

# The Dalles Dam Fishway Status Report

12/10/23

Inspection Period 12/03-12/09, 2023

## THE DALLES DAM



US Army Corps  
of Engineers  
Portland District

The Dalles Project-Fisheries  
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<b>The Dalles Dam</b>	Inspections OOC	Criteria Limit	<b>Total Number of Inspections:</b> 7		<b>Temperature:</b> 48.3
			<b>Comments:</b> 12/5/23 east ladder dewater		<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 9.7
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'	1.2' per FPP.
Junction pool weir JP6	0	> 7.0'	Weekly average #DIV/0!
East entrance differential	0	1.0' - 2.0'	Weekly average #DIV/0!
Entrance weir E1	0	No criteria	Weekly average #DIV/0!
Entrance weir E2	0	depth (≥ 8')	Weekly average #DIV/0!
Entrance weir E3	0	depth (≥ 8')	Weekly average #DIV/0!
East channel velocity	0	1.5 - 4 fps	2.85fps 11/15/23
Transportation channel velocity	0	1.5 - 4 fps	west 4.10fps 11/15/23
North channel velocity	0	1.5 - 4 fps	3.05 fps 12/3/23
South entrance	0	1.5 - 4 fps	3.6 fps 11/14/23
West entrance differential	0	1.0' - 2.0'	Weekly average #DIV/0!
Entrance weir W1	0	depth (≥ 8')	Weekly average #DIV/0!
Entrance weir W2	0	depth (≥ 8')	Weekly average #DIV/0!
Entrance weir W3	0	No criteria	Weekly average #DIV/0!
South entrance differential	0	1.0' - 2.0'	Weekly average #DIV/0!
Entrance weir S1	0	depth (≥ 8')	Weekly average #DIV/0!
Entrance weir S2	0	depth (≥ 8')	Weekly average #DIV/0!

East ladder dewatered.

### JUVENILE BYPASS

Sluiceway operation	0	Units 1, 18	1-18 gates open.
Turbine trashrack drawdown	0	<1.5', biwklly	11/3/23 all in criteria
Spill volume/pattern	0	1 to 22	Spill closed
Turbine Unit Priority	0	per FPP	
Gatewells	0	Weekly	11/3/23, No fish or mortality.

## Current Outages

SS01 OOS 12/11/23 0700 – 12/21/23 Annual and NPDES thermowell install  
MU11 FOOS 12/3/2023 0719 – 1/18/2024 1700 Exciter trouble (power supply)  
F1 OOS 12/01/2023 0630 – 01/15/2024 1700, ANNUAL  
F2 OOS 12/01/2023 0630 – 01/15/2024 1700, 2 YEAR OVERHAUL  
MU19 & MU20 FOOS 10/07/2018 1205 – 10/31/2025 1700 T10 ACETYLENE  
MU4 OOS 04/17/2023 0630 – 1/18/2024 1700, BREAKER REPAIR/REPLACEMENT

## Maintenance

Planning spill gates 9 and 10 cable and gearbox swap. Possible this fall/winter.  
Spillway assessment; Spillgates 1- 9 rehab 2034. Spillway crane replace first priority. Reviewing gate operation frequency.  
Starting contractor lamprey entrance weir mods and trap above water line work. In house 156 157 exit orifice cut this winter.  
Winter work plans; select wier motor/brake replace, 158/9 weir reseal, swap south weir gearboxes  
East fishway dewatered Dec 5. Approx 30 juvenile salmonids, 12 lamprey and 3 sturgeon released to river. Sturgeon were scanned by state reps.

## Predators

Northern Pikeminnow Management Program concluded with 2421 fish removed from project  
Bird Gard sound system being tested at peninsula and east entrance. Appears effective on cormorants and feeding gulls.  
Tori lines installed at east, south and west entrances removed during dewatering prep.  
100~ WEGU/CAGU gulls on project, mergansers present and 70 some cormorants fishing off project.

