

The Dalles Dam Fishway Status Report

10/16/22

Inspection Period 10/9-10/15, 2022

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: 65.8 °F
			Comments: W155 failure RCC restricted FB		Weekly Ave. Secchi: 5.1

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	0	Closed			
PUD Intake differential	8	≤ 0.5'			

EAST FISHWAY

Exit differential	0	≤ 0.5'	Significant floating mats of weeds at east exit. Not effecting flows or fish passage.		
Removable weirs 154-157	0	Per forebay	Note; 155 weir hoist failed. Forebay restriction minimum 157' applied.		
Weir 158-159 differential	0	1.1' ± 0.1'			
Count station differential	0	≤ 0.3'	Less weed plugging at pickets.		
153 Weir crest depth	0	1.3' ± 0.1'			
Junction pool weir JP6	0	> 7.0'	Weekly average	9.9	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	9.0	
Entrance weir E2	0	depth (≥ 8')	Weekly average	10.6	
Entrance weir E3	0	depth (≥ 8')	Weekly average	10.6	
Collection channel velocity	0	1.5 - 4 fps	3.49 fps 10/15		
Transportation channel velocity	0	1.5 - 4 fps	1.7 fps 10/15		
North channel velocity	0	1.5 - 4 fps	3.32 fps 10/15		
South channel velocity	0	1.5 - 4 fps	4.47 fps 10/15		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir W1	0	depth (≥ 8')	Weekly average	9.6	
Entrance weir W2	0	depth (≥ 8')	Weekly average	9.7	
Entrance weir W3	0	No criteria	Weekly average	-3.3	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	0	depth (≥ 8')	Weekly average	9.4	
Entrance weir S2	0	depth (≥ 8')	Weekly average	9.3	

JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18	MU 18 OOS, sluice gate 17-2 in operation		
Turbine trashrack drawdown	0	<1.5', biwklly	Monitoring FU drawdown due to weed buildup on intakes. Stable at .5 to .6' on FU2		
Spill volume/pattern	0	1 to 22	NO SPILL.		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	Nothing to report		

Current Outages

MU19 & MU20 FOOS 10/07/2018 1205 – 10/27/2022 1700 T10 ACETYLENE
MU12 OOS 0001 4/12/2021 – 1700 10/27/2022 for Annual & Cooler Upgrades
MU18 OOS 08/29/2022 0630-1/26/2023 1700, COOLER UPGRADES
SS01 OOS 10/03/2022 0630 – 10/27/2022 1700, 2 YEAR
MU20 OOS 10/03/2022 0630 – 12/29/2022 1700, TOP PLATE OIL SUMP

Maintenance

PUD trash rake repair completed to resume raking and correct differential.
EFL exit weir 155 hoist failed in down position. Weir pull and repair December. Forebay restriction 157 remainder of passage season.
Permanent oil boom reinstall planned for December. Plan to extend to cover AWS intake.
Calibrations all accurate for fishway entrances. New automation in calibration. All maintaining criteria.
Spillway assessment (MRER); Spillgates 1- 9 rehab 2034. Includes spillbay 9 trunnion pin repair. Spillway crane first priority
Fish unit rehab Phase 1A awaiting funding.
AWS intake trashrack debris management - PDT reviewing alternatives.
Monitoring fish unit intake drawdown for potential trashrack plugging.
Planning repair of AWS trashrack lift beam for easier use if needed.
Planning for use of antiquated fish unit intake trashrack rake in anticipation for future debris plugging.

Predators

Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Acquiring permits.
Resident cormorants foraging around project. Up to 3 at a time at the east fishladder exit.
Northern Pikeminnow Management Program Columbia River Dam Angling & Site-Specific Fishery with 650 removed YTD

