

# The Dalles Dam Fishway Status Report

12/4/22

Inspection Period 11/27-12/3, 2022

## THE DALLES DAM



US Army Corps  
of Engineers  
Portland District

The Dalles Project-Fisheries  
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<b>The Dalles Dam</b>	<b>Inspections OOC</b>	<b>Criteria Limit</b>	<b>Total Number of Inspections:</b> 11		<b>Temperature:</b> 45.9 °F
			<b>Comments:</b> FUs OOS, east entrances flushing.		<b>Weekly Ave. Secchi:</b> 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	9.8	
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.3	
N2	0	Closed			
PUD Intake differential	0	≤ 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	10.6	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir E1	0	No criteria	Weekly average	9.6	
Entrance weir E2	1	depth (≥ 8')	Weekly average	8.8	
Entrance weir E3	0	depth (≥ 8')	Weekly average	8.8	
Collection channel velocity	0	1.5 - 4 fps	1.6 fps 11/3		
Transportation channel velocity	0	1.5 - 4 fps	4.3 fps 11/3		
North channel velocity	0	1.5 - 4 fps	2.89 fps 11/30		
South channel velocity	0	1.5 - 4 fps	4.47 fps 10/15		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.3	
Entrance weir W1	4	depth (≥ 8')	Weekly average	8.0	
Entrance weir W2	3	depth (≥ 8')	Weekly average	8.2	
Entrance weir W3	0	No criteria	Weekly average	-2.7	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	3	depth (≥ 8')	Weekly average	8.0	
Entrance weir S2	4	depth (≥ 8')	Weekly average	8.0	

### JUVENILE BYPASS

Sluicgate operation	0	Units 1, 8, 18	MU 18 OOS, sluice gate 16-2 in operation		
Turbine trashrack drawdown	0	<1.5', biwkly	Monitoring FU drawdown due to weed buildup on intakes. Stable at .1' on all FUs		
Spill volume/pattern	0	1 to 22	NO SPILL.		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly			

## Current Outages

MU19 & MU20 FOOS 10/07/2018 1205 – 10/27/2022 1700 T10 ACETYLENE

MU12 OOS 04/12/2021 0001 – 9/22/2023 ANNUAL

MU18 OOS 08/29/2022 0630-1/26/2023, 1/28/2022

MU17 OOS 11/07/2022 0630 – 12/01/2022 1700, TURBINE BRG

MU22 11/14/2022 0630 – 12/08/2022 1700, FALL PROTECTION

F1 OOS 11/26/2022 0630 - 01/26/2023 1700, 2 YEAR

## Maintenance

Planning to revive old fish unit intake trashrack rake in anticipation for future debris buildup concerns.

EFL exit weir 155 hoist failed in down position. Weir pull and repair mid December.

Permanent oil boom reinstallation planned for December 13 and 14.

Calibrations not accurate for W2, S2 and E1 fishway entrances. All entrances maintaining criteria.

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

Planning spill gates 9 and 10 cable and gearbox swap. Replacing bulkhead seals needed. Completion estimate end march.

Fish unit rehab Phase 1A awaiting funding.

AWS intake trashrack debris management - PDT reviewing alternatives.

Planning repair of AWS trashrack lift beam for easier use if needed.

AWS backup operation in place of fish unit 1 Nov26-Dec1 for PDT info gathering. East fishladder dewater Dec6.

Fish units and AWS off Dec1. East fishladder dewatering Dec6. No dewater below tailwater.

## Predators

Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Acquiring WDFW permits.

Resident cormorants foraging around project, not at east ladder due to deterrents.

Northern Pikeminnow Management Program Columbia River Dam Angling & Site-Specific Fishery complete for the year

## Research/Construction/Contractors

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

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 traps pulled 9/7 end of season

Zebra mussel sampling completed 8/15. No mussels detected on substrate in ladders.

