

The Dalles Dam Fishway Status Report

12/12/21

Inspection Period: 12/5 - 12/11, 2021

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: 10		Temperature: 48.7 °F
			Comments: fished EFL below TW 12/8		Weekly Ave. Secchi: 4.0

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')	Weekly average	9.6
Entrance Differential	0	1.0' - 2.0'	Weekly average	1.4
Entrance weir N2	0	Closed		
PUD Intake differential	0	≤ 0.5'	Significant aquatic weeds accumulating. Rake turned over to PUD operations.	

EAST FISHWAY - out of service

Exit differential		≤ 0.5'		
Removable weirs 154-157		Per forebay		
Weir 158-159 differential		1.1' ± 0.1'		
Count station differential		≤ 0.3'		
153 Weir crest depth		1.0' ± 0.1'		
Junction pool weir JP6		> 7.0'	Average for week =	16.5
East entrance differential		1.0' - 2.0'		
Entrance weir E1		No criteria		
Entrance weir E2		depth (≥ 8')		
Entrance weir E3		depth (≥ 8')		
Collection channel velocity		1.5 - 4 fps	Dewatered	
Transportation channel velocity		1.5 - 4 fps	Dewatered	
North channel velocity		1.5 - 4 fps	2.6 fps 12/7/21	
South channel velocity		1.5 - 4 fps	Dewatered	
West entrance differential		1.0' - 2.0'	Week ave.	0.0
Entrance weir W1		depth (≥ 8')	Week ave.	0.0
Entrance weir W2		depth (≥ 8')	Week ave.	0.0
Entrance weir W3		No criteria	Closed	
South entrance differential		1.0' - 2.0'	Week ave.	0.0
Entrance weir S1		depth (≥ 8')	Week ave.	0.0
Entrance weir S2		depth (≥ 8')	Week ave.	0.0

JUVENILE BYPASS

Sluiceway operation	0	Units 1,8, 18	Gates over MU1/1-2, moved to MU4, MU8/1-3, MU18-2 open. Total 4 open gates through Dec15	
Turbine trashrack drawdown	0	<1.5', biwkly	10/20/21, all gatewells in criteria.	
Spill volume/pattern	0	1 to 8	Spill closed 9/1/21	
Turbine Unit Priority	0	per FPP	Mus 1-3 OOS due to crane rail replacement work.	
Gatewells	0	Weekly	No mortality 11/17/2021.	

OTHER ISSUES:

Current Unit Outages

- SS01 OOS 0001 11/17/2021 – 1700 11/24/2021 for Annual
- MU3 OOS 0630 9/20/2021 – 1700 11/24/2021 for Crane Rail Replacement
- MU2 OOS 0630 9/20/2021 – 1700 11/24/2021 for Crane Rail Replacement
- MU1 OOS 0630 9/20/2021 – 1700 11/24/2021 for Crane Rail Replacement
- 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

Navlock outage Feb 13-Mar19

Maintenance

Permanent oil boom removed from east exit for repairs. Attachment bracket redesign.

Fishway automation replacement work in progress. Approximately half complete.

Calibrations: North channel openings in criteria. Upgrades to east opening automation gates underway by TDE.

12/7/2021 North channel velocity measured with floating peel 2.7fps. North channel measured with new mechanical meter, 2.6fps.

Spillway assessment (MRER); Spillgates 1- 9 rehab date estimate 2034. Includes replacement of spillbay 9 trunnion pin repair

East fishway lower channels dewatered for winter maintenance; 10 steelhead, 1 coho, 138 lamprey, 4 sturgeon, 7 walleye

MU1 dewatered for overhaul. No fish found in scroll or draft tube.

Predators

Few cormorants foraging in SW2 & 3. Bald eagles beginning to show up.

Western gulls foraging at nav lock and in PH1/ PH2

More walleye found in east fishway channels than previous years.

Research/Construction/Contractors

[TD-USGS °F](#) For water temps

AWS intake trashrack/trash rake- No funding FY22.

Fish Accords Lamprey Passage plan for The Dalles ongoing at 30% DDR junction pool. Will discuss east ladder dewatering lamprey morts.

PITAGS north and east fishladder data collection at count stations continues.

Fish unit rehab - Phase 1A on hold. Date to be determined. Planning operation with AWS backup water supply during construction.

