

The Dalles Dam Fishway Status Report

12/24/23

Inspection Period 12/17-12/23, 2023

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: 7		Temperature: 46.5
			Comments: LPS installation in east.ladder.		Weekly Ave. Secchi: 5.0+

NORTH FISHWAY

Exit differential	0	≤ 0.5'	Aquatic weed mass 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	1.2	
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.4	
N2		Closed			
PUD Intake differential	0	≤ 0.5'	Lots of weed mass accumulating on intake		

EAST FISHWAY Out of Service

Exit differential		≤ 0.5'			
Removable weirs 154-157		Per forebay			
Weir 158-159 differential		1.1' ± 0.1'			
Count station differential		≤ 0.3'			
153 Weir crest depth		1' ± 0.1'	1.2' per FPP.		
Junction pool weir JP6		> 7.0'	Weekly average	#DIV/0!	East ladder dewatered.
East entrance differential		1.0' - 2.0'	Weekly average	#DIV/0!	
Entrance weir E1		No criteria	Weekly average	#DIV/0!	
Entrance weir E2		depth (≥ 8')	Weekly average	#DIV/0!	
Entrance weir E3		depth (≥ 8')	Weekly average	#DIV/0!	
East channel velocity		1.5 - 4 fps	2.85fps 11/15/23		
Transportation channel velocity		1.5 - 4 fps	west 4.10fps 11/15/23		
North channel velocity		1.5 - 4 fps	3.05 fps 12/3/23		
South entrance		1.5 - 4 fps	3.6 fps 11/14/23		
West entrance differential		1.0' - 2.0'	Weekly average	#DIV/0!	
Entrance weir W1		depth (≥ 8')	Weekly average	#DIV/0!	
Entrance weir W2		depth (≥ 8')	Weekly average	#DIV/0!	
Entrance weir W3		No criteria	Weekly average	#DIV/0!	
South entrance differential		1.0' - 2.0'	Weekly average	#DIV/0!	
Entrance weir S1		depth (≥ 8')	Weekly average	#DIV/0!	
Entrance weir S2		depth (≥ 8')	Weekly average	#DIV/0!	

JUVENILE BYPASS

Sluicelgate operation	0	Units 1, 18	1-18 gates open. Endgate closed.		
Turbine trashrack drawdown	0	<1.5', biwklly	12/7/23 all in criteria		
Spill volume/pattern	0	1 to 22	Spill closed		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	12/16/23, 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
MU 8 FOOS 12-23 – 1/18/2024 Exciter trouble (power supply)

Maintenance

Planning spill gates 9 and 10 cable and gearbox swap. Bulkhead seals need repair.
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 weir orifice being cut, same as 154 155 last year.
Winter work plans; several wier motor/brake replace, 158/9 weir reseal, swap west weir gearboxes
East fishway below tailwater dewatered Dec 13: 5 Coho salmon and 29 adult lamprey released into river.

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.
50~ WEGU/CAGU gulls on project, mergansers present and 40 some cormorants fishing in PH1 project.
Falconry contract in PR for 2024, projected to use RC boat as well in difficult to reach areas.
Eagles arriving in AM in PH2 but mild temperatures do not provide best foraging for adult shad.

