

# The Dalles Dam Fishway Status Report

4/3/22

Inspection Period 3/22-4/2/2022

## 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> 13		<b>Temperature:</b> #REF! °F
			<b>Comments:</b> NPUD sampling bypass RTS		<b>Weekly Ave. Secchi:</b> #REF!

### NORTH FISHWAY

Exit differential	0	≤ 0.5'			
Count station differential	0	≤ 0.3'			
Weir crest depth	0	1.0' ± 0.1'			
Entrance weir N1	2	depth (≥ 8')		1.2	
Entrance Differential	0	1.0' - 2.0'		9.7	
N2	0	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	7	1.1' ± 0.1'	Weir 159 .5' OOCalibration and thus OOCriteria. TDE fixed 3/30.		
Count station differential	0	≤ 0.3'			
153 Weir crest depth	0	1.0' ± 0.1'			
Junction pool weir JP6	0	> 7.0'	Weekly average	12.0	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	3.9	
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.7	
Entrance weir E3	0	depth (≥ 8')	Weekly average	12.0	
Collection channel velocity	0	1.5 - 4 fps	2.62 fps 3/25		
Transportation channel velocity	0	1.5 - 4 fps	3.90fps 4/2		
North channel velocity	0	1.5 - 4 fps	3.15 fps 4/2		
South channel velocity	0	1.5 - 4 fps	3.94 fps 4/2		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir W1	0	depth (≥ 8')	Weekly average	9.6	
Entrance weir W2	0	depth (≥ 8')	Weekly average	10.0	
Entrance weir W3	0	No criteria	Weekly average	-0.8	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir S1	0	depth (≥ 8')	Weekly average	9.0	
Entrance weir S2	0	depth (≥ 8')	Weekly average	9.0	

### JUVENILE BYPASS

Sluicelgate operation	0	Units 1, 18	in criteria		
Turbine trashrack drawdown	0	<1.5', biwklly	3/13/2022 all in criteria		
Spill volume/pattern	0	1 to 8	Spill closed		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	Juv. chinook in MU 18-2, fish observed 3/29/2022		

## OTHER ISSUES:

### Current Unit Outages

- MU1-MU4 FOOS (Line 1) 1650 4/5/2022 Due to BPA PT damage (Big Eddy), RTS unknown
- T10 (MU19 & 20) FOOS through 10/27/2022 due to acetylene levels
- MU12 OOS 0001 4/12/2021 – 1700 10/27/2022 for Annual & Cooler Upgrades
- MU19 OOS 0630 6/27/2021 – 1700 10/27/2022 for Top Plate Cover Upgrade and blade linkage inspection
- MU 17 OOS 3/28/2022 0630 – 7/15/2022 1700 for 6 yr. overhaul and top plate
- MU 18 OOS 3/28/2022 0630 – 4/7/2022 1700 for Annual

### Maintenance

- Permanent oil boom removed from east exit for repairs. Fabricating attachments. Determining install timing.
- Fishway automation replacement entrances and exits in operation. Work to finish resumes in June, pending funding.
- Calibrations on east fishway entrances still need slight adjustments. All in criteria. South entrance experiencing low flows criteria problems.
- Spillway assessment (MRER); Spillgates 1- 9 rehab date estimate 2034. Includes replacement of spillbay 9 trunnion pin repair. Spillway crane top priority
- Calibration of weir 159 at east ladder exit is showing .5' high on PLC. No OOC at weir 153 below count station. TDE is working on fix to 159.

### Predators

- Resident cormorants have returned to nest on BPA towers.
- California gulls not seen on project this week-see graph. Gulls feeding at the mouth of the Klickitat River.
- Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Fish Passage Plan 2022 approved.
- Yakima biologists using all means short of lethal to deter gull breeding at Miller Rocks 3/30/2022.

