

The Dalles Dam Fishway Status Report

5/13/23

Inspection Period 05/7-05/13, 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: 54.6 °F
			Comments: flow-turbidity increase		Weekly Ave. Secchi: 3.3

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	11.4	
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	1	Per forebay	Problem with W 157 limit switches require TDE repair.		
Weir 158-159 differential	0	1.1' ± 0.1'			
Count station differential	0	≤ 0.3'			
153 Weir crest depth	0	1' ± 0.1'			
Junction pool weir JP6	0	> 7.0'	Weekly average	17.4	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.6	
Entrance weir E1	0	No criteria	Weekly average	2.6	
Entrance weir E2	0	depth (≥ 8')	Weekly average	13.1	
Entrance weir E3	0	depth (≥ 8')	Weekly average	13.1	
Collection channel velocity	0	1.5 - 4 fps	2.02 fps 5/15/23		
Transportation channel velocity	1	1.5 - 4 fps	4.09 fps 5/15/23		
North channel velocity	0	1.5 - 4 fps	2.41 fps 3/11/23		
South channel velocity	0	1.5 - 4 fps	4.72 fps 4/23/23	Entrance	
West entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir W1	0	depth (≥ 8')	Weekly average	9.9	
Entrance weir W2	0	depth (≥ 8')	Weekly average	9.8	
Entrance weir W3	0	No criteria	Weekly average	3.6	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	0	depth (≥ 8')	Weekly average	11.7	
Entrance weir S2	0	depth (≥ 8')	Weekly average	10.5	

JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18	1-8-18 gates open.		
Turbine trashrack drawdown	0	<1.5', biwklly	5/14/2023 All in criteria.		
Spill volume/pattern	0	1 to 22	1-8 bays in operation daily		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	Many fish in gatewells, mostly yearlings. No mortality. No trash.		

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
MU4 OOS 04/17/2023 0630 – 05/04/2023 1700, ANNUAL

Maintenance

Plan in place for fish unit intake trashrack rake in preparation for potential debris issues.
Calibrations at fishways entrances are all within criteria 5/5/2023
Planning spill gates 9 and 10 cable and gearbox swap. Resealing bulkheads.
Spillway assessment; Spillgates 1- 9 rehab 2034. Spillway crane replace first priority. Reviewing gate operation frequency.

Predators

100-20 foraging gulls in tailwater/FB/PH1 count zones. Cormorants persisting. ~17 nests counted 5/13.
Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Waiting on WDFW permit process.
Falconry abatement at 5 weeks, undertaking mock gull takes in afternoons to some success.

Research/Construction/Contractors

USGS river temperatures link
4 Peaks fish counters 16hr/7 day/wk started Apr 1.
Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, other 2 next winter.
ODFW conducting monthly fishway inspections.
PTAGIS fishladder data collection at count stations continues

Operations

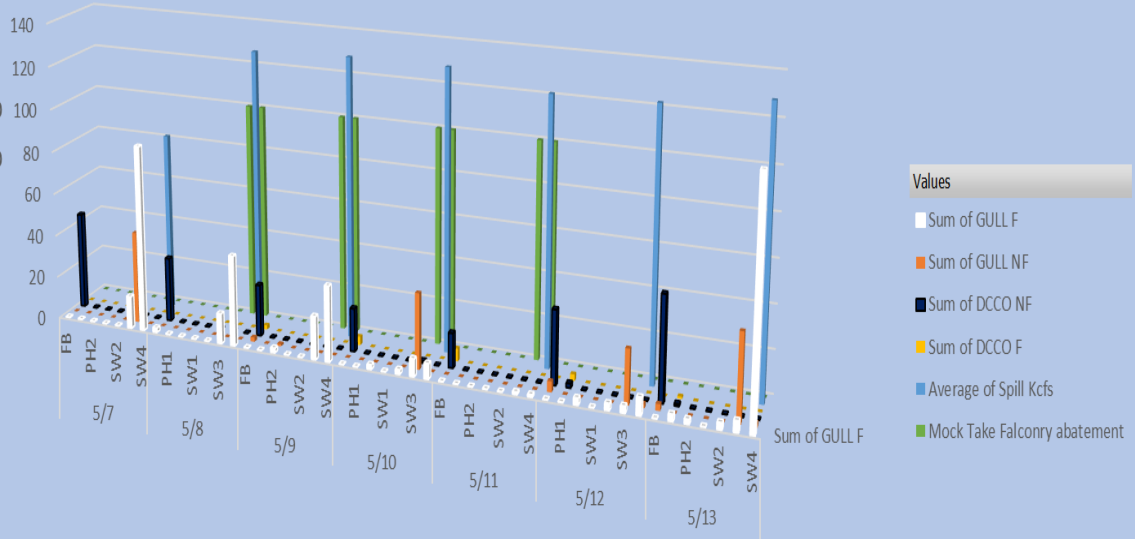
Sluice gates 1-1, 1-2, 1-3, 8-1, 8-3, 18-2 open
Gatewells contain small numbers of chinook yearlings, no mortality.
Approved by: Ron Twiner, Operation Project Manager, The Dalles Dam