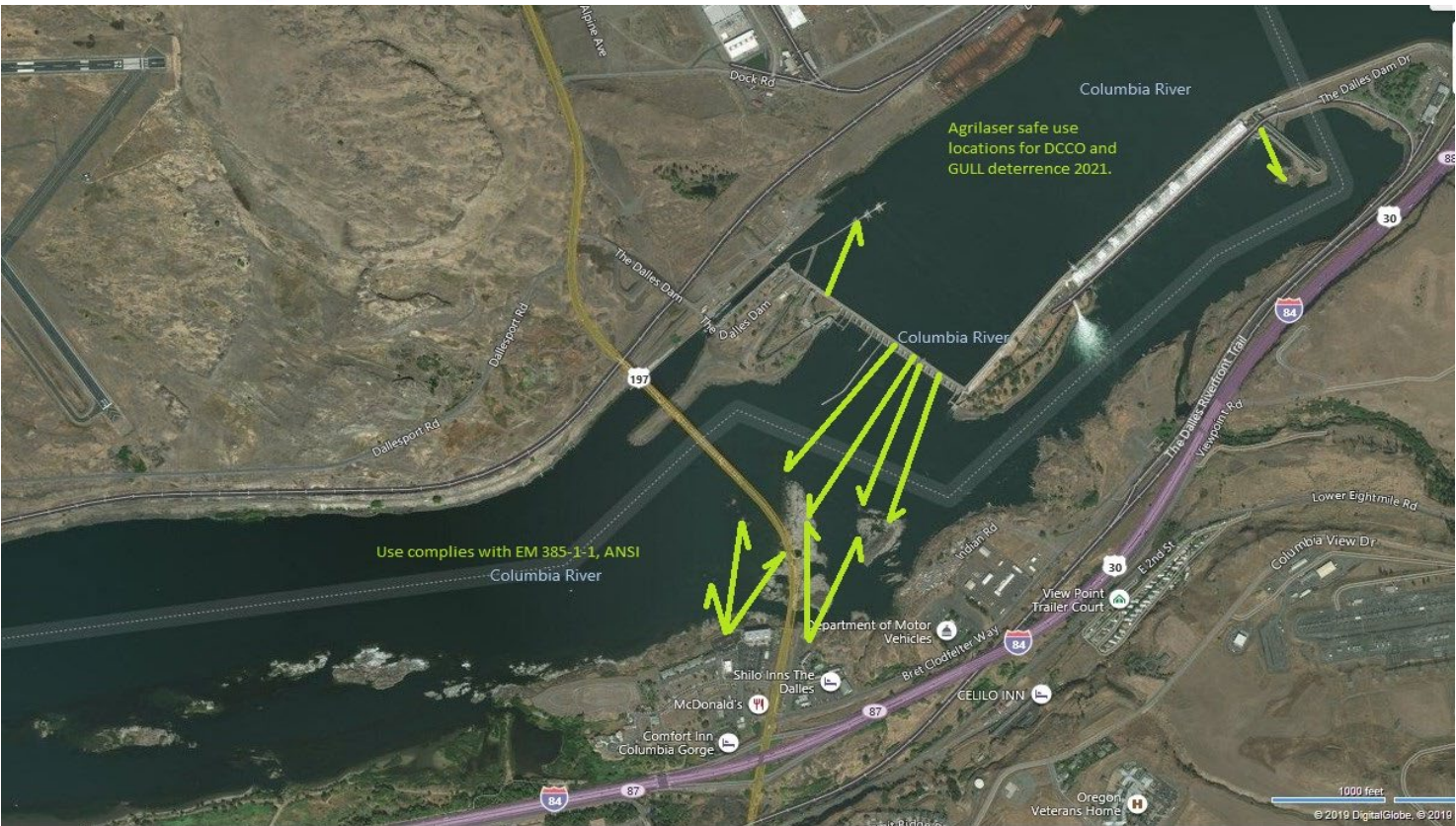