Northern Pikeminnow Management Program season concluded w/1384 native pikeminnow removed YTD

PUD removing debris from location where a new juvenile sampling facility will be constructed prior to upcoming fish season 2021/2022

Crane rail replacement underway on intake deck units 1-4. Sluiceways unit 1 moved to unit 4 open.

Additional PIT tags recovered from east ladder found in gravel piles at east, west and south entrances. Will be uploaded to PTAGIS site TDAMRT

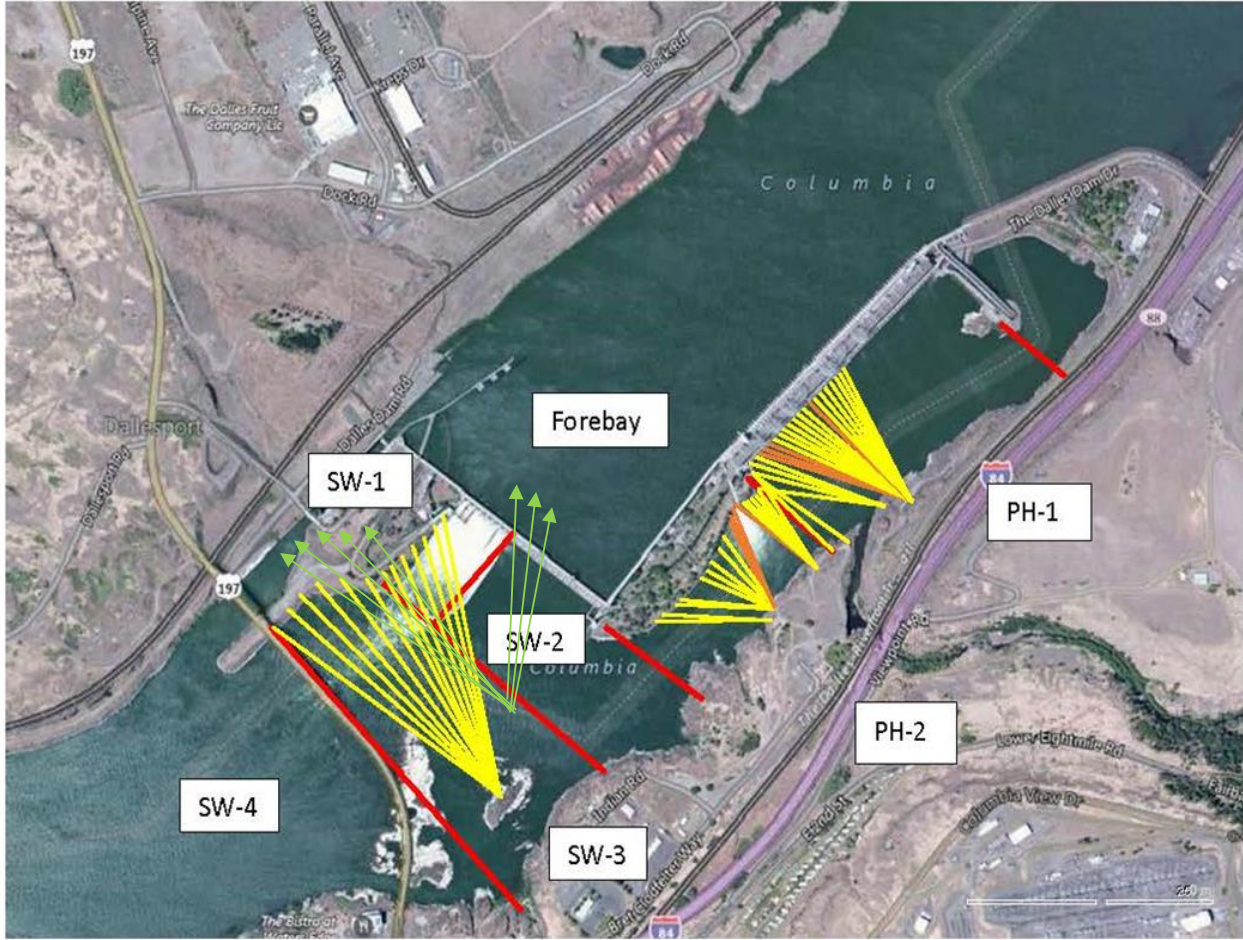
Fishway Operations

Ice Trash sluiceway opened 24/7. MU4/1-2-3, MU 8/1-2, MU18/2 Sluice openings move to unit 4 due to concrete-crane rail removal

East and north fish ladders in full operation per Fish Passage Plan.