### Research/Construction/Contractors

#### March°F

#### April°F

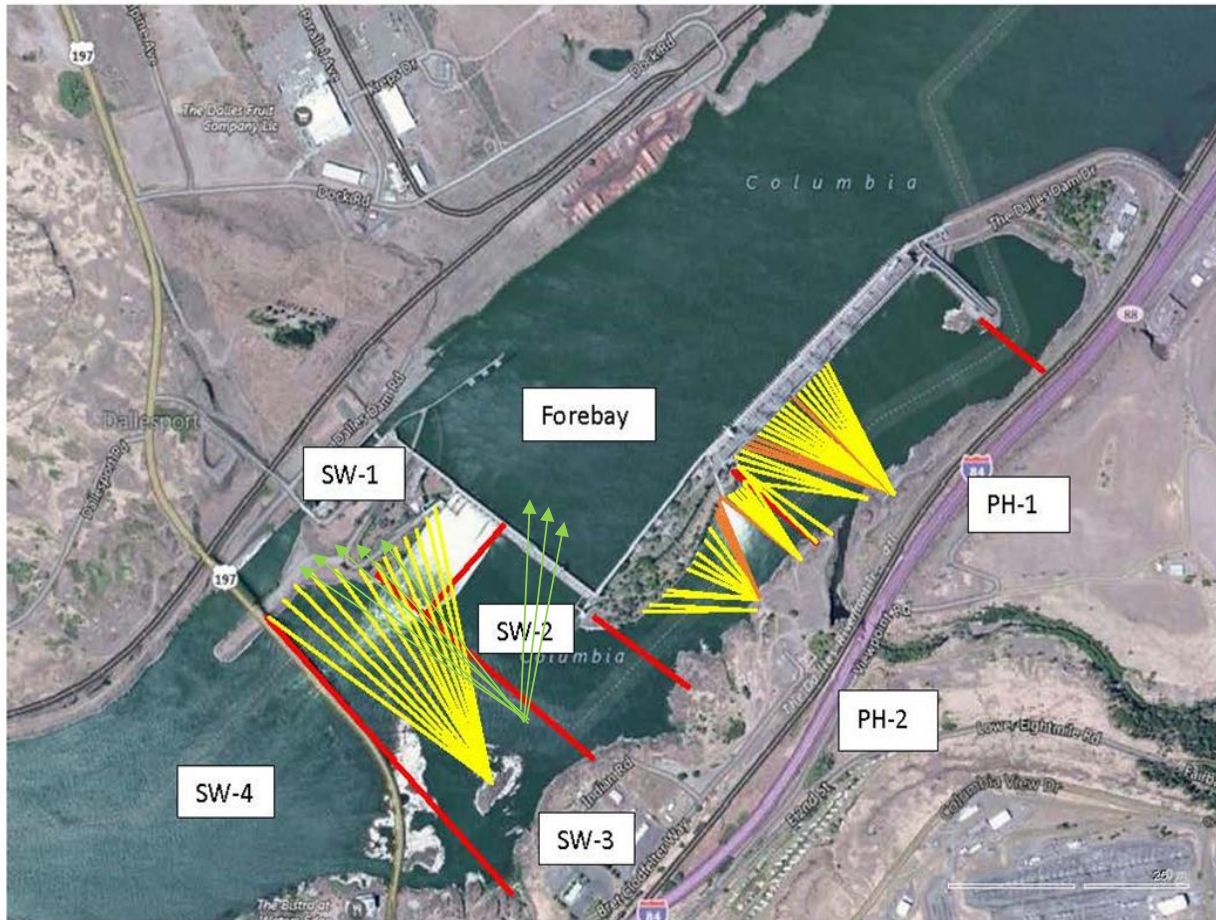
- AWS intake trashrack debris issue - No funding FY22.
- Fish Accords Lamprey Passage plan ongoing at 60% DDR junction pool LPS
- PITAGS fishladder data collection at in service count station continues.
- Fish unit rehab - Phase 1A on hold. Date to be determined. Planning operation with AWS backup water supply during construction.
- PUD new juvenile sampling facility near complete.
- 4 peaks visual counting started April 1
- USDA avian hazing starts Apr15. Prework logisitics in process.

### Fishway Operations

- East and North fishways in full service
- Ice Trash sluiceway endgate Open. 6 intakes opened for fish egress according to FPP. Some gate changes due to recent unit outages.

