

The Dalles Dam Fishway Status Report

3/12/23

Inspection Period 3/5-3/11, 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: 11		Temperature: 38.4 °F
			Comments: Both fish units flow in east ladder		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	9.4	
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.2	
N2	0	Closed			
PUD Intake differential	0	≤ 0.5'			

EAST FISHWAY

Exit differential	0	≤ 0.5'			
Removable weirs 154-157	0	Per forebay	Note; 155 weir hoist failed.		
Weir 158-159 differential	0	1.1' ± 0.1'			
Count station differential	0	≤ 0.3'			
153 Weir crest depth	0	1.3' ± 0.1'			
Junction pool weir JP6	0	> 7.0'	Weekly average	9.5	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	2.4	
Entrance weir E2	0	depth (≥ 8')	Weekly average	12.1	
Entrance weir E3	0	depth (≥ 8')	Weekly average	12.1	
Collection channel velocity	0	1.5 - 4 fps	No data		
Transportation channel velocity	1	1.5 - 4 fps	4.71fps 3/8/23		
North channel velocity	0	1.5 - 4 fps	2.41fps 3/11/23		
South channel velocity	0	1.5 - 4 fps	No data		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir W1	0	depth (≥ 8')	Weekly average	10.4	
Entrance weir W2	0	depth (≥ 8')	Weekly average	10.4	
Entrance weir W3	0	No criteria	Weekly average	-3.7	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	0	depth (≥ 8')	Weekly average	10.0	
Entrance weir S2	0	depth (≥ 8')	Weekly average	10.0	

JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18	Intakes MU1, 8, 16 and 18 open to recirculate. Endgate closed.		
Turbine trashrack drawdown	0	<1.5', biwklly	Nothing to report. FU differential .3' 3/9/23		
Spill volume/pattern	0	1 to 22	ITS spill 4kcfs estimated.		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	MU1-1 no salmonid fish mortality		

Current Outages

MU19 & MU20 FOOS 10/07/2018 1205 – 10/27/2023 1700 T10 ACETYLENE
MU12 OOS 04/12/2021 0001 – 9/22/2023 ANNUAL
MU17 OOS 02/06/2023 0630 – 03/30/2023 1700, TURBINE BEARING
MU17 & MU18 OOS 02/06/2023 0630 – 03/30/2023 1700 FOR STRAINER
MU13 FOOS 02/14/2023 1112 - 03/01/2023 1700 LOW GOV OIL

Maintenance

Planning to revive fish unit intake trashrack rake this spring

AWS intake trashrack debris management - PDT reviewing alternatives.

Planning spill gates 9 and 10 cable and gearbox swap. Bulkhead seal replacement needed.

Spillway assessment; Spillgates 1- 9 rehab 2034. Includes spillbay 9 trunnion pin repair. Spillway crane first priority

North count station brush requires adjustments

East entrance wiers adjusting limits

Entrance calibrations show good accuracy

Predators

Small groups of CAGU foraging in SW4. DCCO numbers increasing.

Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Presently in WDFW permit process.

Working on Falconry abatement contract for start work in late March 2023.

Research/Construction/Contractors

USGS river temperatures link [USGS ladder-river temperatures](#) [USGS ladder-river temperatures](#)

4 peaks video counting will occur through winter. Power outage at north count station scheduled.

Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, Investigating mods for entrance weirs