Research/Construction/Contractors

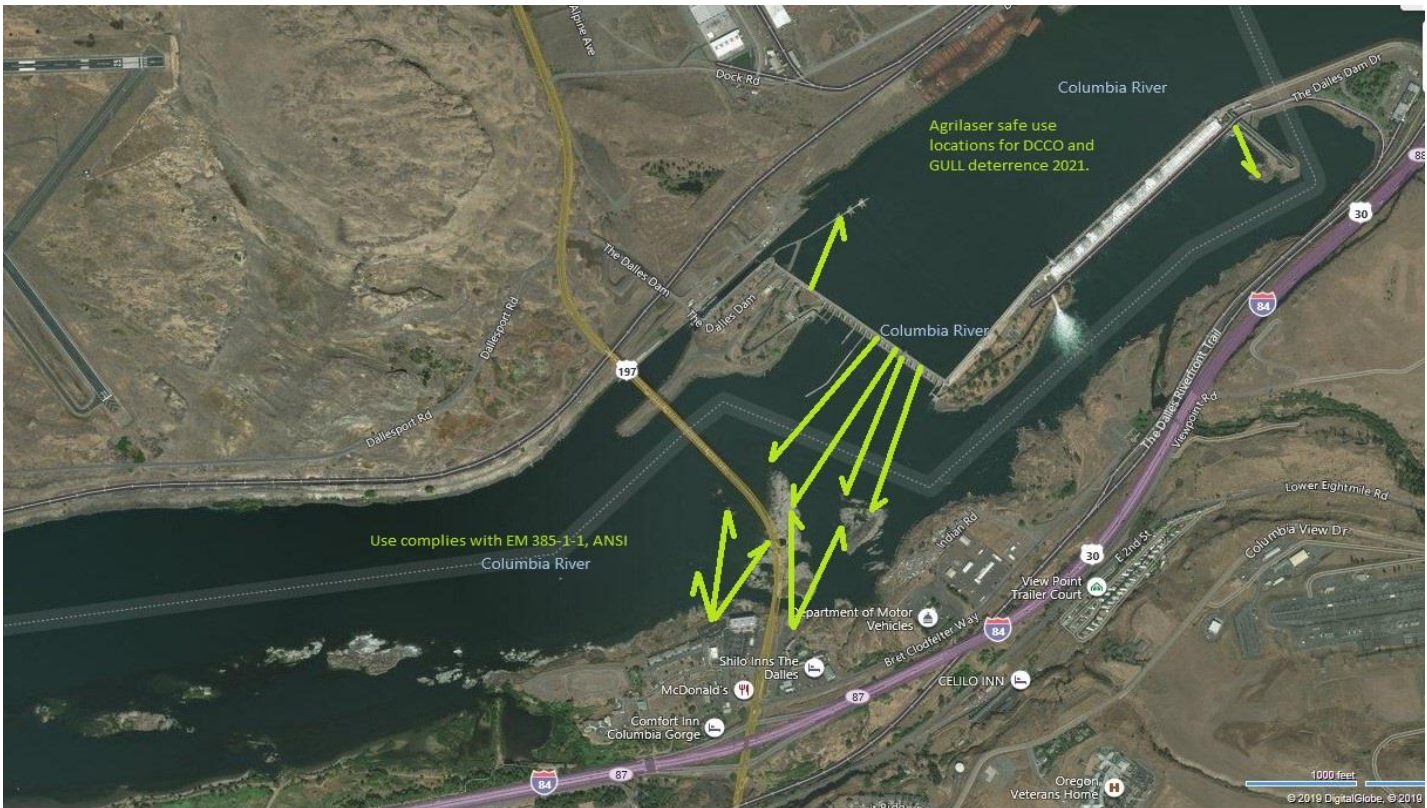
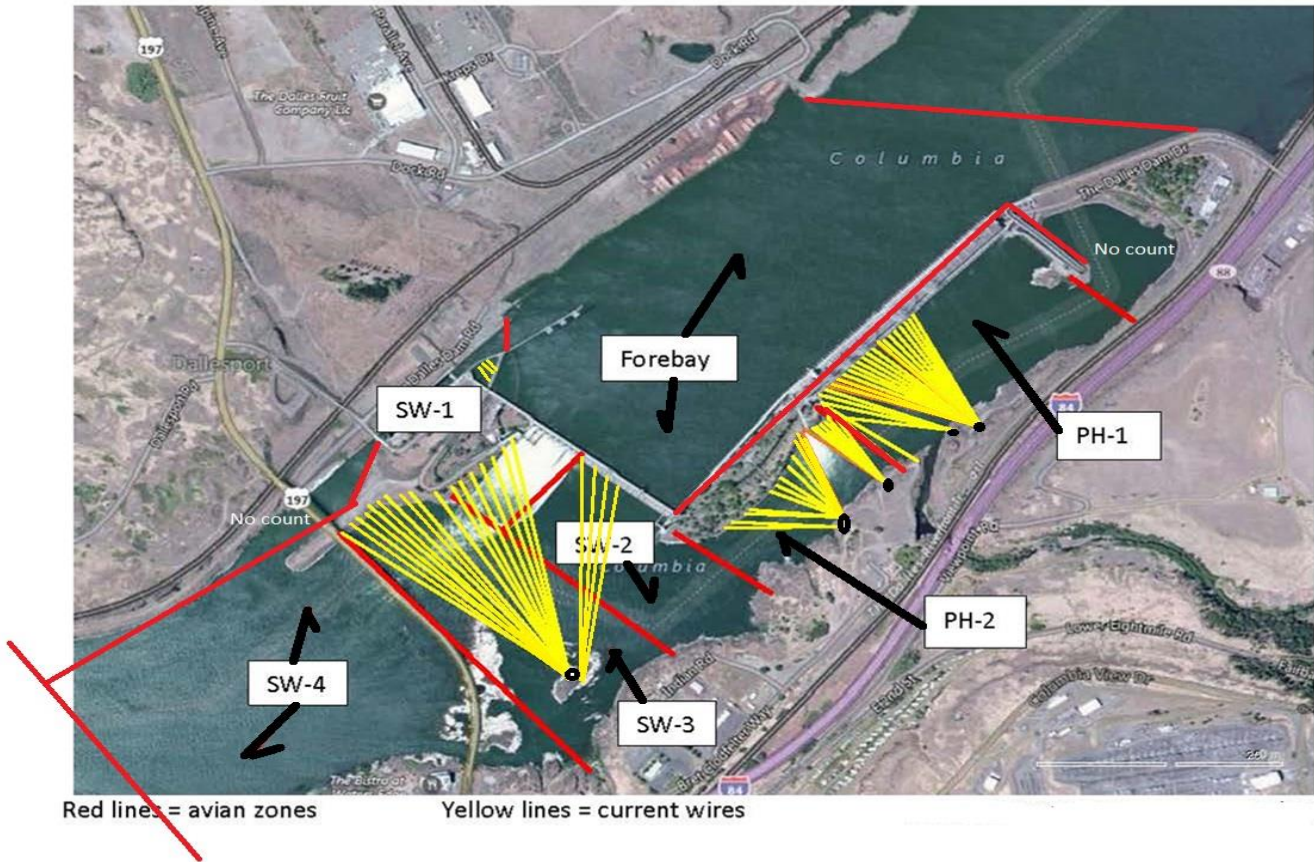
USGS river temperatures link
4 peaks counting 4/1-10/31. Video counting will occur through December this year.
Fish Accords Lamprey Passage plan ongoing at 90% due 09/01 DDR junction pool LPS. Investigating mods for entrance and exit weirs.
PTAGIS fishladder data collection at count stations continues
Lamprey translocation project reporting 1065 captures YTD- Traps pulled 9/7 end of season
Zebra mussel sampling completed 8/15. No mussels detected on substrate in ladders.