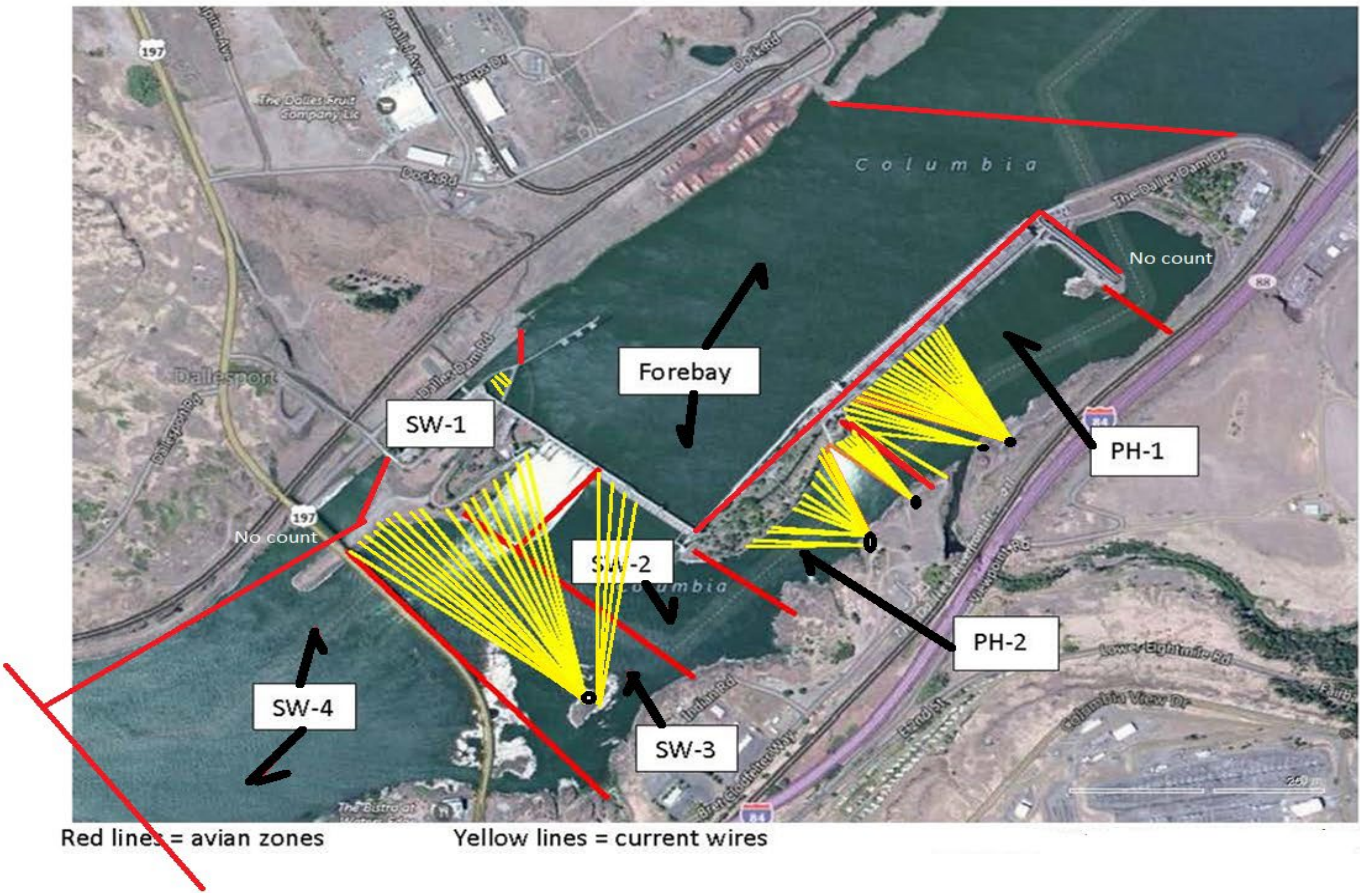
## Operations

