

# The Dalles Dam Fishway Status Report

8/7/23

Inspection Period 07/30-08/6, 2023

## 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> 71.5 °F
			<b>Comments:</b> flows stabilize		<b>Weekly Ave. Secchi:</b> 5.0

### 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	9.8	
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' ± 0.1'	1.0' per FPP.		
Junction pool weir JP6	0	> 7.0'	Weekly average	10.0	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.6	
Entrance weir E1	0	No criteria	Weekly average	5.9	
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.3	
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.3	
Collection channel velocity	0	1.5 - 4 fps	3.21 east entrance 8/5/23		
Transportation channel velocity	0	1.5 - 4 fps	3.99 fps 8/4/23		
North channel velocity	0	1.5 - 4 fps	2.77 fps 7/15/23		
South entrance	0	1.5 - 4 fps	5.02 fps 8/5/23		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir W1	0	depth (≥ 8')	Weekly average	9.6	
Entrance weir W2	0	depth (≥ 8')	Weekly average	9.6	
Entrance weir W3	0	No criteria	Weekly average	-3.1	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	0	depth (≥ 8')	Weekly average	9.9	
Entrance weir S2	0	depth (≥ 8')	Weekly average	9.5	

### JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18	1-8-18 gates open.		
Turbine trashrack drawdown	0	<1.5', biwklly	8/3/2023 All MUs and FUs in criteria.		
Spill volume/pattern	0	1 to 22	1-8 bays in operation daily		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	Some adult shad mortality.		

### Current Outages

MU13 OOS 07/10/2023 0630 – 08/10/2023 1700, 6 YEAR OVERHAUL  
MU4 OOS 04/17/2023 0630 – 9/28/2023 1700, ANNUAL  
MU12 OOS 04/12/2021 0001 – 9/22/2023 ANNUAL  
MU19 & MU20 FOOS 10/07/2018 1205 – 10/31/2025 1700 T10 ACETYLENE

### Maintenance

Working on contract for north ladder vegetation removal  
Planning spill gates 9 and 10 cable and gearbox swap. Resealing bulkheads.  
Spillway assessment; Spillgates 1- 9 rehab 2034. Spillway crane replace first priority. Reviewing gate operation frequency.  
Plan in place for fish unit intake trashrack rake in preparation for potential debris issues. Monitoring fish unit differential.  
200' Tori line at east entrance-bird activity at entrances reduced, intend to increase implementation  
Calibrations on all entrances found within criteria.

### Predators

USDA hazing ended 7/31  
More juvenile gulls present and counted as foraging  
Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Working on permit.  
Falconry abatement completed and RC boat trial completed on July 21.  
Planning construction of custom tori lines for other ladder entrance locations.  
East end of Lewis island scanned for PIT tags. Few new ones found

### Research/Construction/Contractors

Northern Pikeminnow Management Program (NPM)  $\geq 230\text{mm}$  151 for the week, 2128 YTD  
USGS temperature link- [July °F](#) [August °F](#)  
4 Peaks conduction fish counts, night video commenced  
Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, other 2 next winter.  
ODFW conducting monthly fishway inspections.  
PTAGIS fishladder data collection at count stations continues  
lamprey translocation #'s as of 8/6 -at 1121 YTD

