

# The Dalles Dam Fishway Status Report

3/27/22

Inspection Period 3/20-3/26/2022

## THE DALLES DAM



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> 14		<b>Temperature:</b> 44.2 °F
			<b>Comments:</b> NPUD sampling bypass RTS		<b>Weekly Ave. Secchi:</b> 4.4

### 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')		9.7	
Entrance Differential	0		1.0' - 2.0'		1.3
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	14	1.1' ± 0.1'	Weir 159 .5' OOCalibration and thus OOCriteria. Still waiting for TDE fix.		
Count station differential	0	≤ 0.3'			
153 Weir crest depth	0	1.0' ± 0.1'			
Junction pool weir JP6	0	> 7.0'	Weekly average	11.8	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	3.8	
Entrance weir E2	0	depth (≥ 8')	Weekly average	12.5	
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.4	
Collection channel velocity	0	1.5 - 4 fps	2.62 fps 3/25		
Transportation channel velocity	0	1.5 - 4 fps	3.5fps 3/25		
North channel velocity	0	1.5 - 4 fps	3.39 fps 3/20		
South channel velocity	0	1.5 - 4 fps	3.79 fps 3/25		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir W1	0	depth (≥ 8')	Weekly average	9.7	
Entrance weir W2	0	depth (≥ 8')	Weekly average	9.9	
Entrance weir W3	0	No criteria	Weekly average	-1.8	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir S1	2	depth (≥ 8')	Weekly average	9.4	
Entrance weir S2	2	depth (≥ 8')	Weekly average	13.8	

### JUVENILE BYPASS

Sluicgate operation	0	Units 1, 18	in criteria		
Turbine trashrack drawdown	0	<1.5', biwkly	3/13/2022 all in criteria		
Spill volume/pattern	0	1 to 8	Spill closed		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	No fish observed 3/23/2022		

## OTHER ISSUES:

### Current Unit Outages

- MU3 OOS 2/7/2022 0630 – 3/17/2022 1700 6 YEAR
- 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  
Nav Locks RTS

### Maintenance

Permanent oil boom removed from east exit for repairs. Parts on hand for fabrication. Determining timing.  
Fishway automation replacement entrances and exits complete. Working out bugs.  
Calibrations on east fishway entrances still need slight adjustments. All in criteria. South entrance experiencing low flows OOC.  
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 breed on BPA towers. Likely to be on eggs soon.  
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 planning to deter gull breeding at Miller Rocks to begin 3/30/2022.