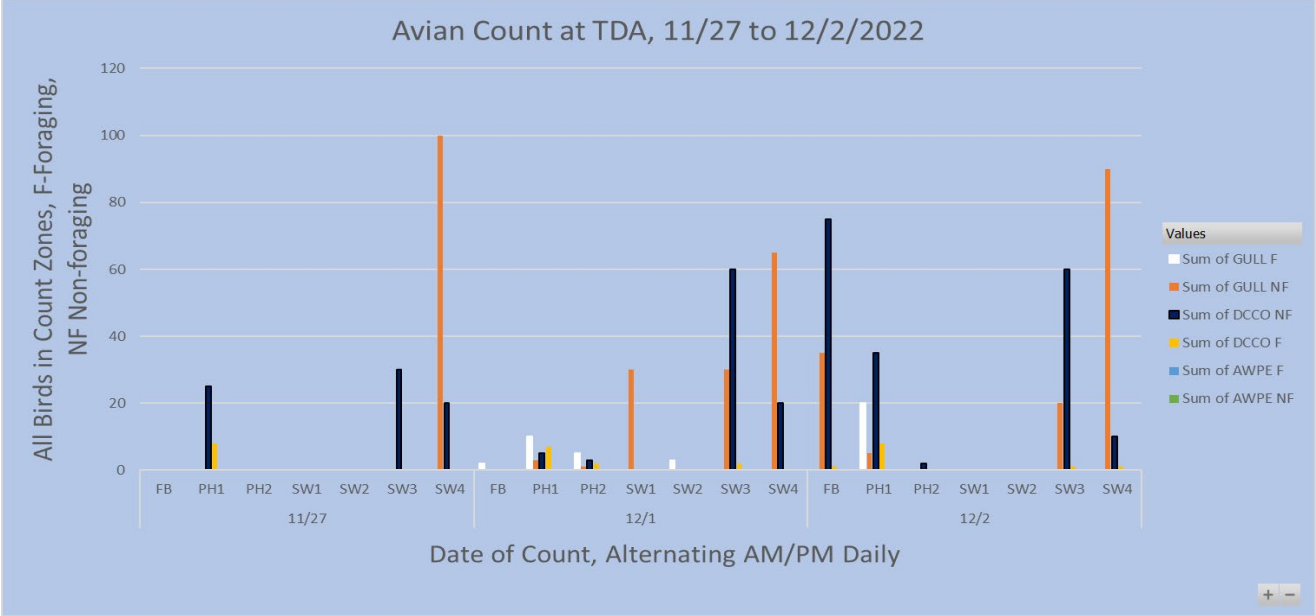
Ice Trash sluiceway endgate open. Sluiceways 1,8,17 open.

