

The Dalles Dam Fishway Status Report

10/29/23

Inspection Period 10/22-10/28, 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: 14		Temperature: 60.5
			Comments: Bald eagle spent day 10/27		Weekly Ave. Secchi: 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	9.5	
Entrance Differential	0	1.0' - 2.0'	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	9.9	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	2.0	
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.0	
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.0	
Collection channel velocity	0	1.5 - 4 fps	1.13fps west 10/18/23		
Transportation channel velocity	0	1.5 - 4 fps	East 3.84fps 10/18/23		
North channel velocity	0	1.5 - 4 fps	3.51 fps 10/26/23		
South entrance	0	1.5 - 4 fps	4.76 fps 10/7/23		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.3	
Entrance weir W1	0	depth (≥ 8')	Weekly average	9.0	
Entrance weir W2	0	depth (≥ 8')	Weekly average	9.0	
Entrance weir W3	0	No criteria	Weekly average	-2.9	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	3	depth (≥ 8')	Weekly average	8.2	low tailwater FU flow 4000cfs
Entrance weir S2	2	depth (≥ 8')	Weekly average	8.2	low tailwater FU flow 4000cfs

JUVENILE BYPASS

Sluicgate operation	0	Units 1, 8, 18	1-8-18 gates open.		
Turbine trashrack drawdown	0	<1.5', biwklly	10/23/23 all in criteria		
Spill volume/pattern	0	1 to 22	Spill closed		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	10/23/23, No fish or mortality.		

Current Outages

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

MU15-20 OOS 10/10/2023 0600 - 11/2/2023 1700, SYNCHRONOUS COND CONTROLS UPGRADE

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; some wier motor/brake replace, 158/9 weir reseal, swap south weir gearboxes

Predators

Northern Pikeminnow Management Program 2421 YTD -3 fish caught last week Fishing concluded 10/6

Bird Gard mobile mount on MULE at peninsula and east entrance, highly effective on DCCO.

Trial of Tori lines installed at east, south and west entrance ongoing. 1 Pelican loafing in SW4, not observed feeding.

Pacific Lamprey translocation season ended 9/6 w/ a grand total of 1501 fish captured/translocated

140-250~ WEGU/CAGU gulls on project, COME present and 70 some DCCO no longer foraging at east ladder entrances.

Foxpro distress caller effective at dispersing DCCO when employed daily in PH1.

Research/Construction/Contractors

USGS temperature link- [October](#)

4 Peaks fish count ending 10/31

Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, other 2 next winter.

Planning for install of junction pool lamprey trap and entrance weir modiifications via contractor this winter.

ODFW conducting monthly fishway inspections.

PTAGIS fishladder data collection at count stations continues

zebra/quagga mussel samples collected on 10/22/2023, no mussels on substrate. No veligers detected in August sample results.

