal take stopped 7/30/24.

Total of 280 avian stomachs taken so far at JD SMF awaiting eDNA analysis in Nov. 2024?

#### Researchers

USGS temperature link- August

4 Peaks fish count Resumed 4/1

280 stomachs from gulls taken by Cramer fish for eDNA work. Mix of recent fledged and adult RBGU/CAGU taken. 18 total DCCO stomachs taken.

USDA concluded the 2024 bird hazing season on 7/31/24

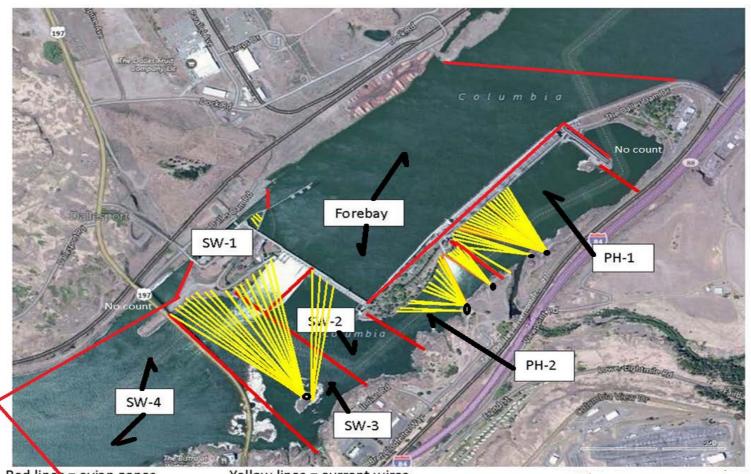
WDFW Dam Angling begin 30 April -samples taken for predator study.

#### **Operations**

Both fishladders in full operation.

Spillway 30%

## Bird Count Zones, Avian Lines and Deterrent Sites



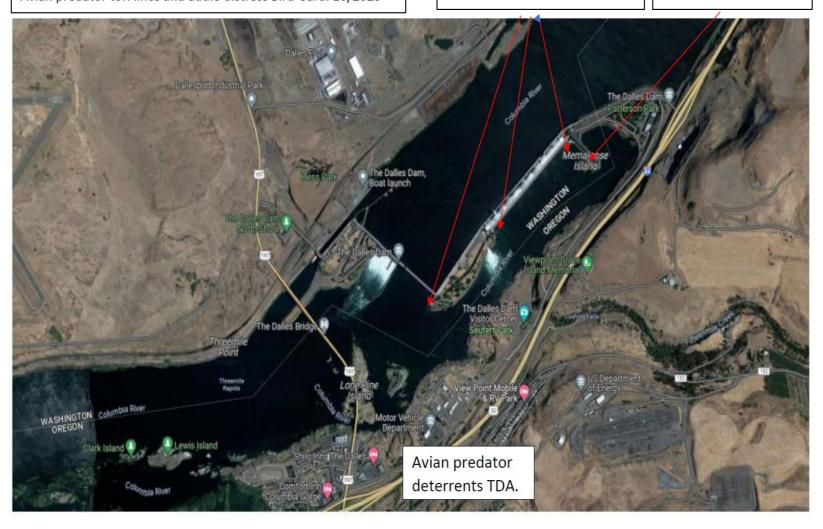
Red lines = avian zones

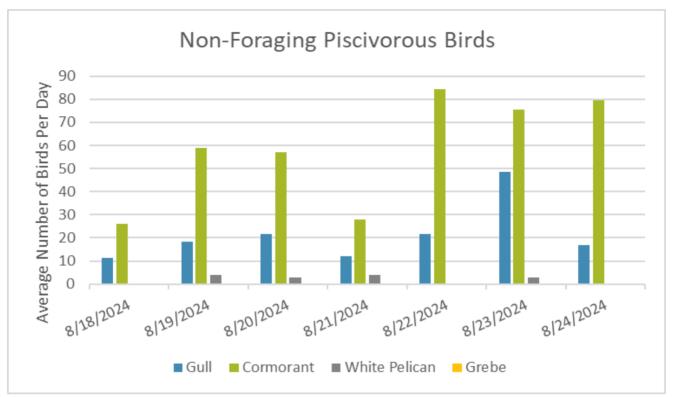
Yellow lines = current wires

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

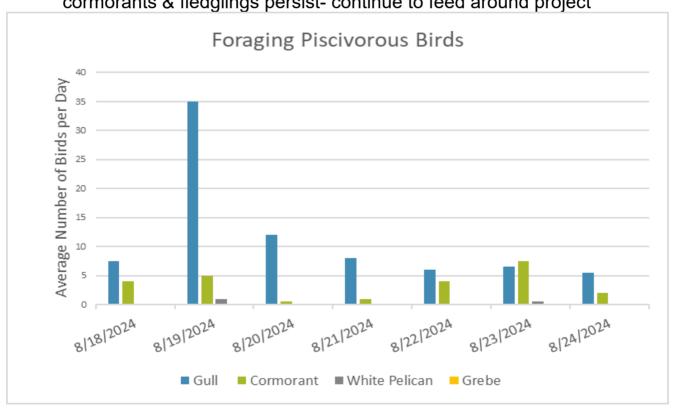
Tori lines at East Ladder entrances.