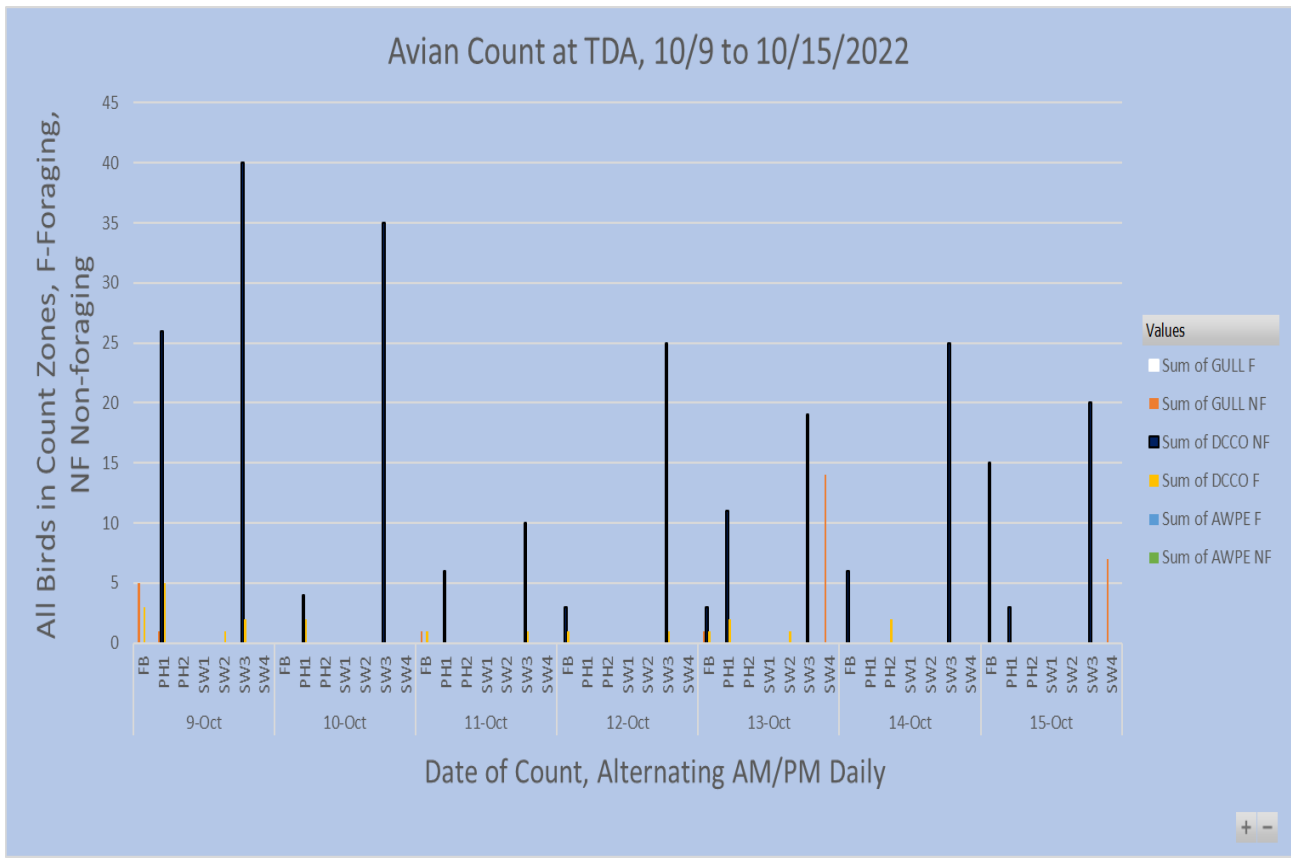
Operations

Ice Trash sluiceway endgate open. Sluiceways 1,8,17 open.
East and North fishways in full service

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

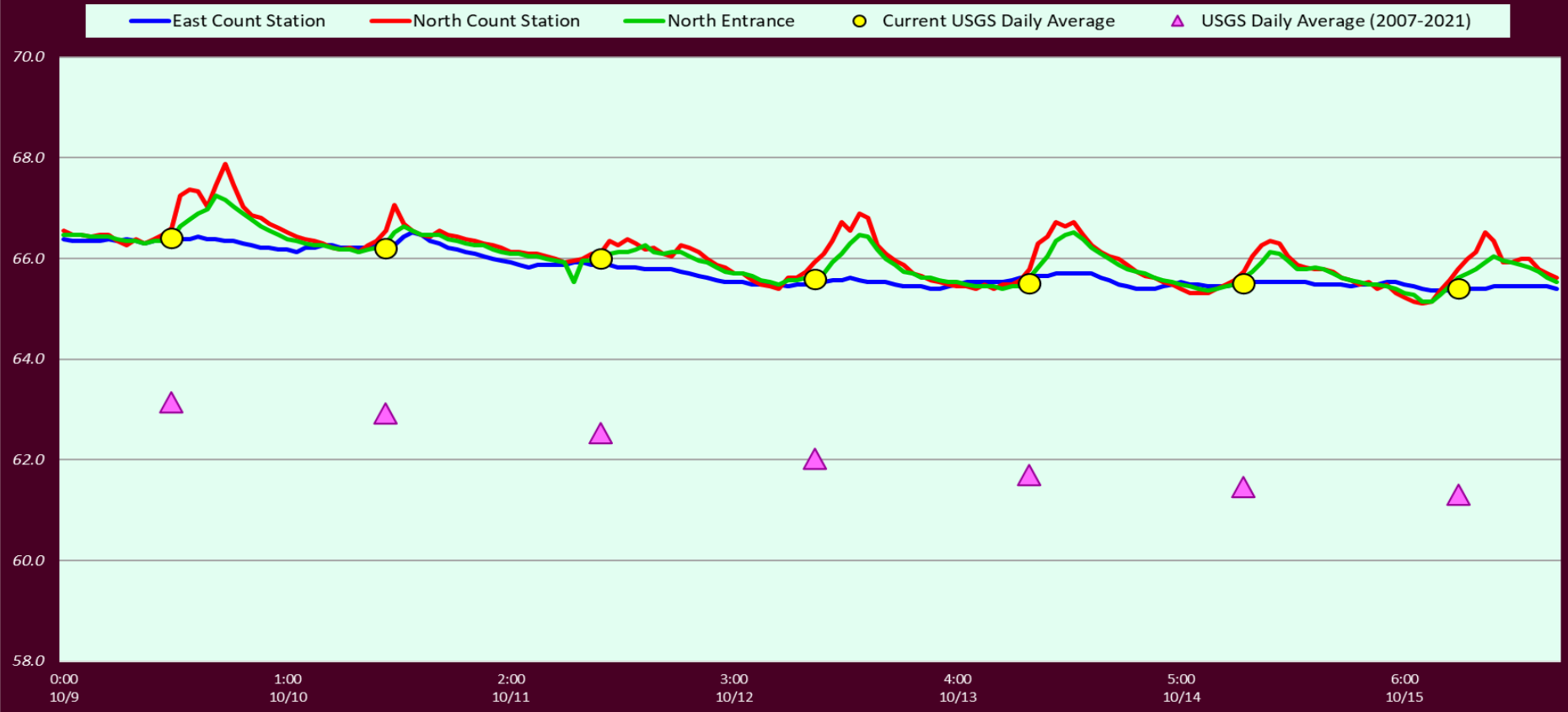
Bird Count Zones, Avian Lines and Laser Deterrent Sites