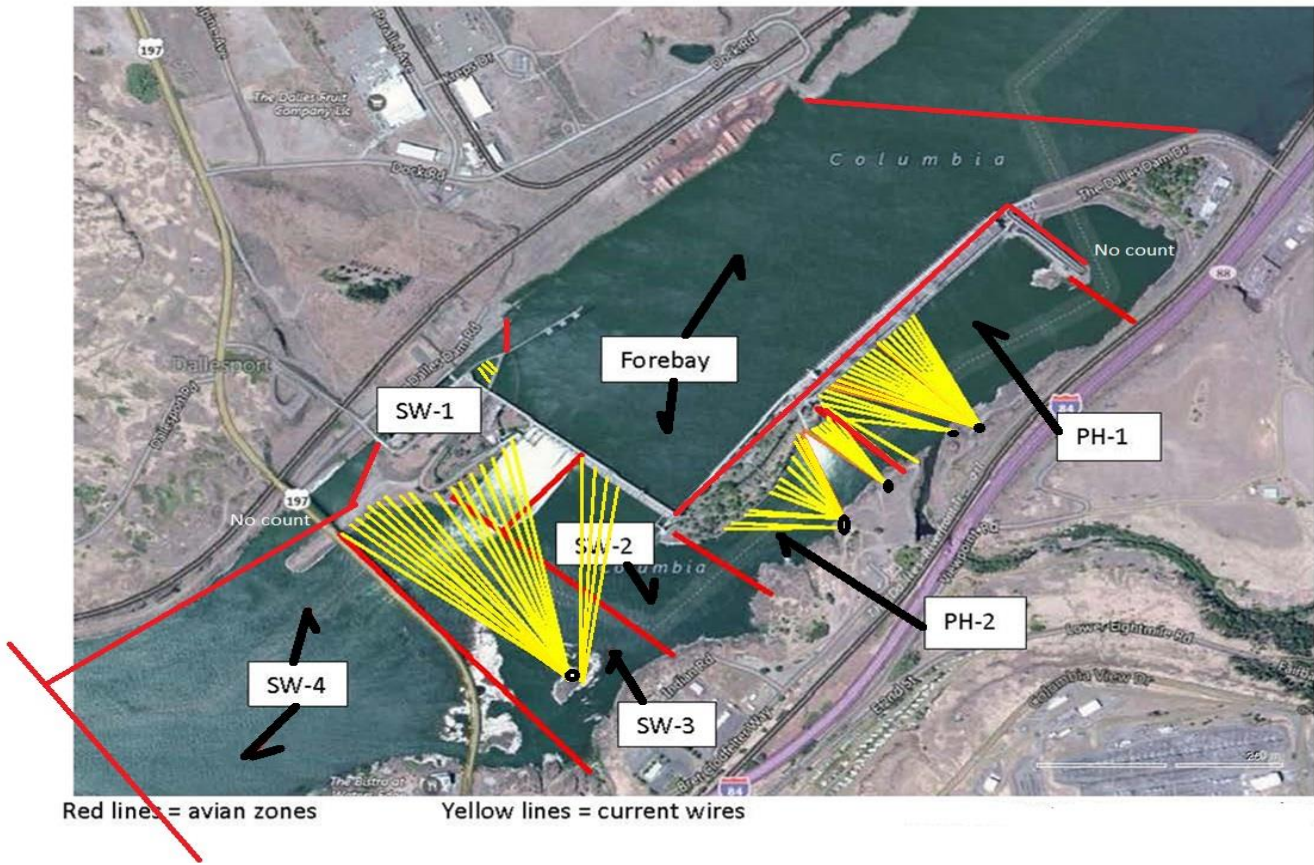
Operations

Sluice gates 1-1, 1-2, 1-3, 8-1, 8-3, 18-2 in operation

Fish unit flow reduced from 5kcfs to 4 kcfs rest of season due to grating damage repair.

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

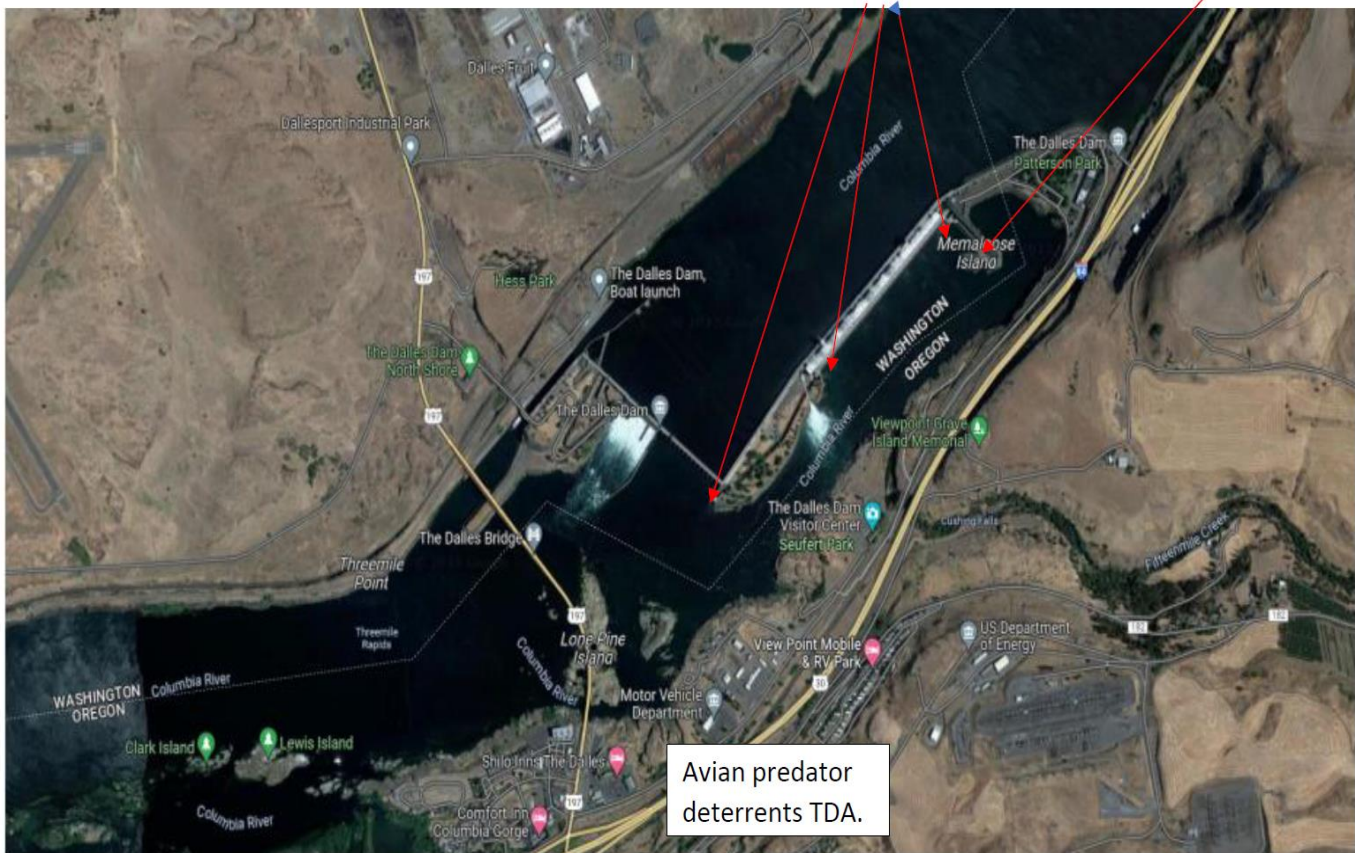
Bird Count Zones, Avian Lines and Deterrent Sites