### Research/Construction/Contractors

#### [TD-USGS °F](#)

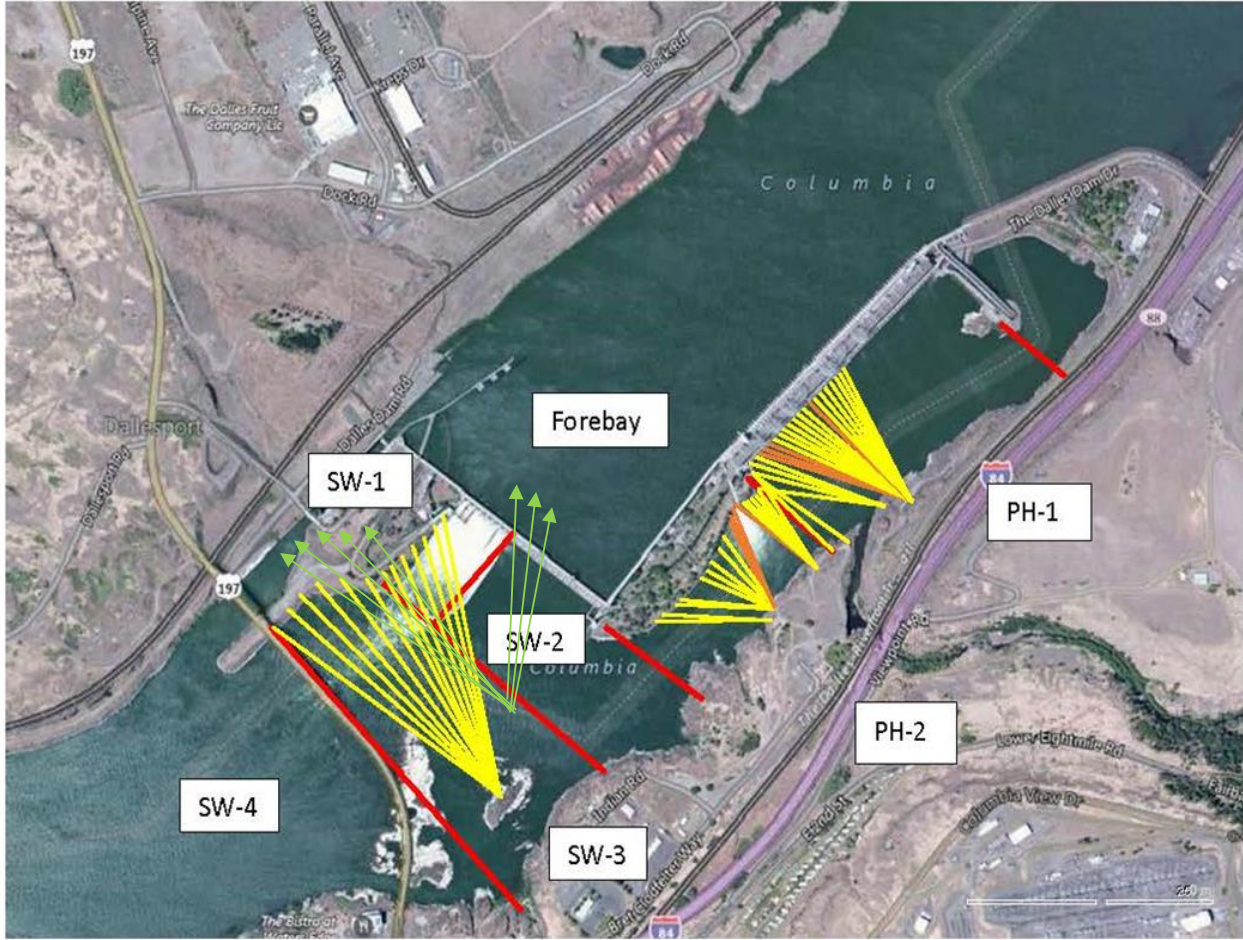
AWS intake trashrack debris issue - No funding FY22.  
Fish Accords Lamprey Passage plan ongoing at 60% DDR junction pool LPS  
PITAGS fishladder data collection at in service count station continues.  
Fish unit rehab - Phase 1A on hold. Date to be determined. Planning operation with AWS backup water supply during construction.  
PUD new juvenile sampling facility near complete. Fish condition testing next week. Subyearling and lamprey morts found in PUD intake. MFR to FPOM.  
4 peaks video count underway. Visual counting April 1

### Fishway Operations

East and North fishways in full service  
Ice Trash sluiceway endgate Open. MU1 and 18 intakes opened for fish egress according to FPP