Declining cormorants in PH1 possibly due to Gadfly, motion sensor noise deterrent at East PH shoreline.

Adult Fish Ladders-River Temperatures



Secchi:		USGS°F
5.0	Sun	66.4
5.0	Mon	66.2
5.0	Tue	66.0
5.0	Wed	65.6
5.0	Thurs	65.5
5.0	Fri	65.5
6.0	Sat	65.4
5.1	AVG	65.8

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
10/9	1.3	9.5	1.7	8.3	10.2	10.4	9.3	1.6	9.1	9.2	-3.8	1.5	9.2	8.9
	1.2	9.6	1.6	8.6	10.5	10.7	9.6	1.5	9.3	9.4	-3.8	1.5	9.4	9.0
10/10	1.2	9.7	1.5	8.9	10.8	11.0	9.9	1.3	9.8	10.0	-3.3	1.4	9.6	9.2
	1.3	9.5	1.5	9.0	10.9	11.1	10.0	1.3	9.9	10.1	-3.2	1.4	9.7	9.4
10/11	1.3	9.6	1.5	8.9	10.8	11.1	9.9	1.4	9.7	9.9	-3.4	1.4	9.4	9.2
	1.3	10.5	1.7	8.4	10.3	10.5	9.4	1.4	9.5	9.7	-3.6	1.5	9.4	9.1
10/12	1.3	9.6	1.5	9.2	10.9	11.1	10.2	1.4	9.7	9.9	-2.9	1.4	9.4	9.5
	1.3	9.7	1.4	9.4	11.1	11.3	10.4	1.4	9.5	9.7	-3.6	1.5	9.4	9.1
10/13	1.3	9.6	1.5	9.1	10.8	11.0	10.0	1.3	9.7	9.8	-2.9	1.4	9.4	9.3
	1.2	9.6	1.6	8.9	10.6	10.9	9.9	1.4	9.5	9.6	-3.2	1.5	9.4	10.2
10/14	1.5	9.5	1.5	9.3	10.8	11.0	10.3	1.4	9.8	9.9	-2.9	1.4	9.3	9.3
	1.4	9.6	1.4	9.5	11.0	11.2	10.5	1.4	9.9	10.0	-2.8	1.4	9.6	9.4
10/15	1.5	9.5	1.7	9.1	10.3	10.6	10.1	1.6	9.5	9.7	-3.1	1.5	9.1	9.1
	1.5	9.5	1.6	8.9	10.3	10.4	9.9	1.6	9.5	9.6	-3.2	1.5	9.1	9.2
AVG:	1.3	9.6	1.5	9.0	10.6	10.9	9.9	1.4	9.6	9.7	-3.3	1.4	9.4	9.3

Fishways are inspected twice daily.

found out of criteria



Gadfly noisemaker and "long legs" bird deterrents able to reduce cormorants on shoreline. Had to be relocated

with water levels.