Research/Construction/Contractors

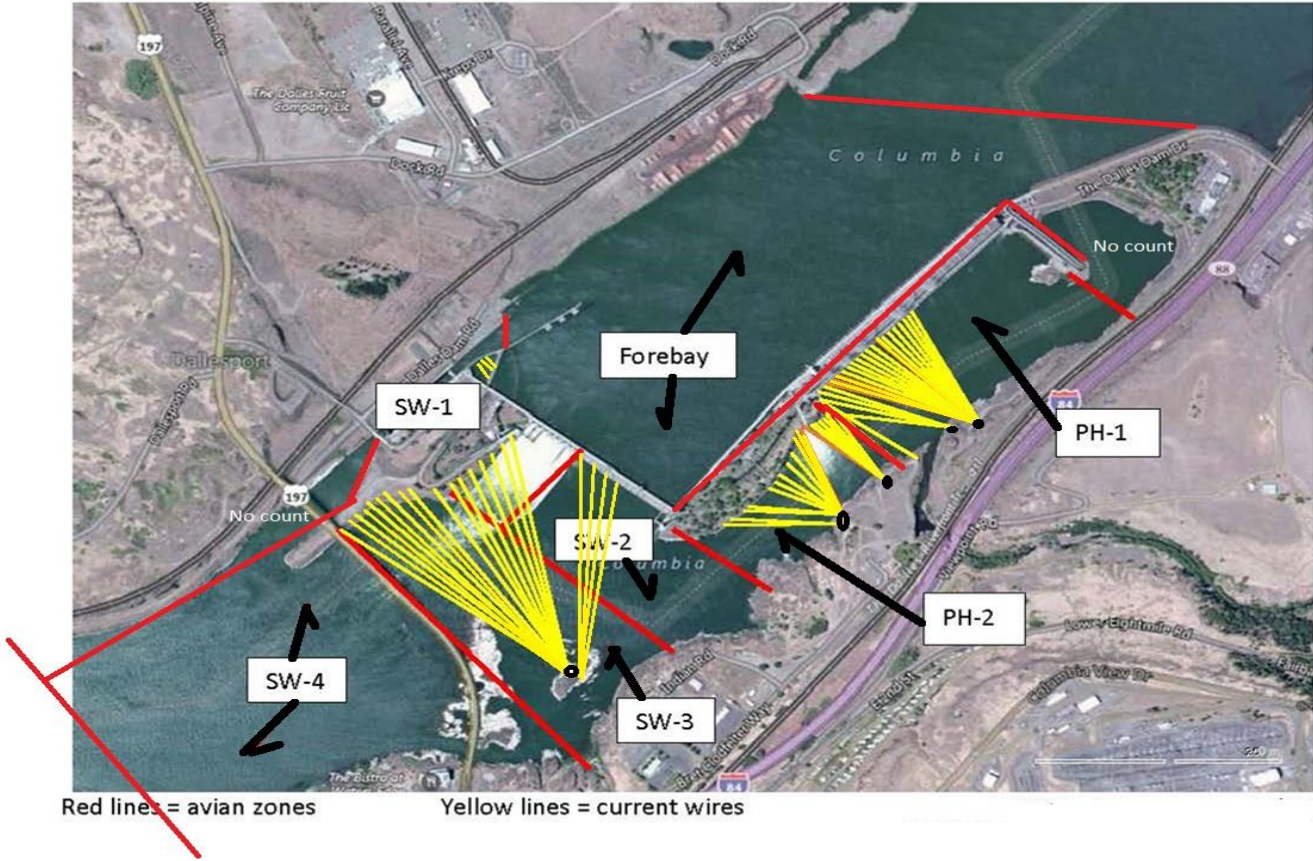
USGS temperature link- [December](#)
4 Peaks fish count ended 10/31
Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, other 2 this winter.
Planning for install of junction pool lamprey trap and entrance weir modifications via contractor this winter.
zebra/quagga mussel 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 endgate closed.
Fish units off

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

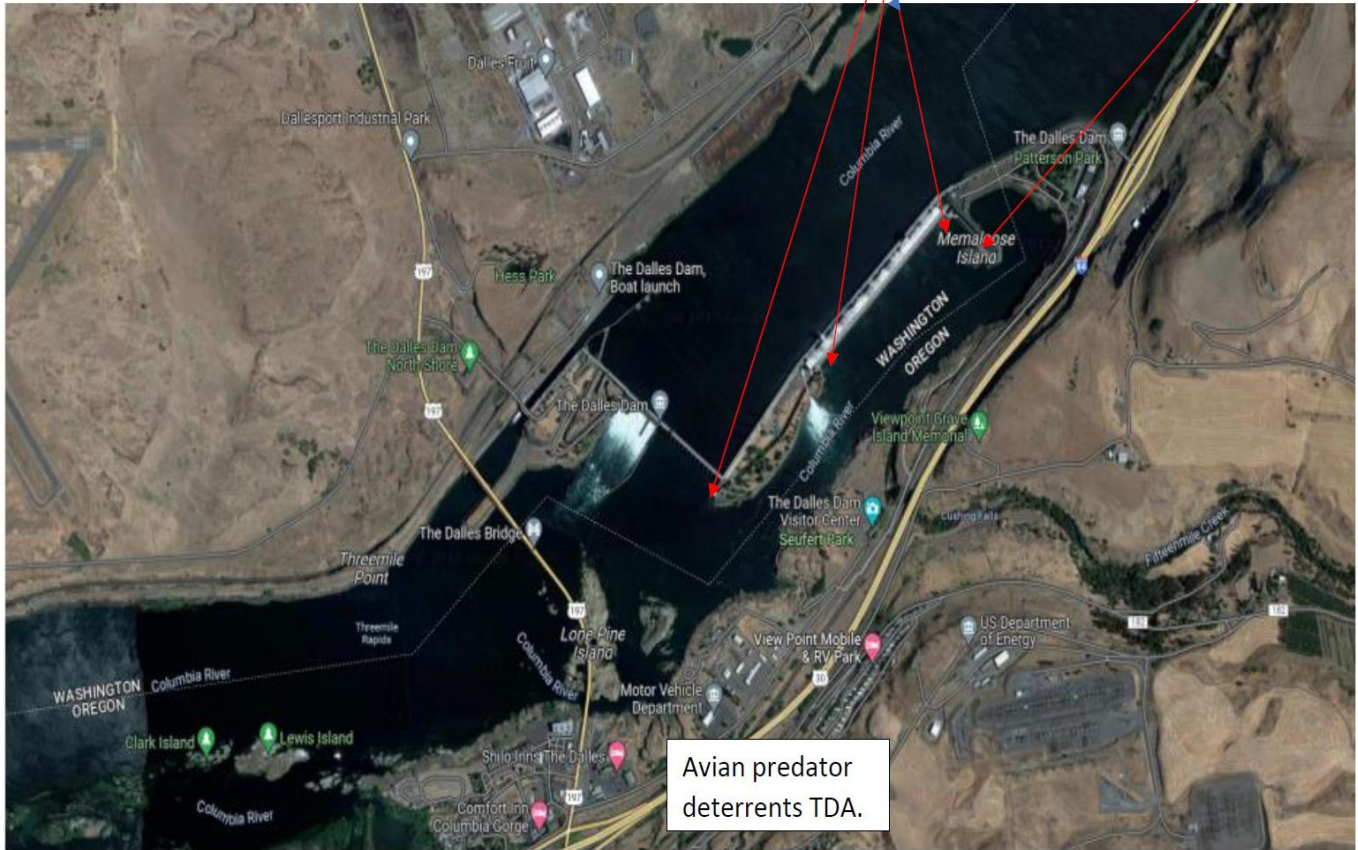
Bird Count Zones, Avian Lines and Deterrent Sites