## Instruction/Contractors

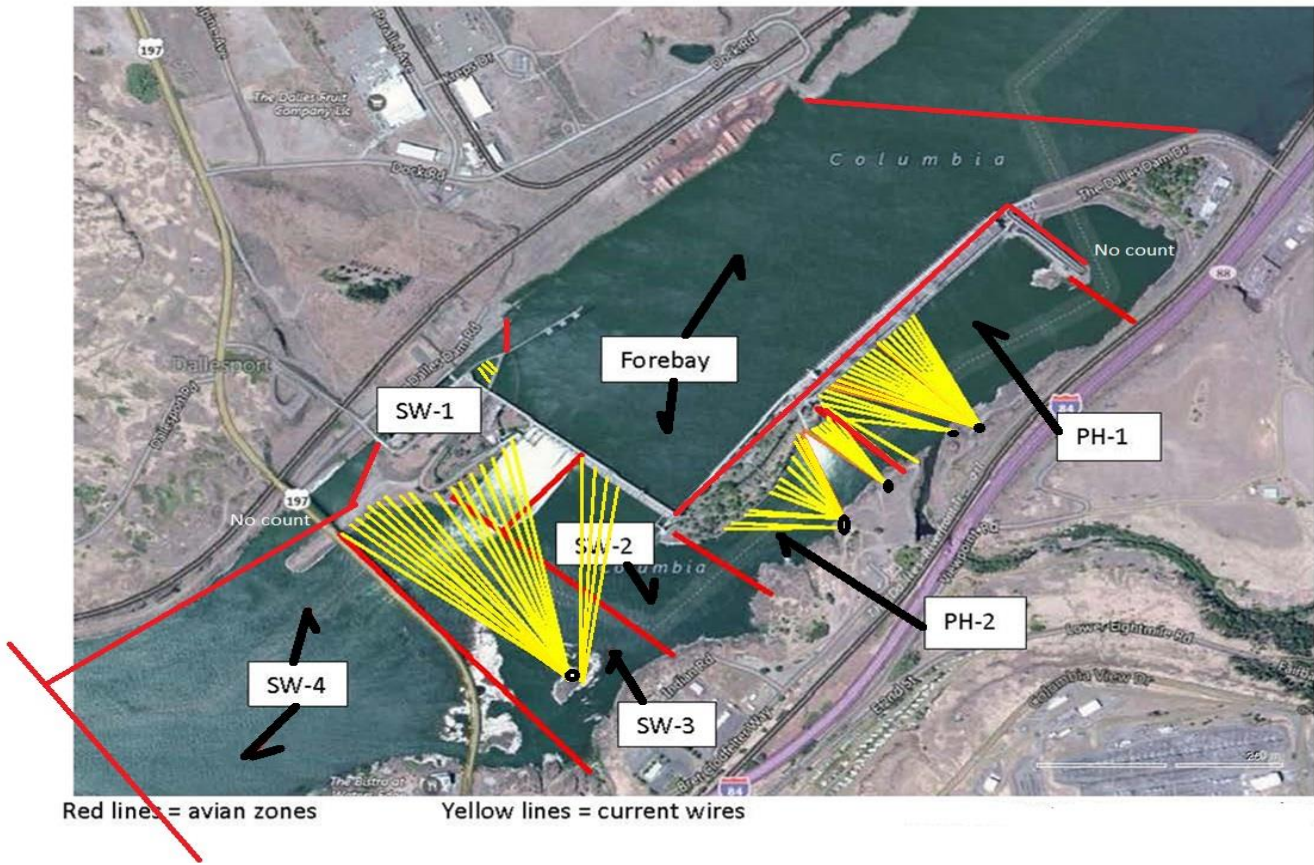
USGS temperature link- [December](#)  
4 Peaks fish count ended 10/31  
Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, other 2 this winter.  
Planning for install of junction pool lamprey trap and entrance weir modifications via contractor this winter.  
zebra/quagga mussel samples collected on 10/22/2023, no mussels on substrate. No veligers detected in samples.  
PTAGIS fishladder data collection at count stations continues

## Operations

Sluice gates 1-1, 1-2, 1-3, 8-1, 8-3, 18-2 in operation  
Fish unit flow reduced from 5k cfs to 4 k cfs rest of season due to grating damage repair.