### Operations

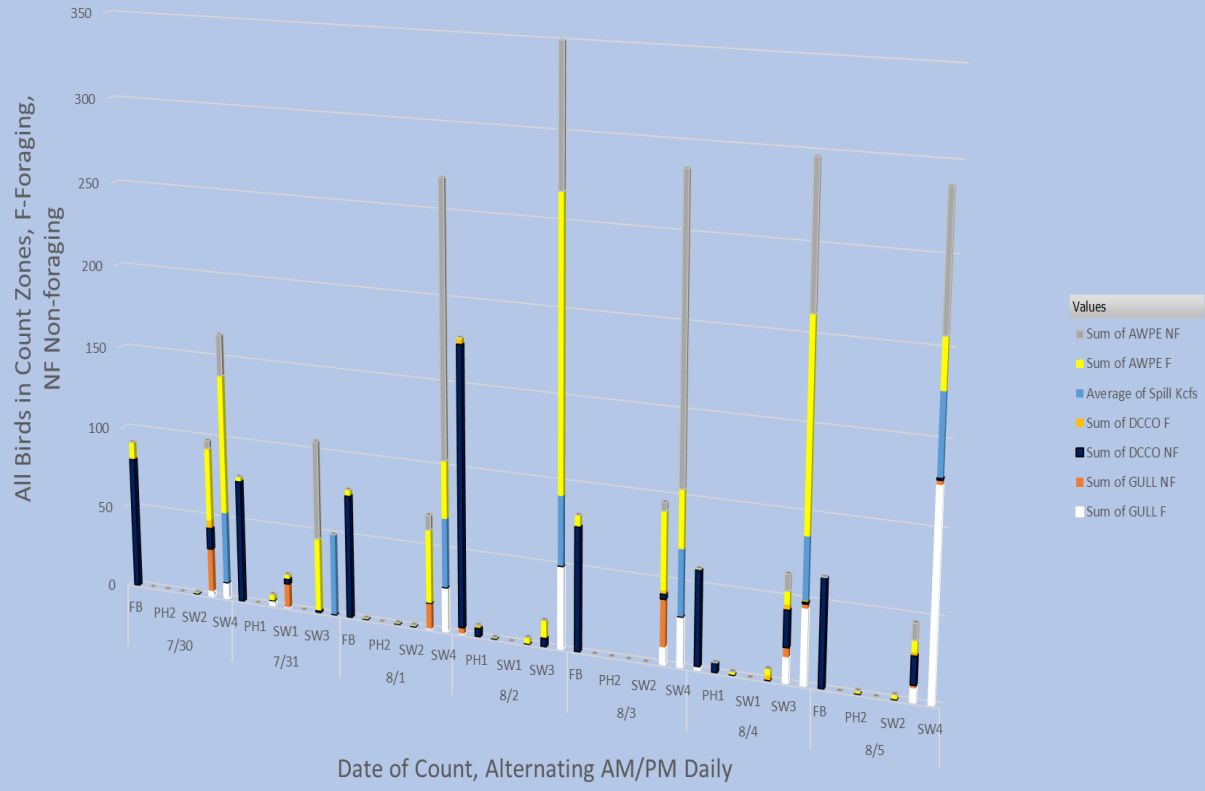
Sluice gates 1-1, 1-2, 1-3, 8-1, 8-3, 18-2 in accordance with fish passage criteria

