

The Dalles Dam Fishway Status Report

10/23/23

Inspection Period 10/15-10/21, 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

The Dalles Dam	Inspections OOC	Criteria Limit	Total Number of Inspections: 14		Temperature: 67.9°F
			Comments: Very Low tailwater		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	9.3	
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	10.0	
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	10.8	
Entrance weir E3	0	depth (≥ 8')	Weekly average	10.8	
Collection channel velocity	1	1.5 - 4 fps	1.13 west 10/18/23 Low tailwater and FU flow at 4000cfs		
Transportation channel velocity	0	1.5 - 4 fps	East 3.84 fps 10/18/23		
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		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir W1	0	depth (≥ 8')	Weekly average	1.4	
Entrance weir W2	0	depth (≥ 8')	Weekly average	8.7	
Entrance weir W3	0	No criteria	Weekly average	-2.7	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.3	
Entrance weir S1	0	depth (≥ 8')	Weekly average	8.7	
Entrance weir S2	0	depth (≥ 8')	Weekly average	8.7	

JUVENILE BYPASS

Sluiceway 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	10/13/23, 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
TO1 OOS 10/02/2023 0800 – 10/26/2023 1700, BUSHING REPAIR/REPLACE
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.
Calibrations all within criteria 10/16
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.
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
40-50~ WEGU/CAGU gulls on project, COME present and 70 some DCCO present some foraging at east entrances 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 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

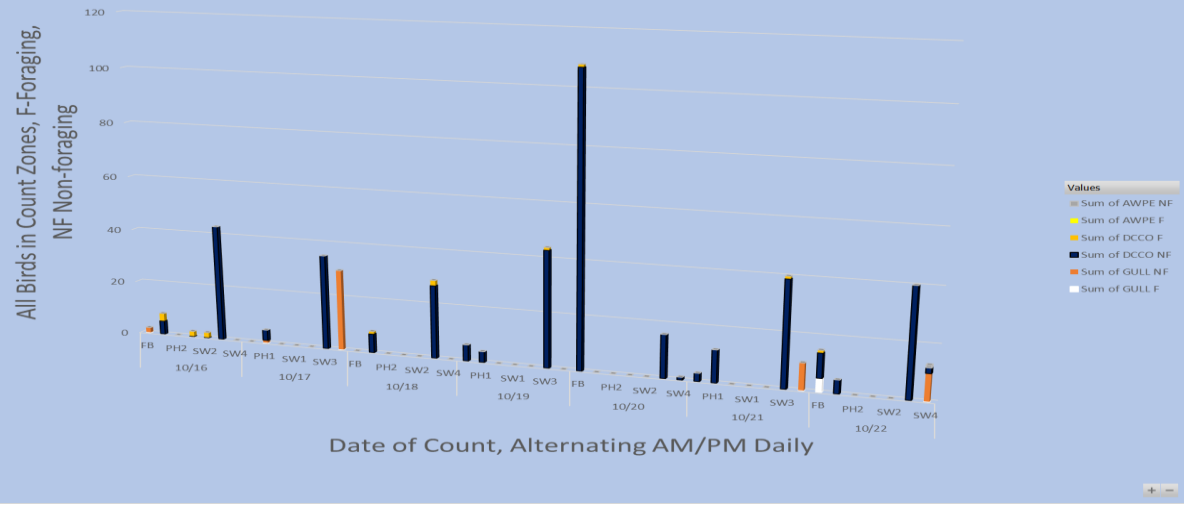
Sluice gates 1-1, 1-2, 1-3, 8-1, 8-3, 18-2 in operation
Fish unit flow reduced from 5kcfs to 4 kcfs rest of season due to grating damage repair.

