

The Dalles Dam Fishway Status Report

10/15/23

Inspection Period 10/8-10/14, 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: 67.9°F
			Comments: Very Low tailwater		Weekly Ave. Secchi: 6.0

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	9.0	
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.4	
N2		Closed			
PUD Intake differential	0	≤ 0.5'	Likely due to aquatic weeds on intake. Rake under repair by PUD.		

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	9.1	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	0.0	
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	2.18 west 9/5/23		
Transportation channel velocity	0	1.5 - 4 fps	3.32 fps 10/4/23		
North channel velocity	0	1.5 - 4 fps	3.46 fps 10/6/23		
South entrance	0	1.5 - 4 fps	4.76 fps 10/7/23 South entrance gates setpoint reduced to 1.3' to reduce velocity.		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir W1	0	depth (≥ 8')	Weekly average	8.3	Very low tailwater results in brief OOC > 8'
Entrance weir W2	0	depth (≥ 8')	Weekly average	8.3	Very low tailwater results in brief OOC > 8'
Entrance weir W3	0	No criteria	Weekly average	-3.7	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.3	
Entrance weir S1	0	depth (≥ 8')	Weekly average	8.6	Very low tailwater results in brief OOC > 8'
Entrance weir S2	0	depth (≥ 8')	Weekly average	8.6	Very low tailwater results in brief OOC > 8'

JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18	1-8-18 gates open.		
Turbine trashrack drawdown	0	<1.5', biwkly			
Spill volume/pattern	0	1 to 22	Spill closed		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	10/6/23, No fish or mortality.		

Current Outages

MU4 OOS 04/17/2023 0630 – 9/28/2023 1700, ANNUAL
MU19 & MU20 FOOS 10/07/2018 1205 – 10/31/2025 1700 T10 ACETYLENE

Maintenance

Working on contract for north ladder vegetation removal in Feb. Uncertain due to time constraint.
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.
Calibrations all within criteria 10/3

Predators

Northern Pikeminnow Management Program 2421 YTD -3 fish caught last week Fishing concluded 10/6
Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Working on permit.
Trial of Tori lines installed at east, south and west entrance ongoing
Pacific Lamprey translocation season ended 9/6 w/ a grand total of 1501 fish captured/translocated
Few WEGU/CAGU gulls on project, COME present and 70 some DCCO present some foraging at east entrances/exit evident.
Foxpro distress caller effective at dispersing DCCO when employed daily in PH1. Gadfly relocated to east exit.

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 modifications via contractor this winter.
ODFW conducting monthly fishway inspections.
PTAGIS fishladder data collection at count stations continues
zebra/quagga mussel samples collected on 10/6/2023, no mussels on substrate. No veligers detected in Sept 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.

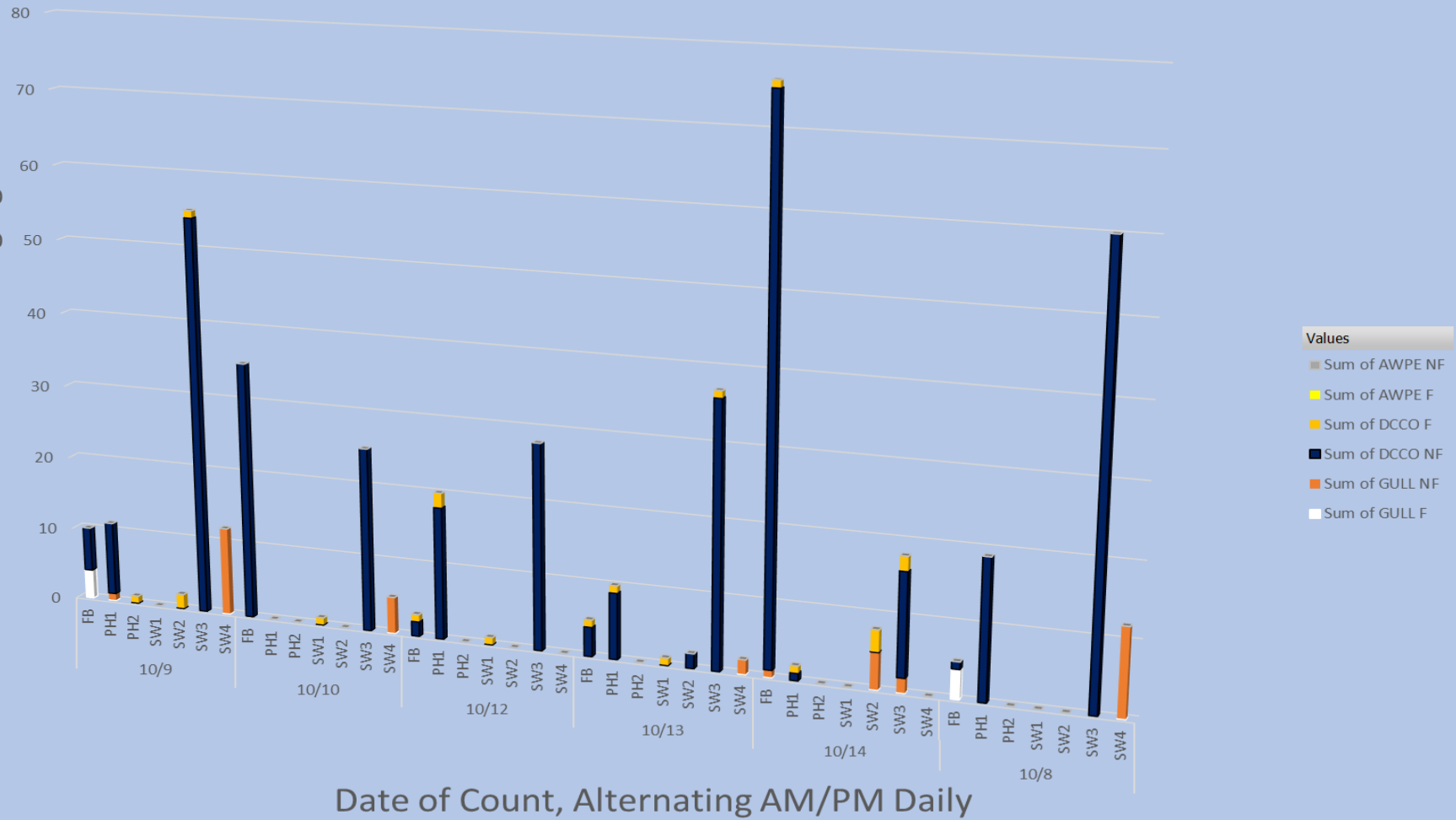
Approved by: Ron Twiner, Operation Project Manager, The Dalles Dam