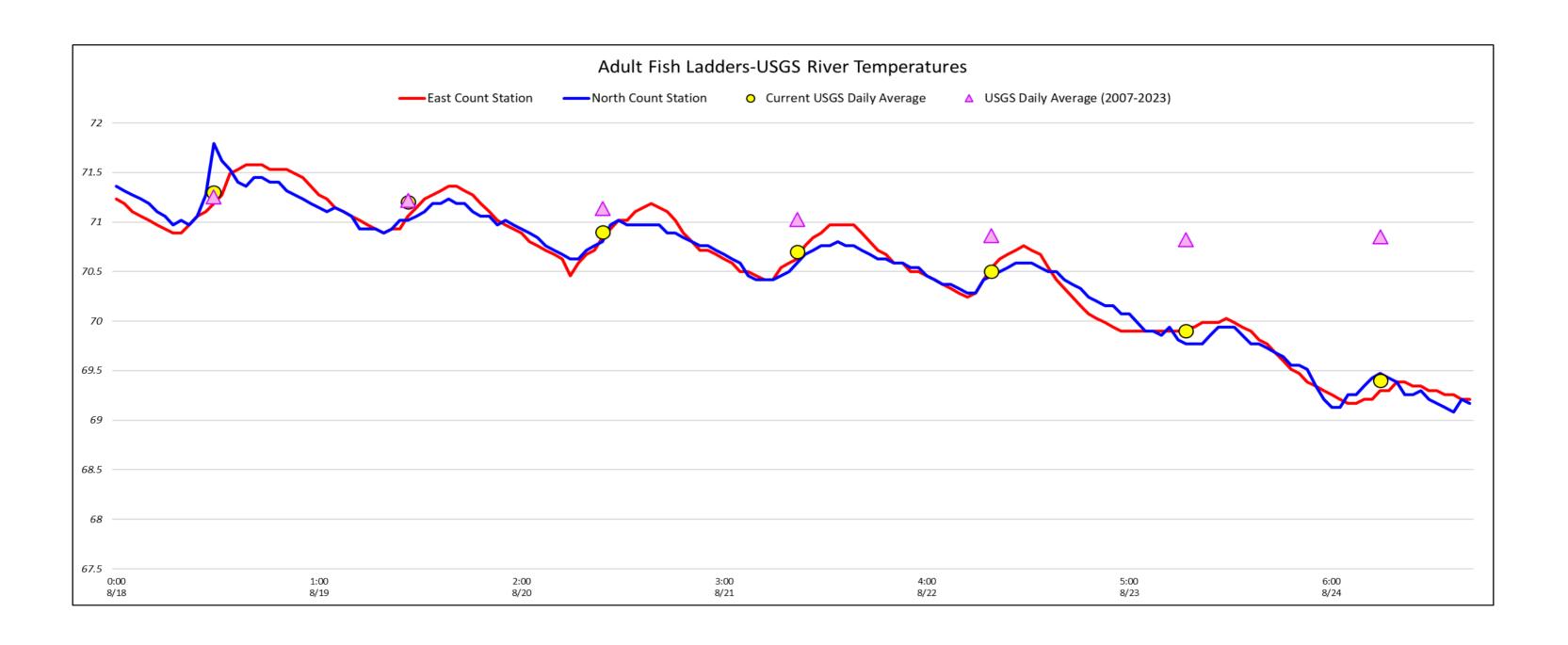
Bird Gard audio deterrent.





Pelicans scarce, gulls following suit cormorants & fledglings persist- continue to feed around project





Secchi:		USGS			
6.0	Sun	71.2			
6.0	Mon	71.1			
5.0	Tue	70.8			
5.0	Wed	70.7			
6.0	Thurs	70.4			
5.0	Fri	69.9			
6.0	Sat	69.3			
5.6	AVG	70.5			

# 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
8/18	1.5	9.7	1.5	3.8	11.3	11.4	9.8	1.4	10.2	10.3	-3.5	1.4	10.1	10.2
	1.5	9.5	1.6	3.7	11.2	11.2	9.7	1.3	10.2	10.2	-3.6	1.3	10.6	10.3
8/19	1.5	9.9	1.4	4.6	11.7	11.8	10.6	1.3	10.8	10.8	-2.8	1.3	10.8	10.8
			1.5	4.9	11.4	11.4	10.9	1.4	10.7	10.7	-2.5	1.3	10.7	10.7
8/20	1.2	9.9	1.6	3.7	11.1	11.2	9.7	1.5	9.7	9.8	-3.6	1.3	10.1	10.2
	1.2	9.9	1.5	3.6	11.3	11.4	9.6	1.5	9.7	9.7	-3.7	1.3	10.1	10.1
8/21														
	1.3	10.0	1.6	3.9	11.2	11.3	9.9	1.3	10.2	10.2	-3.2	1.4	10.1	10.1
	1.4	10.2	1.5	4.4	11.3	11.3	10.4	1.4	10.2	10.2	-3.0	1.3	10.5	10.4
8/22	1.1	10.2	1.5	4.2	11.3	11.4	10.2	1.5	10.3	10.3	-3.3	1.3	10.3	10.4
	1.5	9.7	1.5	4.1	11.3	11.4	10.2	1.5	10.2	10.2	-3.4	1.4	10.3	10.3
8/23	1.3	10.2	1.4	5.0	11.6	11.7	11.0	1.4	10.6	10.7	-2.3	1.4	10.2	10.3
	1.3	10.2	1.5	4.9	11.4	11.5	10.9	1.4	10.5	10.5	-2.4	1.3	10.3	10.4
8/24	1.4	10.0	1.5	4.6	11.4	11.5	10.6	1.5	10.2	10.3	-2.7	1.3	10.5	10.6
	1.3	10.1	1.4	4.8	11.5	11.7	10.8	1.3	10.4	10.5	-2.5	1.3	10.5	10.7
AVG:	1.4	10.0	1.5	4.3	11.4	11.4	10.3	1.4	10.3	10.3	-3.0	1.3	10.4	10.4

Fishways inspected twice daily



Surveying artificial substrates for invasive mussel species at the North and East fish ladders. None present.