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

New Avian Lines and laser deterrent zones

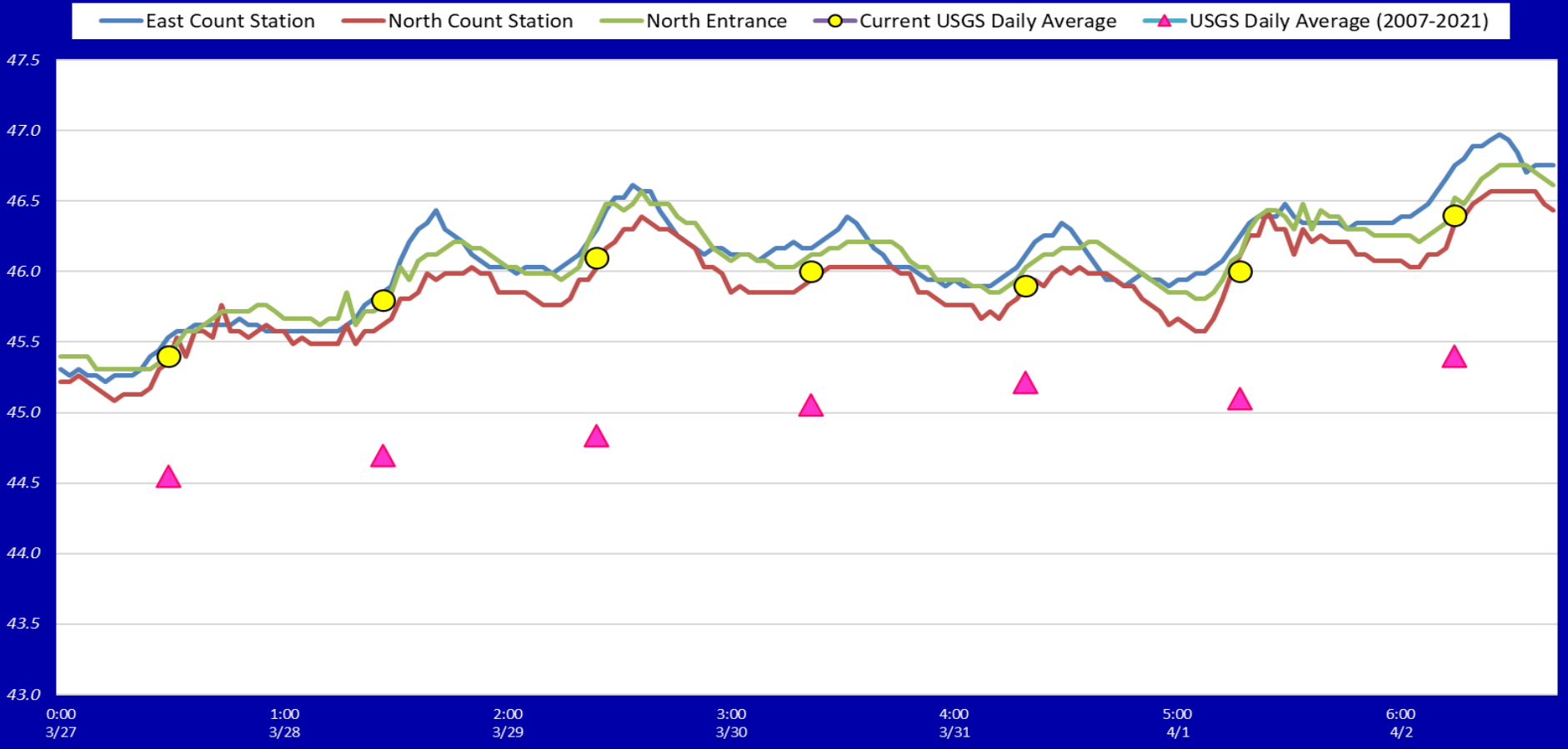


Red lines = avian zones      Yellow lines = current wires      Orange lines = down or missing wires





### Adult Fish Ladders-River Temperatures



Secchi:		USGS°F
5.0	Sun	45.4
5.0	Mon	45.8
5.0	Tue	46.1
5.0	Wed	46.0
5.0	Thurs	45.9
5.0	Fri	46.0
5.0	Sat	46.4
5.0	median	46.0

**The Dalles Dam Daily Readings and Averages for  
Temperatures, Secchi, Entrances, and Spill**

out of criteria

Date:	North Ladder		East Ladder											
	Differential	N1 Depth	Differential	E1 Depth	E2 Depth	E3 Depth	JP 6	Differential	W1	W2	W3	Differential	S1	S2
3/27	1.3	9.9	1.4	3.5	12.1	12.2	11.5	1.6	9.5	9.8	-2.1	1.6	8.5	8.5
	1.3	10.0	1.5	3.7	12.1	12.3	11.7	1.6	9.5	9.5	-2.0	1.6	8.5	8.5
3/28	1.3	9.7	1.5	3.8	11.8	12.0	11.8	1.4	10.1	10.4	-1.8	1.5	9.1	9.1
	0.6	9.8	1.5	3.7	11.7	11.7	11.7	1.6	9.6	9.9	-2.2	1.6	8.8	8.7
3/29	new sample facility testing													
	1.4	8.5	1.5	4.3	11.5	11.6	12.3	1.6	9.1	9.5	-0.2	1.6	9.1	9.1
3/30	1.4	9.8	1.5	5.2	11.2	11.3	13.2	1.4	9.9	10.3	-0.7	1.4	9.1	9.1
	1.4	9.5	1.6	3.8	11.6	11.8	11.8	1.6	9.1	9.5	-2.0	1.6	9.1	9.1
3/31	1.3	9.9	1.3	4.7	11.9	12.1	12.7	1.4	10.0	10.4	-1.1	1.5	9.6	9.6
	1.3	9.8	1.5	3.6	11.7	12.1	11.6	1.5	9.3	9.7	9.7	1.5	8.9	9.0
4/1	1.3	9.8	1.3	3.9	11.9	12.3	11.9	1.4	10.1	10.5	-1.9	1.6	9.0	9.0
	1.2	9.9	1.4	3.6	12.0	12.4	11.6	1.5	9.9	10.3	-2.2	1.6	9.0	8.9
4/2	1.4	9.8	1.5	3.6	11.4	11.8	11.6	1.5	9.5	9.9	-2.0	1.5	9.2	9.2
	0.9	10.3	1.4	4.0	11.8	12.3	12.0	1.4	9.8	10.2	-1.7	1.5	9.3	9.3
<b>AVG:</b>	<b>1.2</b>	<b>9.7</b>	<b>1.5</b>	<b>3.9</b>	<b>11.7</b>	<b>12.0</b>	<b>12.0</b>	<b>1.5</b>	<b>9.6</b>	<b>10.0</b>	<b>-0.8</b>	<b>1.5</b>	<b>9.0</b>	<b>9.0</b>



Juvenile sample facility testing