Operation Project Manager, The Dalles Dam

# Bird Count Zones, Avian Lines and Deterrent Sites



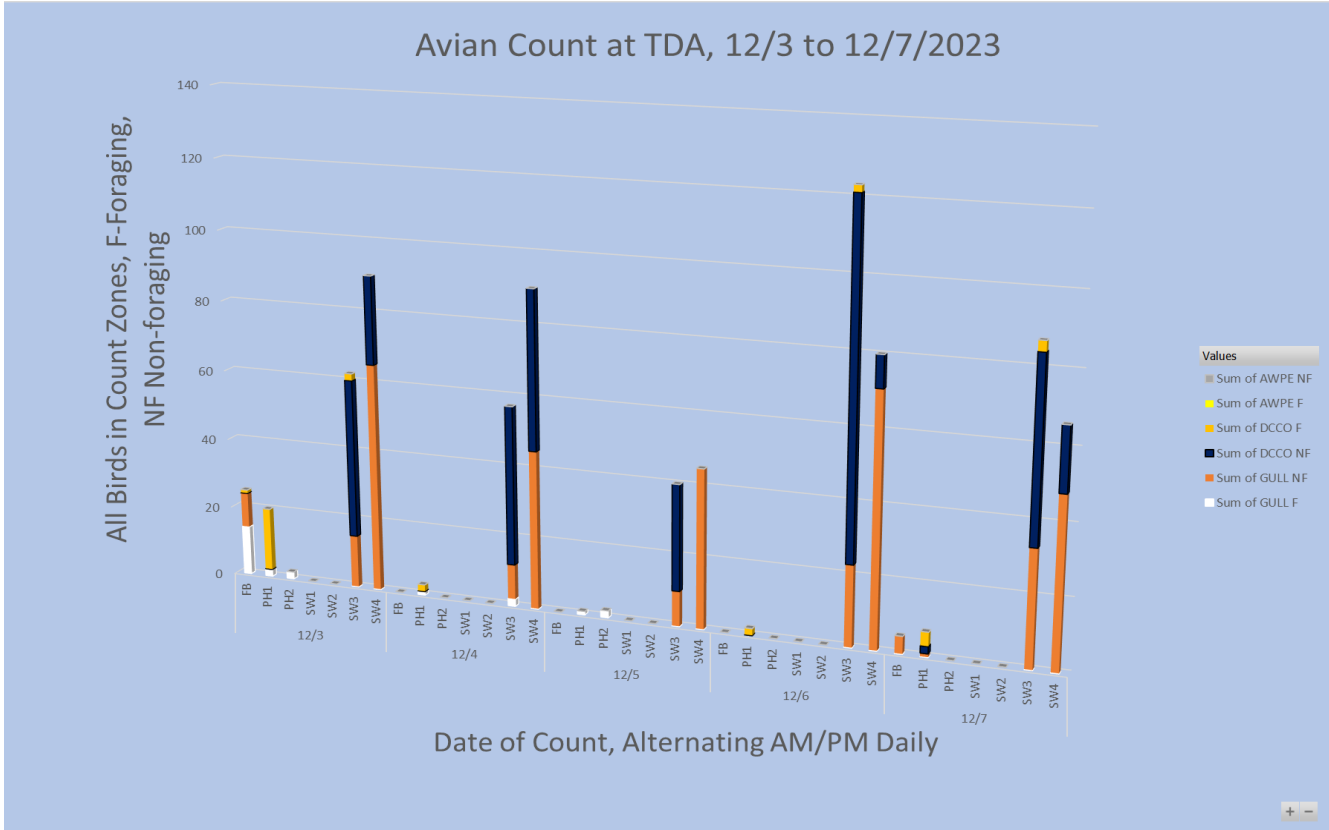
Avian predator tori lines and audio distress Bird Gard. 10/2023

Tori lines at East Ladder entrances.

Bird Gard audio deterrent.