Bird Count Zones, Avian Lines and Laser Deterrent Sites

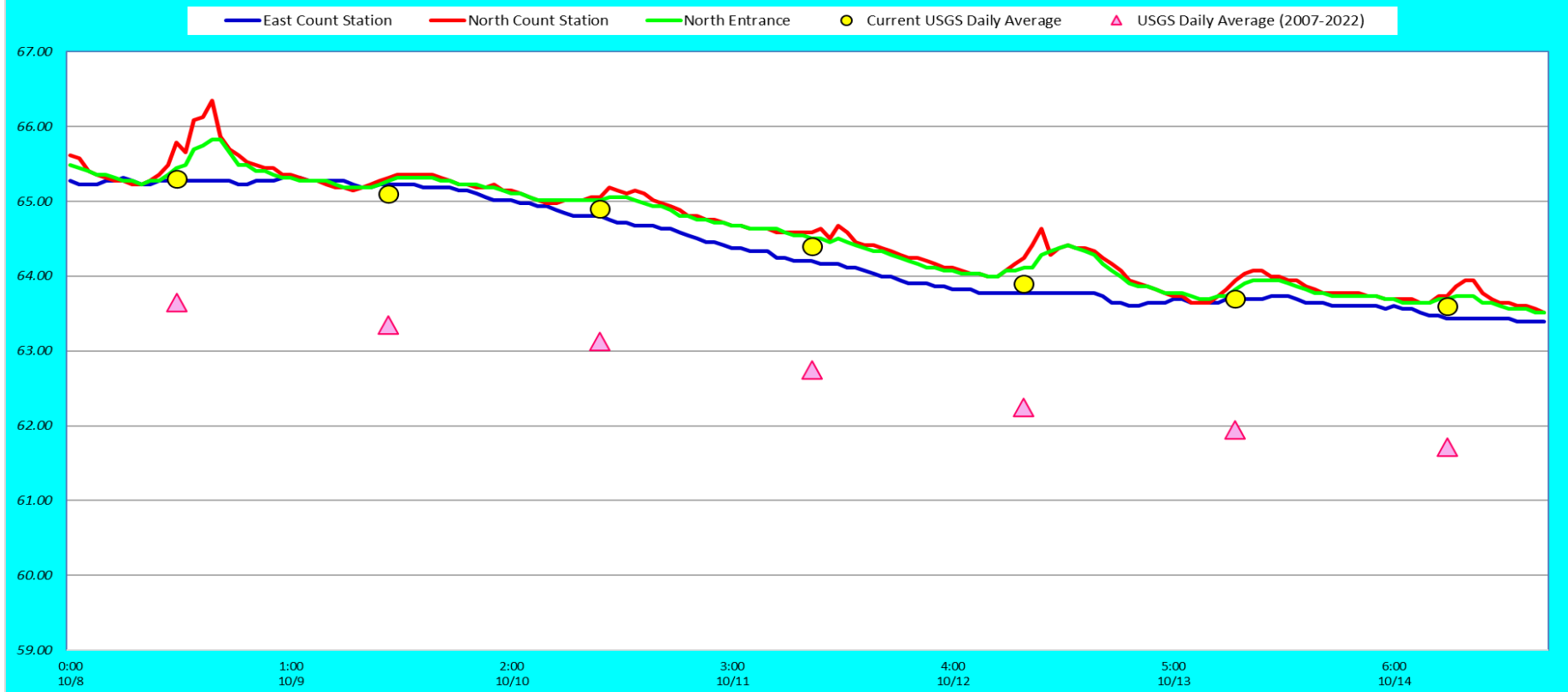


Avian Count at TDA, 10/8 to 10/15/2023

All Birds in Count Zones, F-Foraging, NF Non-foraging



Adult Fish Ladders-River Temperatures



	Secchi:		USGS
10/8	6.0	Sun	65.3
	6.0	Mon	65.1
	6.0	Tue	64.9
	6.0	Wed	64.4
	6.0	Thurs	63.9
10/14	6.0	Fri	63.7
	6.0	Sat	63.6
	6.0	AVG	67.9