PTAGIS fishladder data collection at count stations continues

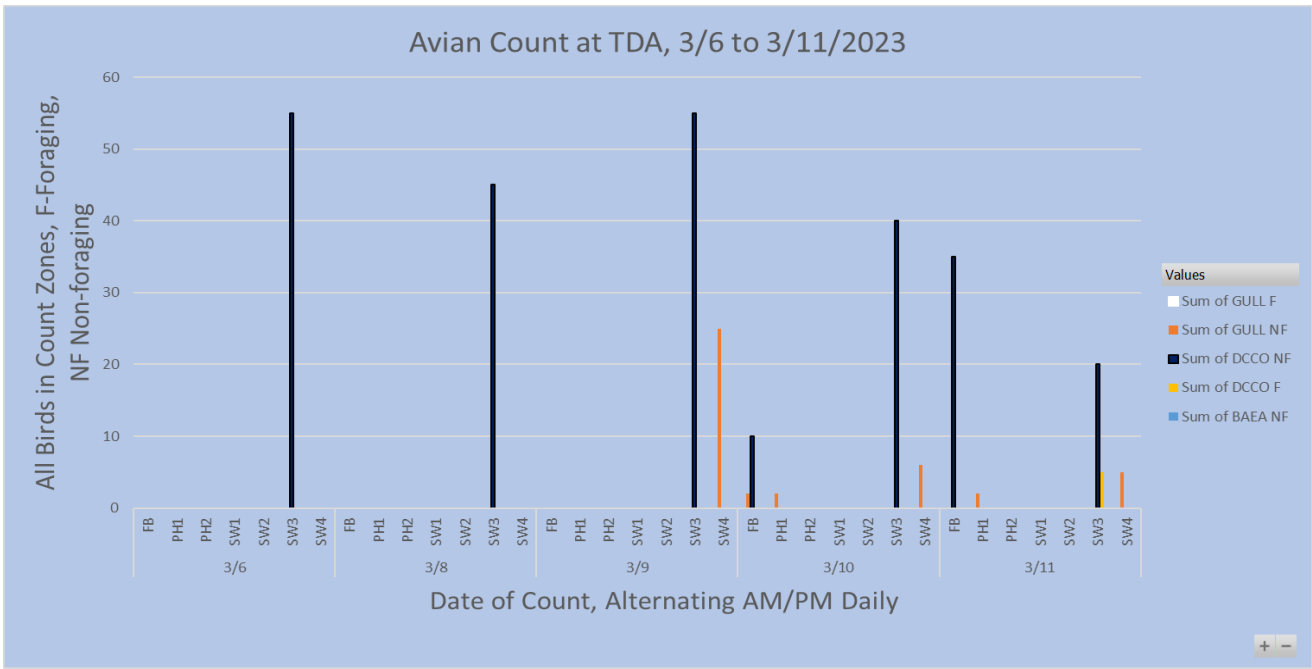
Operations

Sluice gates 1-2, 1-3, 16-1, 16-2, endgate opened March 1

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

Bird Count Zones, Avian Lines and Laser Deterrent Sites

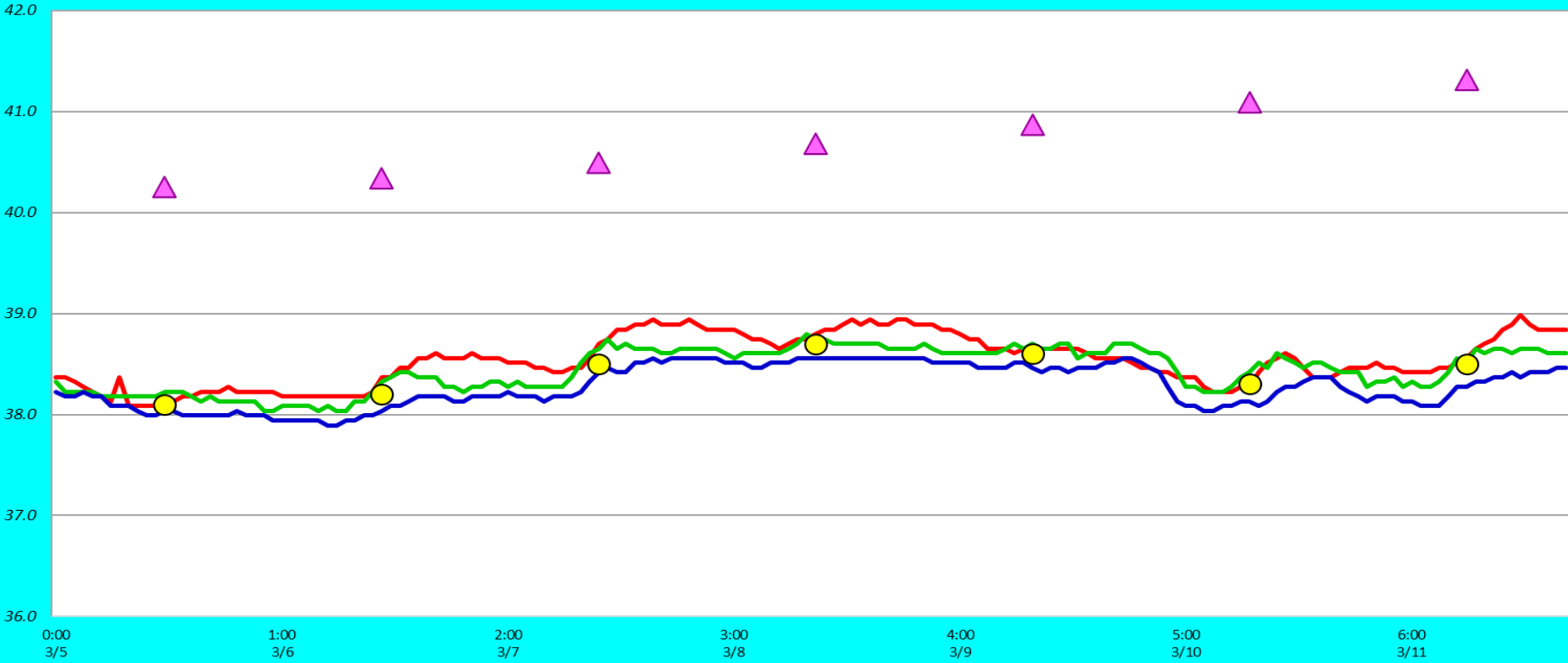




Rapidly increasing numbers of DCCO as they move onto BPA towers for nesting.

Adult Fish Ladders-River Temperatures

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





Gadfly noisemaker and dadi long legs, mounted at base of BPA tower to deter cormorant nesting.

Secchi:		USGS F°
5.0	Sun	38.1
5.0	Mon	38.2
5.0	Tue	38.5
5.0	Wed	38.7
5.0	Thurs	38.6
5.0	Fri	38.3
5.0	Sat	38.5
5.0	AVG	38.4

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
3/5	0.2	9.0	1.5	3.7	11.3	11.3	8.6	1.4	9.9	9.9	-4.9	1.5	9.5	9.6