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

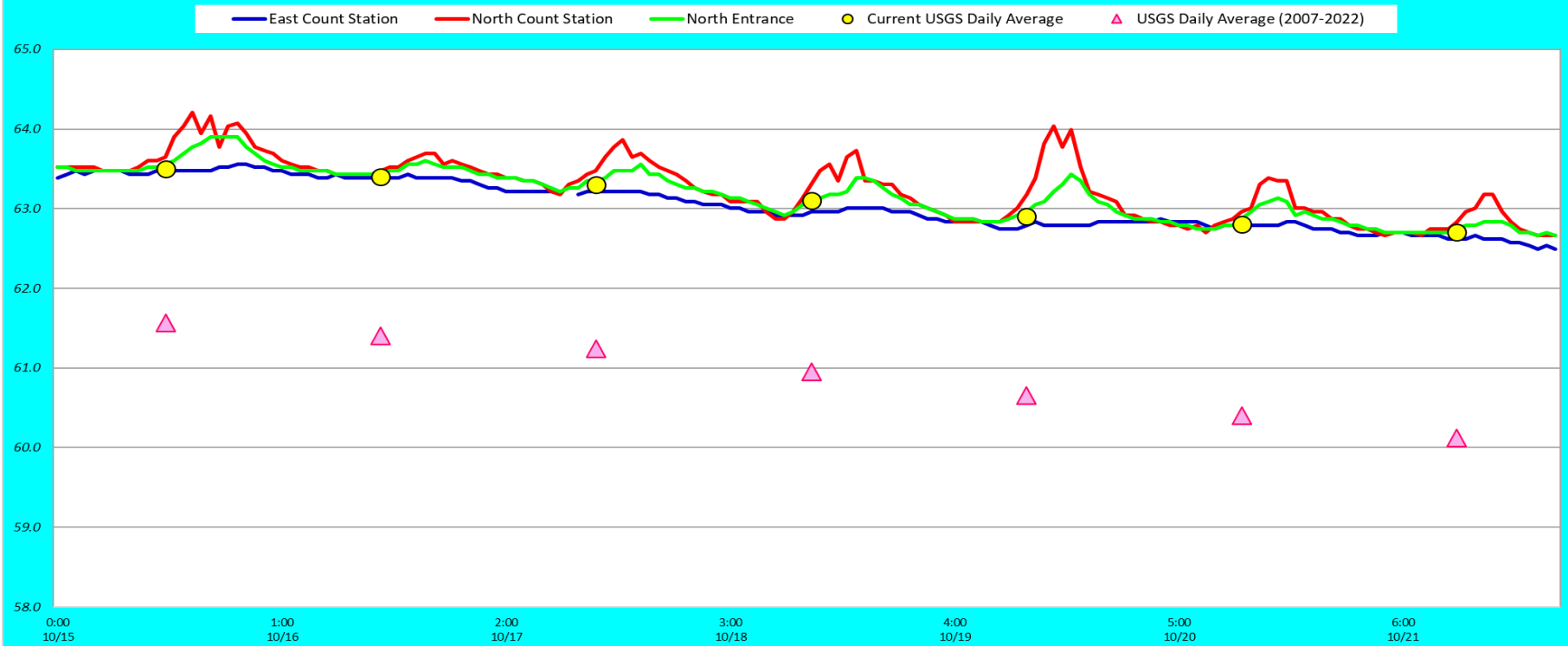
Bird Count Zones, Avian Lines and Laser Deterrent Sites



Avian Count at TDA, 10/16 to 10/23/2023



TD Fish Ladders-River Temperatures



Secchi:		USGS
5.0	Sun	63.5
5.0	Mon	63.4
5.0	Tue	63.3
5.0	Wed	63.1
5.0	Thurs	62.9
5.0	Fri	62.8
5.0	Sat	62.7
5.0+	AVG	63.1

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
10/15	1.3	9.2	1.6	1.7	10.9	10.8	9.7	1.5	1.5	8.3	-3.1	1.2	9.0	9.0
	1.4	9.1	1.6	1.6	10.9	10.8	9.7	1.5	1.5	8.2	-3.2	1.3	9.0	9.0
10/16	1.4	9.3	1.6	1.6	10.8	10.7	9.6	1.4	1.4	8.5	-2.9	1.2	8.9	9.1
	1.6	9.0	1.5	2.0	11.2	11.1	10.0	1.3	1.3	8.6	-2.7	1.2	9.2	9.1
10/17	1.3	9.4	1.6	1.6	9.9	10.8	9.7	1.5	1.5	8.1	-3.0	1.3	8.7	8.6
	1.3	9.4	1.6	1.7	10.9	10.8	9.7	1.5	1.5	8.2	-3.0	1.3	8.9	8.7
10/18	1.2	9.6	1.6	1.8	11.1	11.0	9.8	1.5	1.5	8.3	-2.8	1.2	8.8	8.8
	1.5	9.5	1.6	1.6	8.2	10.7	9.6	1.6	1.6	8.0	-3.1	1.4	8.6	8.4
10/19	1.3	9.6	1.4	3.0	11.2	11.1	11.0	1.1	1.1	10.1	-1.8	1.2	9.1	9.1
	1.3	9.7	1.5	2.6	11.1	10.9	10.6	1.2	1.2	9.7	-2.2	1.2	9.3	9.0
10/20	1.3	9.6	1.3	3.1	11.4	11.2	11.1	1.3	1.3	9.6	-2.0	1.4	8.4	8.5
	1.3	9.5	1.6	1.9	10.9	10.8	10.0	1.3	1.3	9.1	-2.8	1.5	8.0	8.0
10/21	1.3	8.5	1.6	1.8	11.0	11.0	9.8	1.5	1.5	8.7	-3.0	1.5	8.0	8.0
	1.3	9.4	1.4	2.2	11.3	11.3	10.1	1.3	1.3	9.0	-2.7	1.4	8.3	8.3
AVG:	1.4	9.3	1.5	2.0	10.8	10.9	10.0	1.4	1.4	8.7	-2.7	1.3	8.7	8.7

Fishways inspected twice daily



Tori line in place, with white float at downstream end. Keeps foraging birds away from east entrance. Bird Gard audio deterrent installed near rocks.