Reporting week data

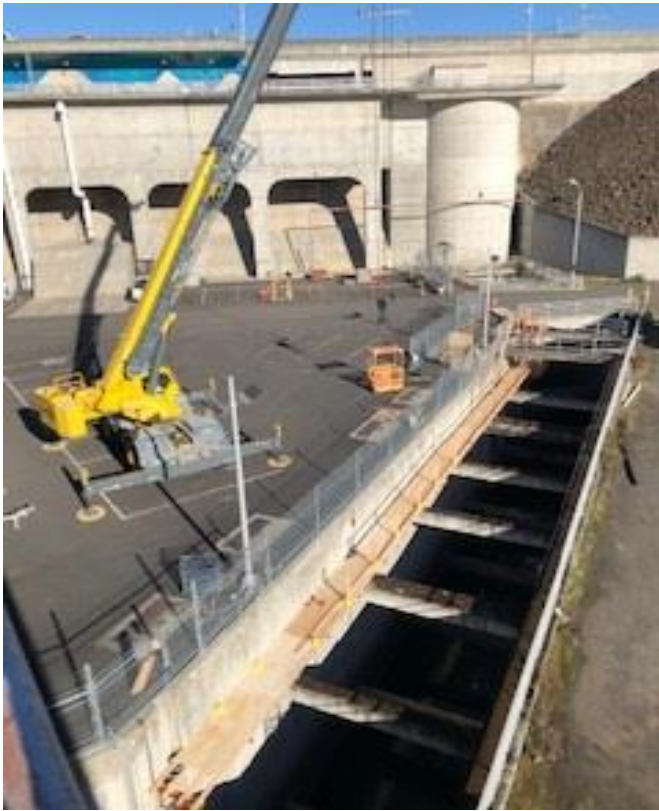
Date:	North Ladder		East Ladder											
			East Entrance					West Entrance			South Entrance			
	Differential	N1 Depth	Differential	E1 Depth	E2 Depth	E3 Depth	JP 6	Differential	W1	W2	W3	Differential	S1	S2
10/8	1.3	9.0	1.4	-1.2	12.0	12.0	8.8	1.4	8.4	8.4	-4.0	1.4	8.1	8.1
	1.4	8.9	1.3	-0.8	11.9	11.9	9.2	1.4	8.4	8.3	-3.7	1.3	8.6	8.7
10/9	1.2	9.1	1.6	-1.2	11.3	11.3	8.8	1.5	8.2	8.2	-4.0	1.3	8.7	8.7
	1.7	8.8	1.4	-0.8	11.7	11.7	9.2	1.4	8.5	8.4	-3.7	1.2	8.9	8.9
10/10	1.3	8.9	1.5	-1.1	11.4	11.4	8.9	2.0	8.3	8.3	-3.8	1.3	8.5	8.6
	1.3	8.9	1.5	-1.1	11.4	11.4	8.9	1.5	8.3	8.2	-3.8	1.4	8.4	8.4
10/11	1.3	9.0	1.6	-1.2	11.4	11.4	8.8	1.5	8.3	8.2	-3.9	1.3	8.4	8.5
	1.3	9.0	1.5	-1.1	11.4	11.4	8.9	1.5	8.2	8.1	-4.0	1.3	8.7	8.6
10/12	1.7	8.8	1.5	1.0	11.1	11.1	9.0	1.5	8.4	8.3	-3.8	1.4	8.3	8.3
	1.2	9.1	1.4	1.0	11.1	11.1	9.0	1.4	8.4	8.3	-3.8	1.3	8.5	8.5
10/13	1.3	9.1	1.5	1.4	11.3	11.2	9.4	1.5	8.3	8.3	-3.4	1.3	8.5	8.5
	1.6	9.2	1.4	1.4	11.3	11.3	9.5	1.4	8.6	8.5	-3.2	1.2	8.9	8.8
10/14	1.3	9.2	1.6	1.6	10.8	10.7	9.6	1.6	8.0	8.0	-3.2	1.3	8.8	8.9
	1.6	9.2	1.6	1.7	10.9	10.8	9.7	1.4	8.3	8.3	-3.1	1.2	9.0	9.0
AVG:	1.4	9.0	1.5	0.0	11.4	11.3	9.1	1.5	8.3	8.3	-3.7	1.3	8.6	8.6

Fishways inspected twice daily



Possible location for Bird Gard sound deterrent on north peninsula.





Lamprey trap tank water supply being installed in old fishlock channel