	1.4	9.1	1.4	3.8	11.5	11.5	8.8	1.3	10.2	10.2	-4.6	1.4	9.9	9.8
3/6	1.0	9.1	1.3	3.9	11.6	11.6	8.8	1.4	10.2	10.2	-4.6	1.4	9.9	9.9
	1.3	9.0	1.6	3.4	11.2	11.1	8.4	1.3	10.1	10.1	-4.8	1.4	9.9	9.7
3/7	1.3	9.2	1.4	1.6	11.6	11.6	9.6	1.5	10.1	10.1	-3.5	1.4	9.8	9.8
	1.3	9.2	1.5	2.3	13.2	11.2	9.3	1.5	9.8	9.8	-3.8	1.4	9.9	9.8
3/8	1.4	9.1	1.3	3.2	12.1	12.1	10.1	1.3	10.5	10.5	-3.1	1.3	10.3	10.4
	1.3	10.4	1.7	1.7	11.8	11.8	8.7	1.4	10.3	10.3	-4.2	1.4	9.9	9.9
3/9	1.3	9.6	1.5	1.4	12.4	12.5	9.4	1.4	10.2	10.3	-4.2	1.4	9.9	9.9
	1.4	9.5	1.6	0.9	12.3	12.4	9.9	1.4	10.6	10.6	-3.2	1.4	10.2	10.0
3/10	1.4	9.5	1.5	1.3	12.8	12.8	10.4	1.3	10.8	10.9	-3.0	1.3	10.4	10.2
	1.2	9.8	1.5	2.1	12.6	12.5	11.1	1.3	10.8	10.8	-2.6	1.4	10.5	10.2
3/11	1.3	9.5	1.7	1.7	12.5	12.5	10.7	1.3	11.0	11.0	-2.4	1.3	10.7	10.5
	AVG:	1.2	9.4	1.5	2.4	12.1	11.9	9.5	1.4	10.4	10.4	-3.7	1.4	10.0

Fishways inspected daily