

The Dalles Dam Fishway Status Report

11/5/23

Inspection Period 10/29-11/04, 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: 58.4
			Comments:		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	9.6	
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	10.4	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	1.7	
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.1	
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.1	
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	3.39 fps 10/27/23		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.3	
Entrance weir W1	0	depth (≥ 8')	Weekly average	9.2	
Entrance weir W2	0	depth (≥ 8')	Weekly average	9.2	
Entrance weir W3	0	No criteria	Weekly average	-2.4	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.3	
Entrance weir S1	0	depth (≥ 8')	Weekly average	8.8	
Entrance weir S2	0	depth (≥ 8')	Weekly average	8.9	

JUVENILE BYPASS

Sluiceway operation	0	Units 2, 8, 18	2-8-18 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

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
MU1 OOS 10/30/2023 0630 –11/9/2023 1700, ANNUAL & OIL ACCOUNTABILITY
MU3/MU4 OOS 10/30/2023 0800 – 11/05/2023 1800, BPA LIMITS LINE 2 TO 0MW

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 sound system being tested at peninsula and east entrance. Appears effective on cormorants.
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, mergansers present and 70 some cormorant no longer foraging at east entrances.
Foxpro distress caller appears effective at dispersing cormorants when employed daily in PH1. On/off testing continues.

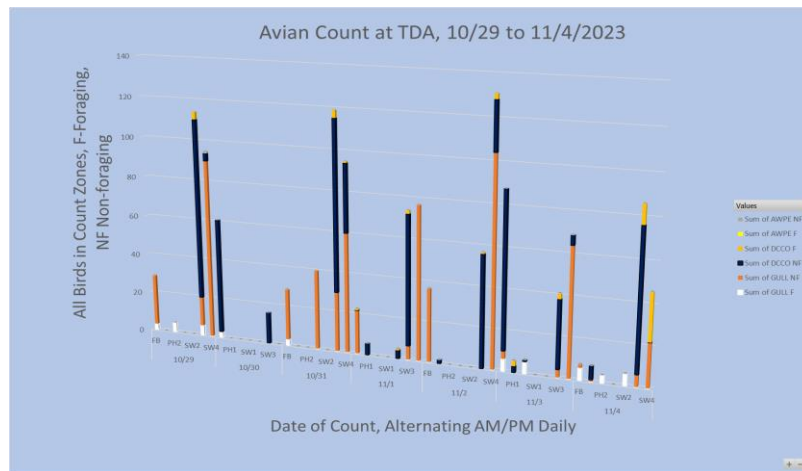
Instruction/Contractors

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 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 August samples.
PTAGIS fishladder data collection at count stations continues