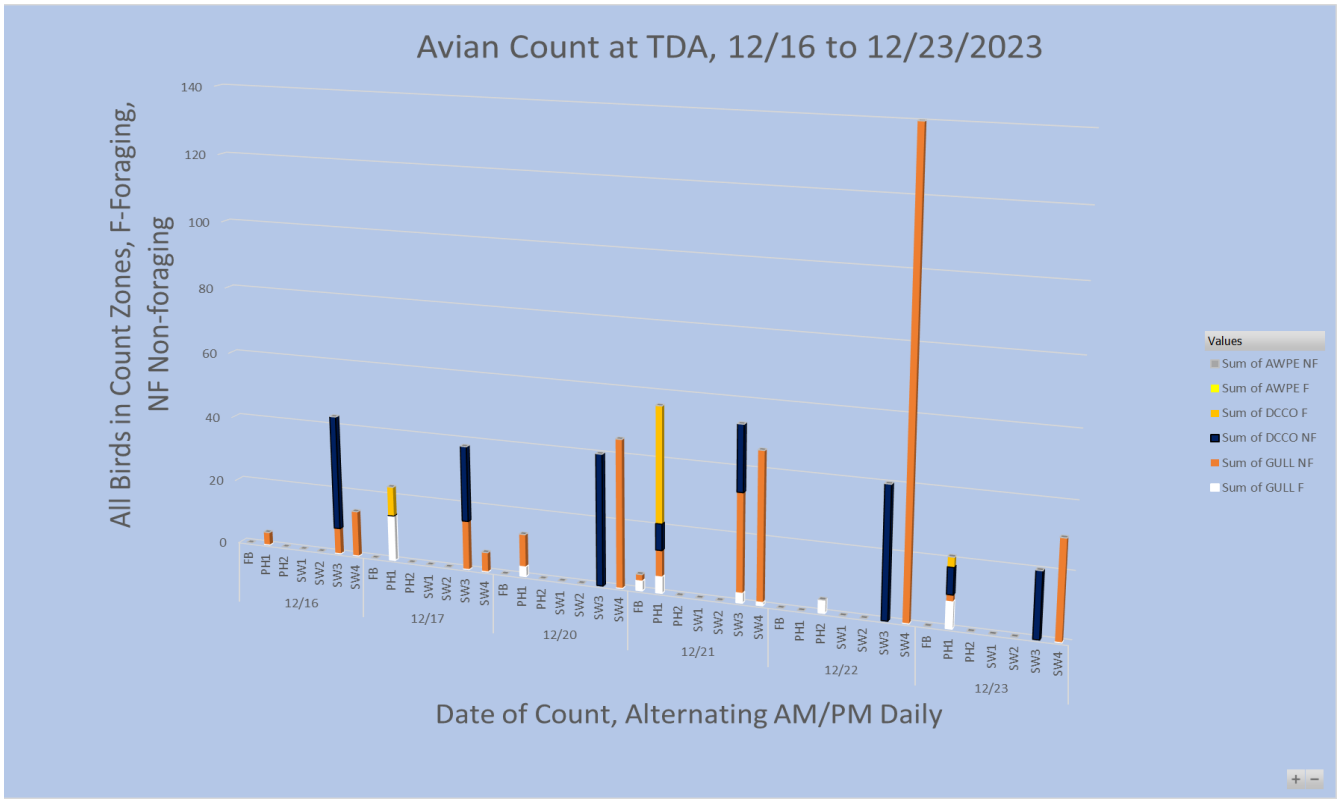


Avian predator tori lines and audio distress Bird Gard. 10/2023

Tori lines at East Ladder entrances.

Bird Gard audio deterrent.





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

12/17	Secchi:		USGS
	5.0+	Sun	47.0
	5.0+	Mon	46.6
	5.0+	Tue	46.3
	5.0+	Wed	46.4
	5.0+	Thurs	46.3
	5.0+	Fri	46.5
	5.0+	Sat	46.1
	5.0+	AVG	46.5

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	
12/17	1.3	1.2	EFL OOS												
12/18	1.3	1.1													
12/19	1.4	1.2													
12/20	1.6	1.1													
12/21	1.3	1.1													
12/22	1.3	1.1													
12/23	1.4	1.3													
AVG:	1.4	1.2													#DIV/0!

Fishways inspected twice daily



Contractor work on the Lamprey Passage System continues 12/21/23