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

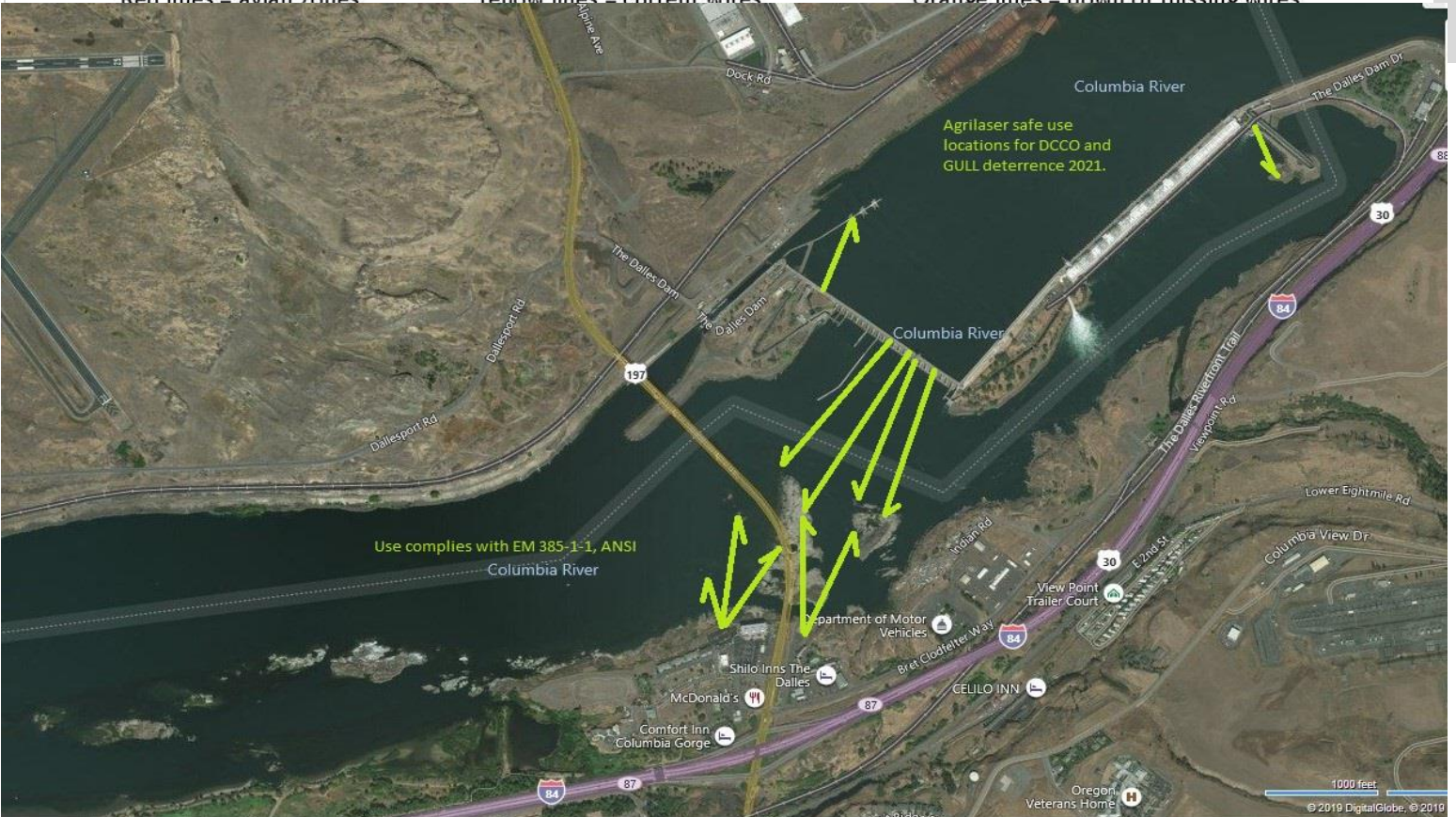
New Avian Lines and laser deterrent zones



Red lines = avian zones

Yellow lines = current wires

Orange lines = down or missing wires

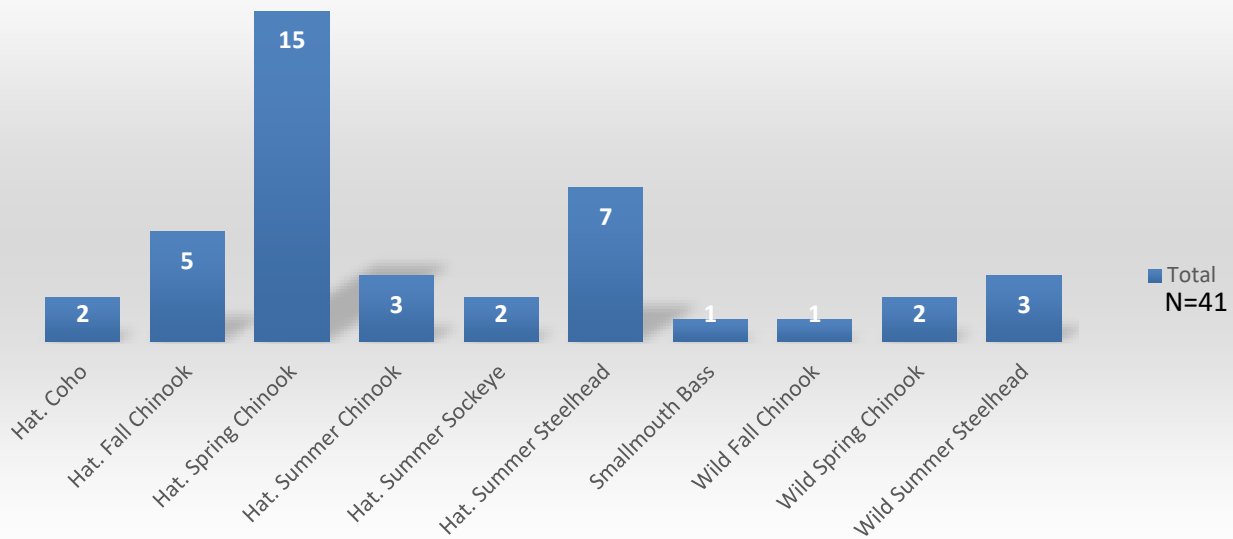


Use complies with EM 385-1-1, ANSI

Agrilaser safe use locations for DCCO and GULL deterrence 2021.