East and North fishways in full service

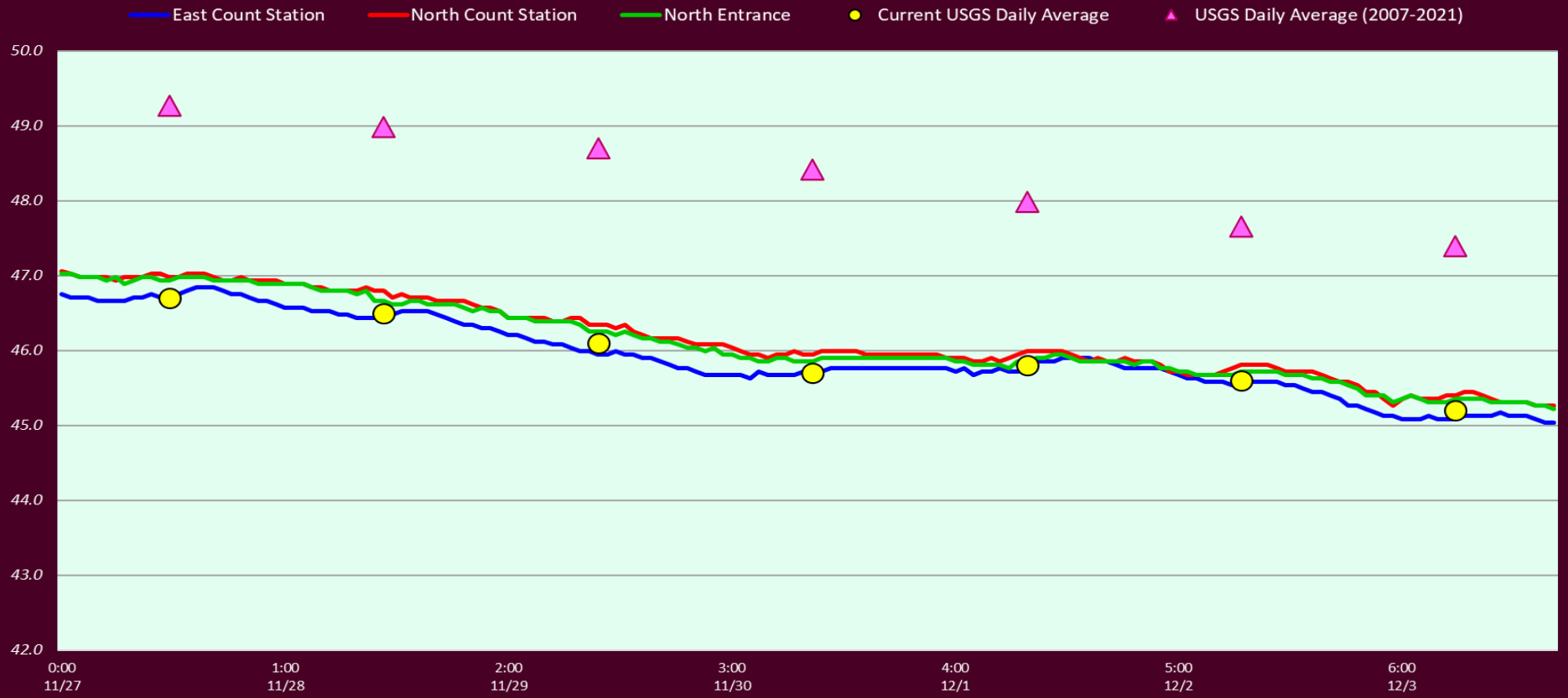
Approved by: Ron Twiner, Operation Project Manager, The Dalles Dam

# Bird Count Zones, Avian Lines and Laser Deterrent Sites





### Adult Fish Ladders-River Temperatures



Secchi:		USGS°F
5.0	Sun	46.7
5.0	Mon	46.5
5.0	Tue	46.1
5.0	Wed	45.7
5.0	Thurs	45.8
5.0	Fri	45.6
5.0	Sat	45.2
5.0+	AVG	45.9

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												
11/27	1.3	9.6	1.3	9.3	9.5	9.6	10.3	1.2	8.3	8.5	-2.8	1.3	8.2	8.2												
	1.3	9.6	1.5	8.8	8.8	8.9	9.8	1.4	7.7	7.7	-3.4	1.5	7.7	7.7												
11/28	1.4	9.5	1.4	9.2	9.5	9.6	10.2	1.3	8.1	8.3	-3.1	1.4	8.0	7.9												
	1.5	9.5	1.5	8.7	9.0	9.1	9.7	1.4	7.7	7.9	-3.5	1.4	7.6	7.6												
11/29	1.4	9.7	1.3	10.3	8.7	8.9	11.3	1.2	8.6	8.8	-2.1	1.3	8.5	8.5												
	1.3	9.8	1.3	10.1	8.9	9.1	11.1	1.3	8.4	8.6	-2.3	1.3	8.3	8.3												
11/30	1.3	10.0	1.6	10.4	8.1	8.3	11.4	1.4	7.9	8.1	-1.9	1.4	8.1	8.1												
	1.3	10.0	1.6	10.0	7.9	8.1	11.0	1.5	7.6	7.8	-2.3	1.5	7.8	7.7												
12/1	1.4	10.0	East Ladder OOS																							
12/2	1.3	10.0																								
12/3	1.3	9.9																								
AVG:	1.3	9.8													1.4	9.6	8.8	9.0	10.6	1.3	8.0	8.2	-2.7	1.4	8.0	8.0

*Fishways are inspected once daily 12/1/22.*

found out of criteria



Dewatering north ladder at John Day 12/1



BPA towers show white staining at bases from cormorant droppings  
12/2 Dead cormorant, not seen in picture, hanging from middle tower, caught in fishing line??