Bird Count Zones, Avian Lines and Laser Deterrent Sites



Avian Count at TDA, 5/7 to 5/13/2023

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

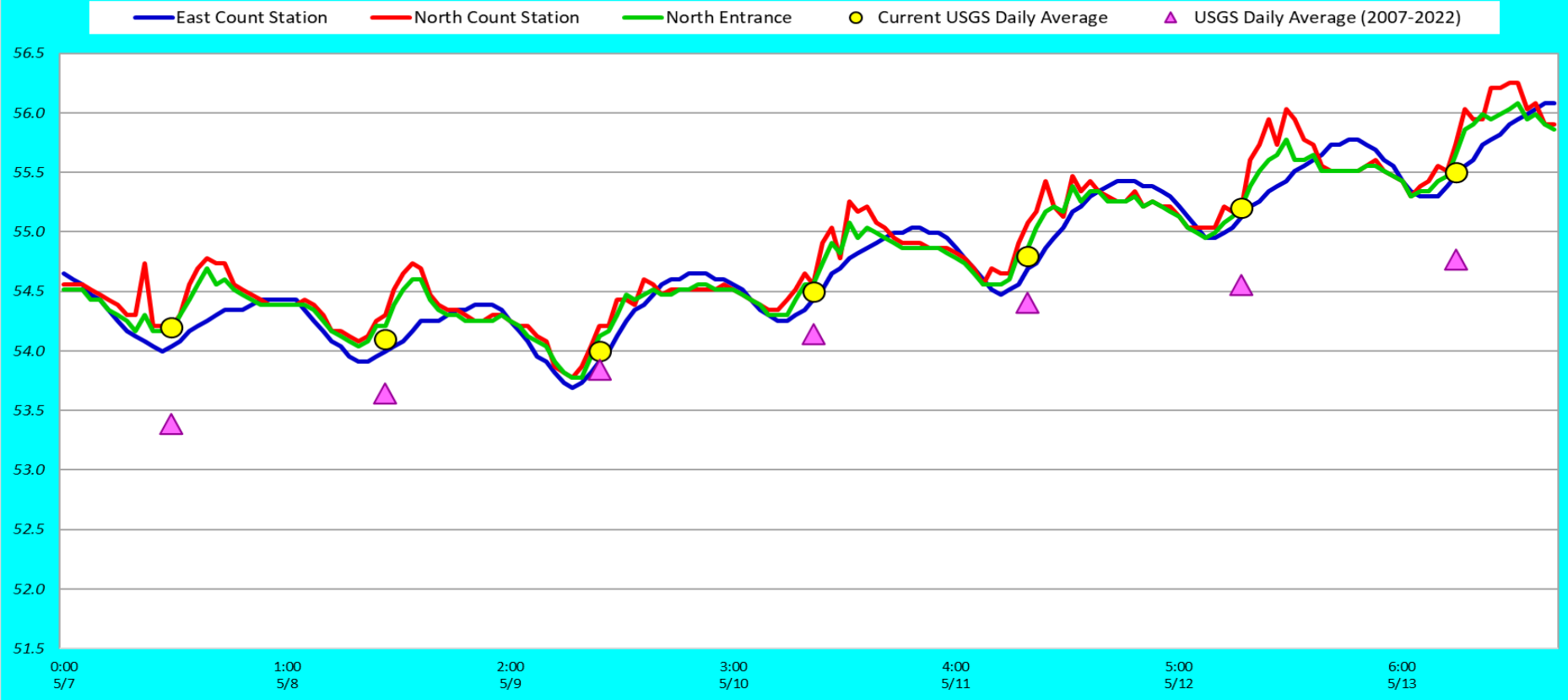


Date of Count, Alternating AM/PM Daily



Green columns indicate full days falconry abatement. Mock take begun on 5/9/2023. High spill pushing most gulls into SW4

Adult Fish Ladders-River Temperatures



Secchi:		USGS F°
3.5	Sun	54.2
3.5	Mon	54.1
3.5	Tue	54.0
4.0	Wed	54.5
3.5	Thurs	54.8
2.5	Fri	55.2
2.5	Sat	55.5
3.3	AVG	54.6

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
5/7	1.4	11.3	1.5	0.8	12.8	12.8	17.8	1.5	10.4	10.3	4.1	1.4	11.4	10.9
	1.4	11.5	1.4	1.4	12.9	12.9	18.4	1.4	10.7	10.7	4.6	1.4	11.7	10.8
5/8	1.4	11.4	1.6	0.2	13.2	13.4	17.2	1.6	9.6	9.6	3.6	1.3	11.7	10.6
	1.4	11.3	1.6	0.3	13.0	13.2	17.3	1.6	9.6	9.6	3.5	1.6	11.7	10.2
5/9	1.4	11.4	1.5	0.7	13.3	13.3	17.7	1.4	10.2	10.2	4.2	1.3	12.3	10.5
	1.4	11.4	1.5	1.6	12.4	12.2	18.6	1.3	10.7	10.7	4.8	1.4	12.3	10.3
5/10	1.4	11.5	1.3	1.0	13.6	13.7	18.0	1.4	10.1	10.1	4.4	1.4	12.4	10.2
	1.3	11.7	1.6	0.6	12.8	12.8	17.6	1.5	9.8	9.7	3.9	1.4	13.0	10.0
5/11	1.4	10.7	1.3	1.9	13.4	13.4	18.0	1.4	10.5	10.5	4.3	1.4	10.7	10.7
	1.4	11.5	1.7	1.2	12.5	12.6	17.2	1.4	10.2	9.2	4.0	1.3	11.5	10.6
5/12	1.3	11.5	1.7	7.0	11.2	10.8	15.0	1.6	8.9	8.9	1.7	1.2	11.1	10.5
	1.3	11.6	1.7	4.3	15.5	16.0	17.2	1.4	10.2	9.2	4.0	1.3	11.5	10.6
5/13	1.0	11.2	1.7	5.9	11.3	11.1	15.7	1.7	9.3	9.3	2.0	1.6	11.4	10.5
	1.3	11.5	1.7	9.2	15.5	16.0	17.2	1.7	9.1	9.1	1.8	1.3	11.5	10.6
AVG:	1.3	11.4	1.6	2.6	13.1	13.2	17.4	1.5	9.9	9.8	3.6	1.4	11.7	10.5

Fishways inspected twice daily



Gatewell show significant numbers of yearlings and sub. No mortality.