Operations

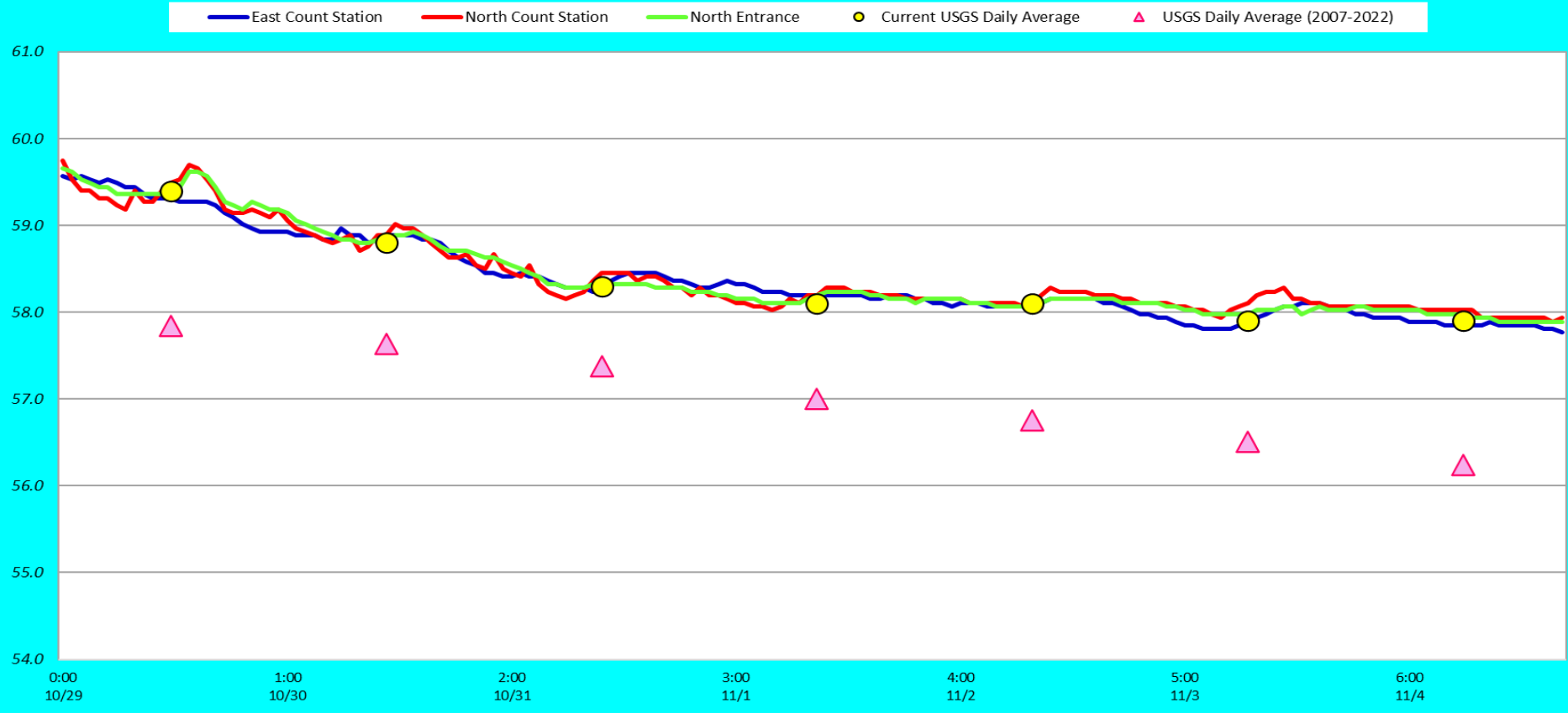
Sluice gates 2-1, 2-2, 2-3, 8-1, 8-3, 18-2 in operation
Fish unit flow reduced from 5kcfs to 4 kcfs rest of season due to grating damage repair.

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



Bird Gard audio deterrent turned off 11/2. Foxpro very effective at deterring feeding gulls.