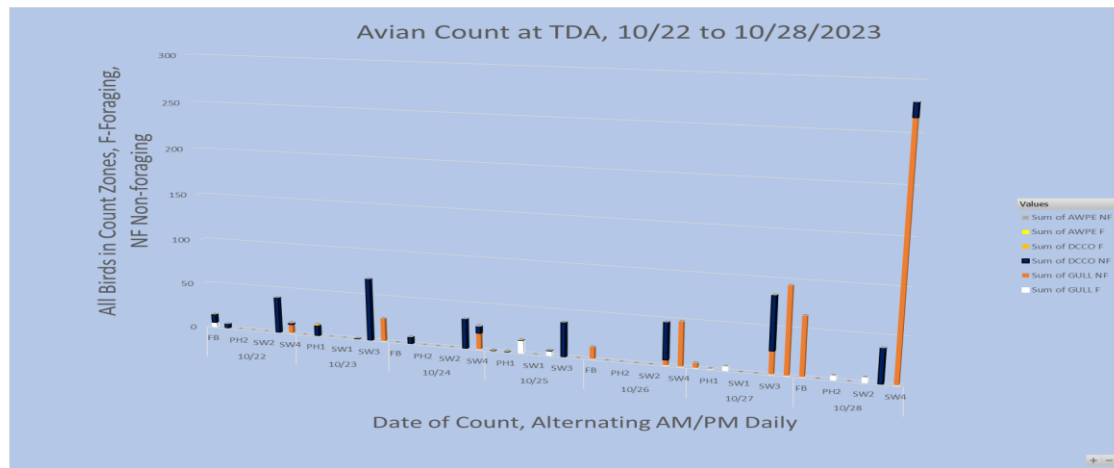


Avian predator tori lines and audio distress Bird Gard. 10/2023

Tori lines at East Ladder entrances.

Bird Gard audio deterrent.