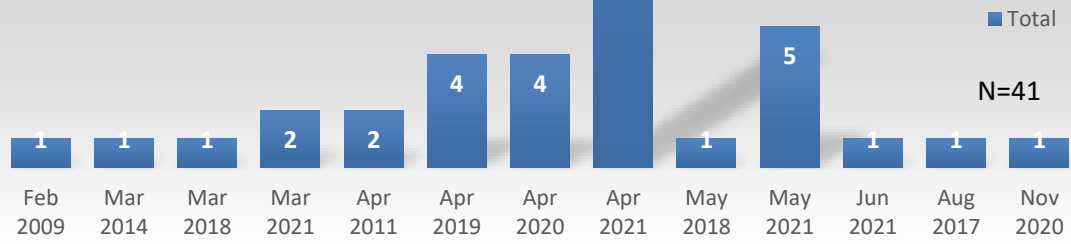
### PIT by species TDBPA tower Cormorant colony



PIT tags found on Navlock upstream guidewall on 3/24/2022.

This is considered only a small fraction of total PITs under the towers. Nav wall is less than 10% of tower foot print. PIT retention on wall is likely minimal due to weather and wind.

# PITs by Date of Release TDBPA Cormorant colony



# Fish Ladders-River Temperatures

— East Count Station    — North Count Station    — North Entrance    ● Current USGS Daily Average    ▲ USGS Daily Average (2007-2021)



Secchi:		USGS°F
4.0	Sun	43.1
4.0	Mon	43.2
4.0	Tue	43.5
4.5	Wed	44.2
5.0	Thurs	44.6
4.5	Fri	44.8
5.0	Sat	45.2
4.4	median	44.2

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

out of criteria

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
3/20	1.1	8.9	1.4	2.8	11.9	12.3	10.8	1.4	9.6	9.8	-2.8	1.6	8.5	8.6
	1.1	10.0	1.5	2.6	11.7	12.0	10.6	1.5	9.4	9.6	-3.0	1.6	8.5	8.5
3/21	1.3	9.8	1.3	3.7	12.0	12.4	11.7	1.3	10.2	10.4	-2.0	1.5	9.1	9.3
	1.3	9.9	1.3	3.9	11.8	12.2	11.9	1.3	10.2	10.4	-1.8	1.5	9.4	9.4
3/22	1.4	9.8	1.4	5.0	13.0	10.4	13.0	1.3	10.2	10.4	-0.7	1.4	10.3	10.4
	1.3	9.9	1.6	3.9	12.8	10.0	12.0	1.7	9.2	9.5	-1.7	1.5	9.7	9.8
3/23	1.4	9.6	1.4	4.1	13.4	9.6	12.0	1.4	10.0	10.3	-1.6	1.4	9.6	9.8
	1.2	9.9	1.4	4.1	13.4	9.7	12.1	1.4	9.8	10.1	-1.6	1.5	9.7	9.8
3/24	1.3	9.7	1.5	3.5	13.1	9.5	11.5	1.5	9.8	10.0	-2.1	1.5	9.4	9.5
	1.3	9.8	1.4	3.4	12.7	12.7	11.4	1.5	9.1	9.4	-2.8	1.5	8.8	8.8
3/25	1.3	9.9	1.3	4.2	12.8	12.8	12.3	1.4	10.0	10.3	-1.2	1.5	9.4	9.6
	1.3	9.7	1.5	3.6	12.3	12.3	11.6	1.3	10.1	10.4	-0.9	1.4	10.0	10.1
3/26	1.2	9.9	1.8	4.0	11.7	11.7	12.0	1.6	9.1	9.4	-1.4	1.5	9.7	69.7
	1.4	9.6	1.7	4.0	11.7	11.7	12.0	1.7	9.0	9.3	-1.5	1.5	9.7	9.7
<b>AVG:</b>	<b>1.3</b>	<b>9.7</b>	<b>1.5</b>	<b>3.8</b>	<b>12.5</b>	<b>11.4</b>	<b>11.8</b>	<b>1.4</b>	<b>9.7</b>	<b>9.9</b>	<b>-1.8</b>	<b>1.5</b>	<b>9.4</b>	<b>13.8</b>

Fishways are inspected once daily.





Upstream Navlock guidewall PIT scanned.