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

# Bird Count Zones, Avian Lines and Laser Deterrent Sites

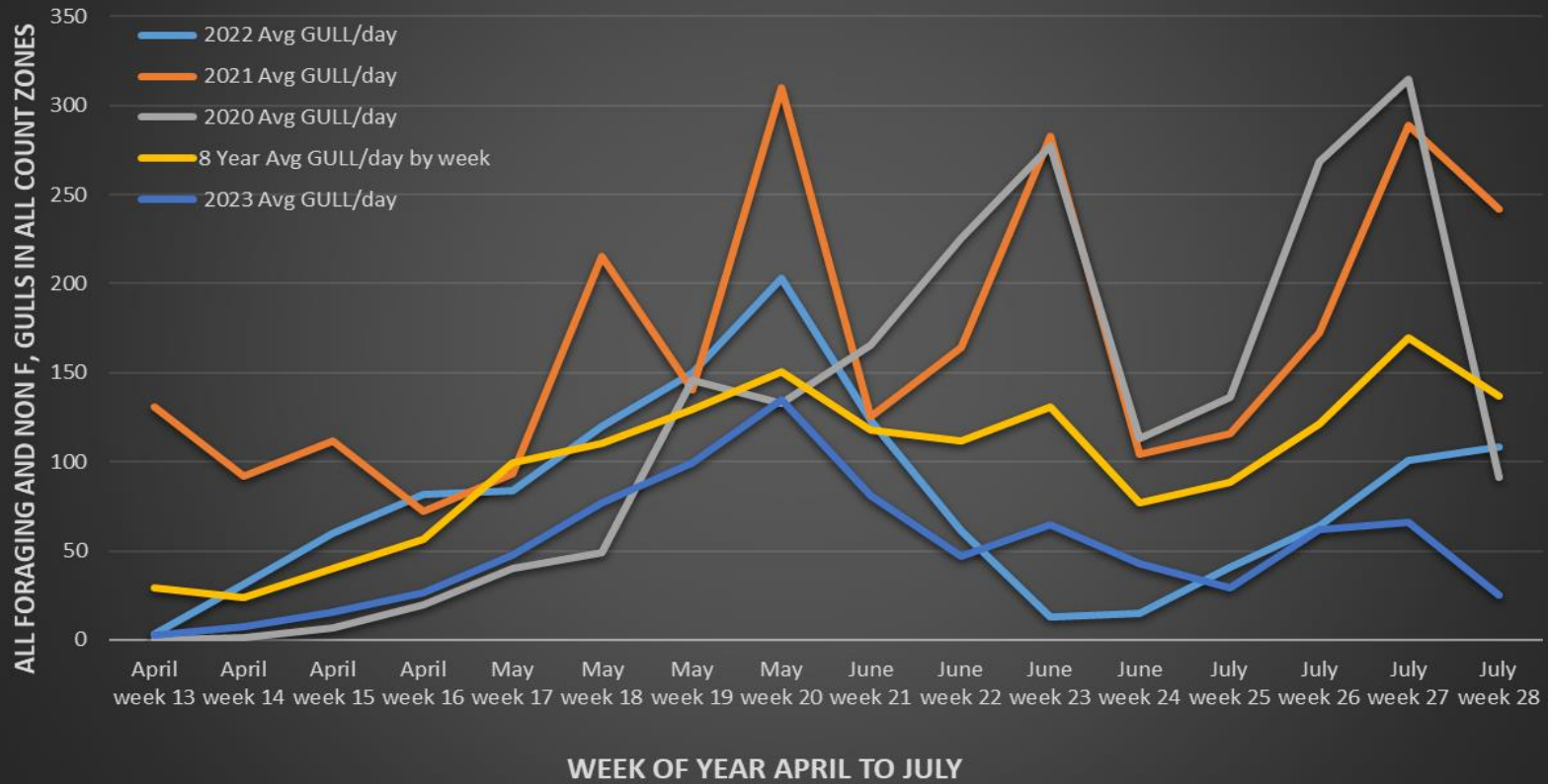


### Avian Count at TDA, 7/30 to 8/5/2023

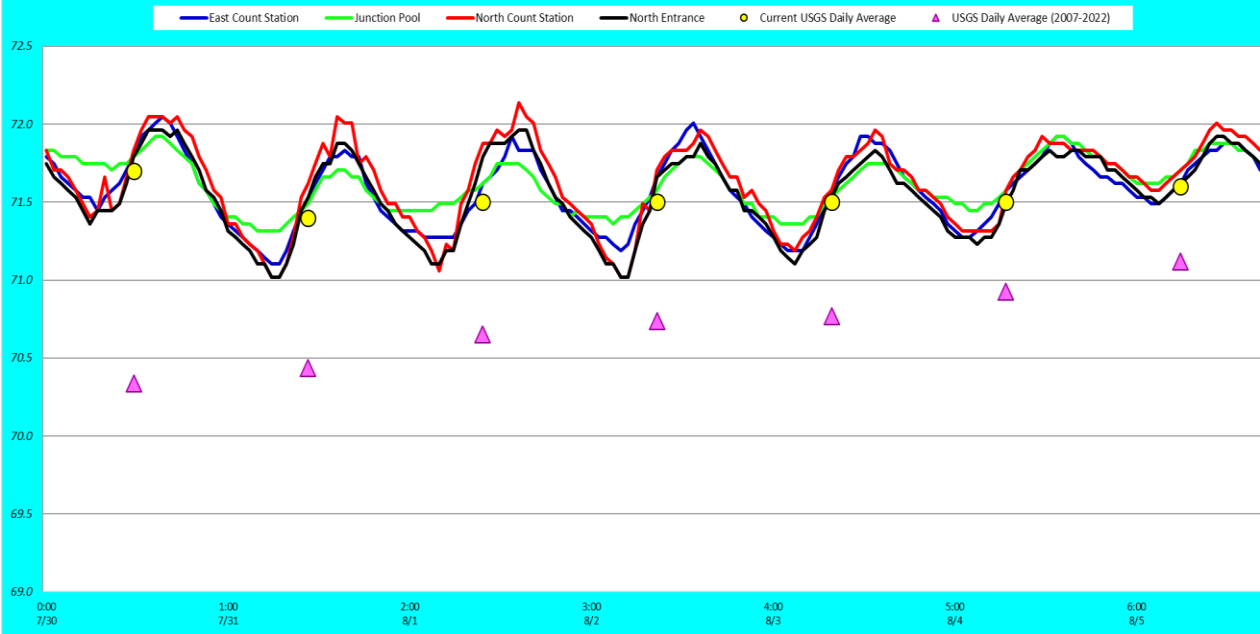


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## TDA Daily Mean # of GULLs by Week, April to July 2020 and 2021, 2022, 2023 Compared to Previous 8 years Daily Mean.



### Adult Fish Ladders-USGS River Temperatures



Secchi:		USGS F°
5.0	Sun	71.7
5.0	Mon	71.4
5.0	Tue	71.5
5.0	Wed	71.5
5.0	Thurs	71.5
5.0	Fri	71.5
5.0	Sat	71.6
5.0	AVG	71.5

## 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
7/30	1.3	9.8	1.7	6.5	11.1	11.3	10.6	1.6	9.7	9.8	-2.6	1.5	10.0	10.3
	1.3	10.6	1.6	5.5	10.4	10.6	10.6	1.6	8.6	8.6	-3.7	1.5	7.9	8.2
7/31	1.3	9.9	1.6	6.5	11.3	11.5	10.5	1.6	9.9	9.9	-2.6	1.4	10.3	9.6
	1.3	9.8	1.7	6.4	11.2	11.4	10.4	1.5	10.0	10.0	-2.6	1.4	10.3	9.6
8/1	1.3	9.9	1.7	6.5	11.1	11.3	10.6	1.6	9.7	9.8	-2.6	1.5	10.0	10.3