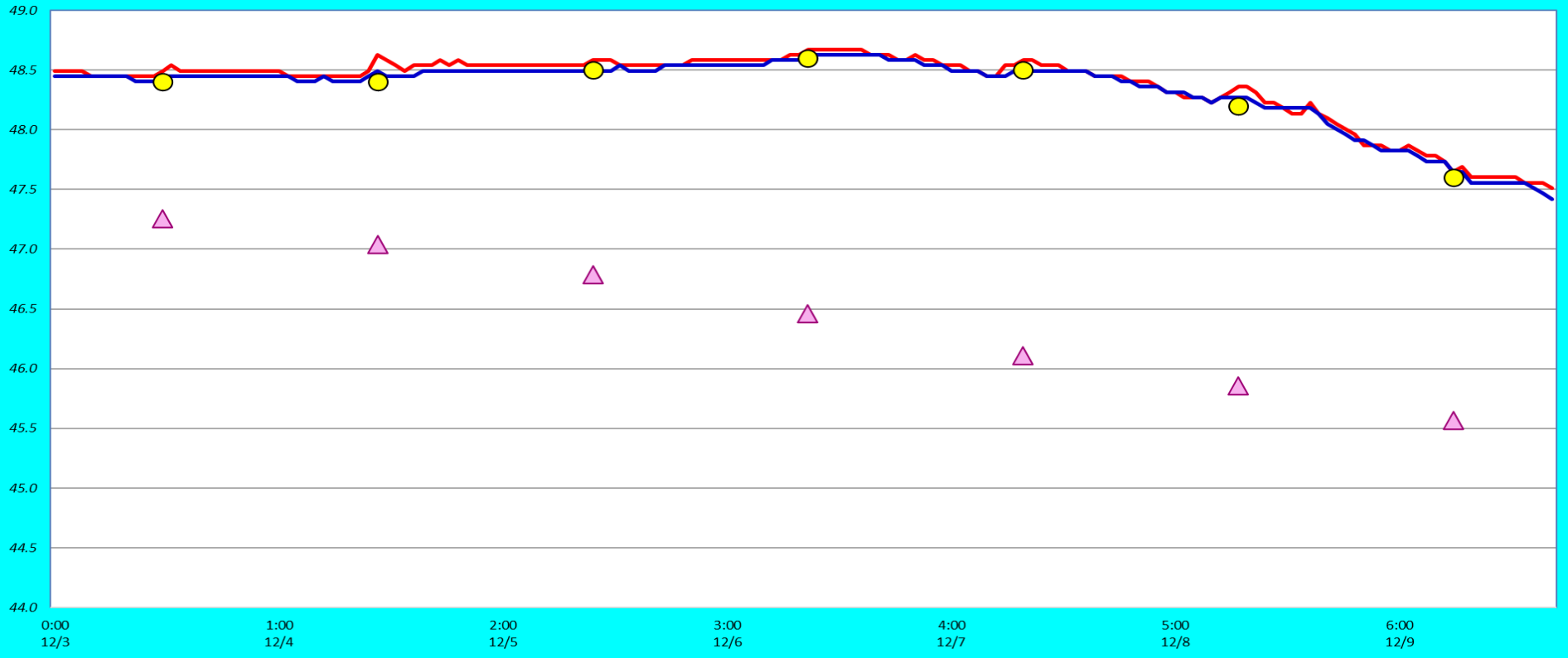




Continued decline in the numbers of foraging CAGU/WEGU. Fairly large numbers of non-foraging gulls in SW4 at times migrating through.

### North Fish Ladder-River Temperatures

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



Secchi:		USGS
5.0+	Sun	48.4
5.0+	Mon	48.4
5.0+	Tue	48.5
5.0+	Wed	48.6
5.0+	Thurs	48.5
5.0+	Fri	48.2
5.0+	Sat	47.6
5.0+	AVG	48.3

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												
12/3	1.3	9.8	EFL OOS																							
12/4	1.3	9.8																								
12/5	1.3	10.0																								
12/6	1.2	10.0																								
12/7	1.4	9.6																								
12/8	1.3	9.3																								
12/9	1.3	9.3																								
<b>AVG:</b>	1.3	9.7													#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

*Fishways inspected twice daily*



One of several dozen steelhead rescued during east ladder  
dewater on 12/5/2023.