Fish Ladders-River Temperatures

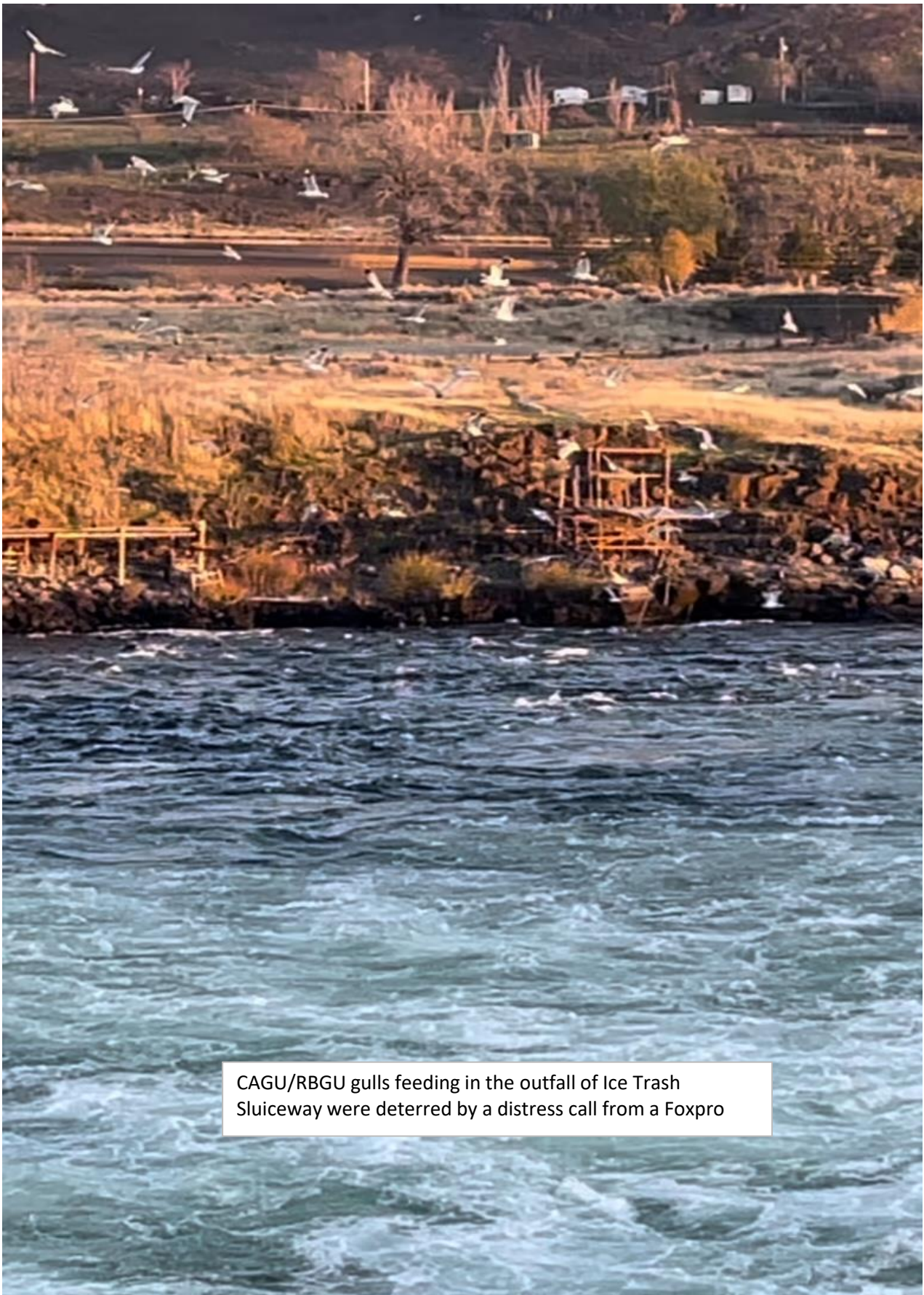


Secchi:		USGS
6.0	Sun	59.4
5.0	Mon	58.8
5.0	Tue	58.3
6.0	Wed	58.1
6.0	Thurs	58.1
6.0	Fri	57.9
5.0	Sat	57.9
5.0+	AVG	58.4

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
10/29	1.5	9.3	1.5	2.1	11.1	11.1	10.1	1.4	8.8	8.8	-2.6	1.3	8.4	8.7
	1.4	9.3	1.5	2.0	11.6	11.5	10.0	1.4	8.8	8.8	-2.6	1.3	8.6	8.6
10/30	1.3	9.5	1.2	2.5	11.8	11.8	10.4	1.2	9.2	9.3	-2.2	1.2	8.8	9.2
	1.5	9.2	1.6	2.3	11.0	10.9	10.3	1.3	9.0	9.0	-2.4	1.3	8.8	8.8
10/31	1.3	9.7	1.3	2.6	11.2	11.1	11.5	1.2	9.9	9.9	-1.5	1.6	8.9	9.3
	1.3	9.7	1.7	1.2	11.0	10.0	10.2	1.3	9.3	9.4	-2.1	1.3	8.6	8.8
11/1	1.3	10.5	1.6	1.9	10.4	10.3	10.9	1.2	9.8	9.8	-1.8	1.3	9.3	9.5
	1.3	9.6	1.6	1.6	10.5	10.4	10.6	1.4	9.3	9.3	-2.4	1.4	9.0	9.0
11/2	1.4	9.6	1.3	1.4	11.2	11.2	10.4	1.4	8.9	9.0	-2.7	1.4	8.6	8.8
	1.3	9.5	1.3	1.5	11.3	11.3	10.4	1.4	9.0	9.1	-2.7	1.3	8.7	8.8
11/3	1.2	9.6	1.6	1.1	11.0	11.0	10.1	1.4	9.0	9.0	-2.7	1.4	8.5	8.7
	1.4	9.6	1.4	1.4	11.1	11.1	10.4	1.3	9.2	9.3	-2.7	1.4	8.7	8.6
11/4	1.3	9.5	1.3	1.2	11.1	11.2	10.2	1.4	9.1	9.1	-2.8	1.3	9.0	9.0
	1.3	9.6	1.4	1.5	10.8	10.8	10.5	1.2	9.7	9.8	-2.2	1.2	9.4	9.4
AVG:	1.3	9.6	1.5	1.7	11.1	11.0	10.4	1.3	9.2	9.2	-2.4	1.3	8.8	8.9

Fishways inspected twice daily



CAGU/RBGU gulls feeding in the outfall of Ice Trash Sluiceway were deterred by a distress call from a Foxpro