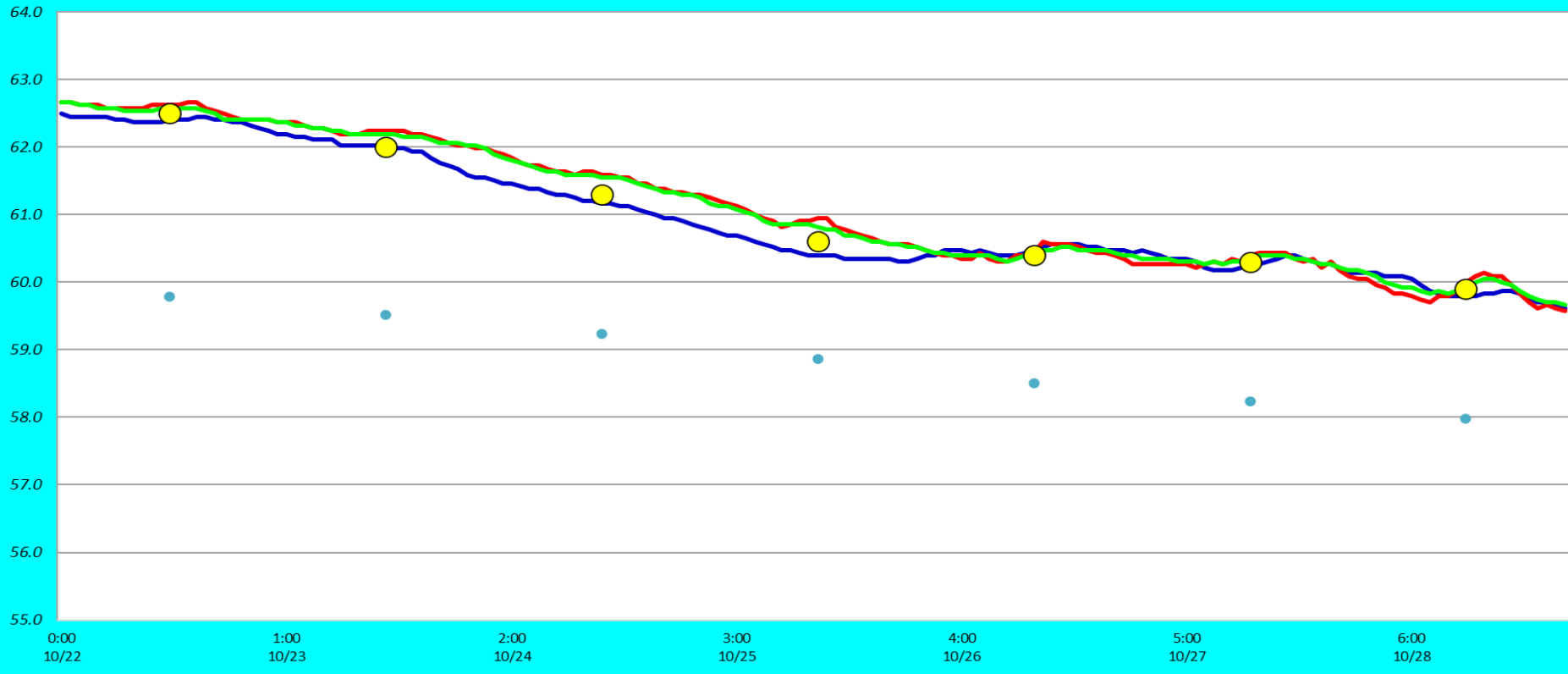




Decline DCCO in PH1 may be due to Bird Gard audio deterrent. Increase in CAGU/RBGU PH2.

Fish Ladders-River Temperatures

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



Secchi:		USGS
5.0	Sun	62.0
5.0	Mon	61.3
5.0	Tue	60.6
5.0	Wed	60.3
5.0	Thurs	60.2
5.0	Fri	59.9
5.0	Sat	59.4
5.0+	AVG	60.5

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
10/22	1.2	9.4	1.7	1.6	10.8	10.8	9.6	1.4	8.6	8.6	-3.0	1.5	7.8	7.8
	1.3	9.3	1.6	1.3	10.7	10.8	9.3	1.4	8.5	8.5	-3.4	1.4	8.1	8.0
10/23	1.5	9.2	1.7	0.7	10.4	10.4	8.7	1.4	8.6	8.7	-4.0	1.5	7.8	7.7
	1.2	9.4	1.6	1.0	10.6	10.7	9.0	1.3	8.9	9.0	-3.8	1.5	8.0	8.0
10/24	1.5	9.3	1.3	1.5	11.3	11.4	9.5	1.2	9.3	9.4	-3.3	1.3	8.3	8.4
	1.3	9.4	1.5	1.4	11.0	11.1	9.4	1.2	9.3	9.3	-3.3	1.4	8.0	8.0
10/25	1.4	9.4	1.4	2.3	11.3	11.4	10.3	1.3	9.4	9.5	-2.5	1.4	8.1	8.4
	1.4	9.3	1.7	2.2	10.7	10.7	10.2	1.5	8.6	8.6	-2.6	1.5	7.9	8.0
10/26	1.4	9.5	1.3	2.9	11.0	11.0	10.9	1.3	9.3	9.3	-2.1	1.5	8.3	8.0
	1.5	9.3	1.4	2.8	10.9	10.9	10.8	1.3	9.2	9.3	-2.2	1.4	8.5	8.5
10/27	1.4	10.5	1.4	2.4	11.4	11.4	10.4	1.3	9.0	9.1	-2.3	1.4	8.2	8.3
	1.4	9.3	1.5	2.1	11.1	11.1	10.1	1.4	8.7	8.7	-2.8	1.5	8.1	8.1
10/28	1.4	10.4	1.3	2.5	11.5	11.5	10.5	1.3	9.1	9.1	-2.3	1.3	8.6	8.8
	1.4	9.3	1.4	2.6	11.5	11.6	10.6	1.3	9.0	9.0	-2.4	1.3	8.6	8.6
AVG:	1.4	9.5	1.5	2.0	11.0	11.1	9.9	1.3	9.0	9.0	-2.9	1.4	8.2	8.2

Fishways inspected twice daily



Gull line intact at spill gate 8. Line at spill gate 9 is down (SW3). Gulls and cormorants in PH2 and SW2/3 and the Navlock downstream. Navlock gulls not in count zones.