	1.2	10.0	1.6	5.9	11.2	11.6	9.9	1.4	10.1	10.2	-2.5	1.4	10.7	9.5
8/2	1.3	8.8	1.6	6.3	11.2	11.5	10.4	1.6	9.5	9.5	-2.6	1.5	9.9	8.9
	1.3	9.5	1.6	5.9	11.2	11.6	9.9	1.4	10.1	10.2	-2.5	1.4	10.7	9.5
8/3	1.3	9.8	1.7	6.7	11.3	11.2	10.7	1.7	9.2	9.3	-2.4	1.5	10.2	9.4
	1.0	10.0	1.4	6.4	12.0	12.0	10.4	1.5	9.5	9.5	-3.2	1.4	10.6	9.3
8/4	1.2	9.7	1.7	4.6	10.9	11.1	8.6	1.6	9.0	9.1	-4.5	1.4	9.4	9.4
	1.2	9.7	1.9	4.4	11.4	11.4	8.4	1.6	9.0	9.0	-4.6	1.4	9.3	9.2
8/5	1.3	9.7	1.5	5.2	11.5	11.4	9.2	1.4	9.8	9.9	-4.0	1.2	10.2	10.1
	1.4	9.5	1.4	5.6	11.9	11.9	9.6	1.4	10.0	10.0	-3.6	1.4	9.9	9.8
<b>AVG:</b>	<b>1.3</b>	<b>9.8</b>	<b>1.6</b>	<b>5.9</b>	<b>11.3</b>	<b>11.4</b>	<b>10.0</b>	<b>1.5</b>	<b>9.6</b>	<b>9.6</b>	<b>-3.1</b>	<b>1.4</b>	<b>9.9</b>	<b>9.5</b>

*Fishways inspected twice daily*



After several hours of coordinated boat pyro and shore deterrence, no gulls or pelicans feeding after 1pm for remainder of day. They did return the following day with routine boat pyro.