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

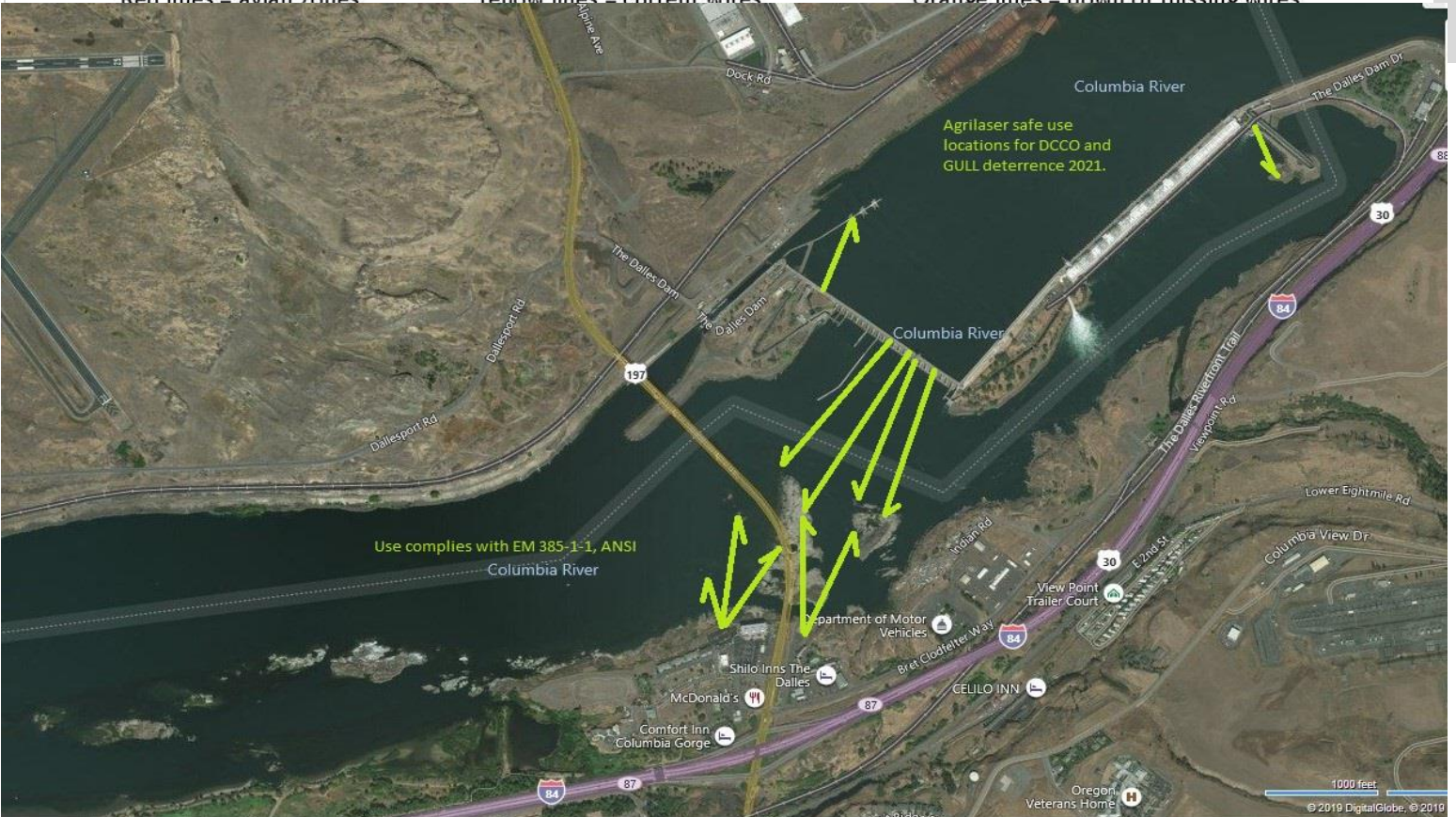
New Avian Lines and laser deterrent zones



Red lines = avian zones

Yellow lines = current wires

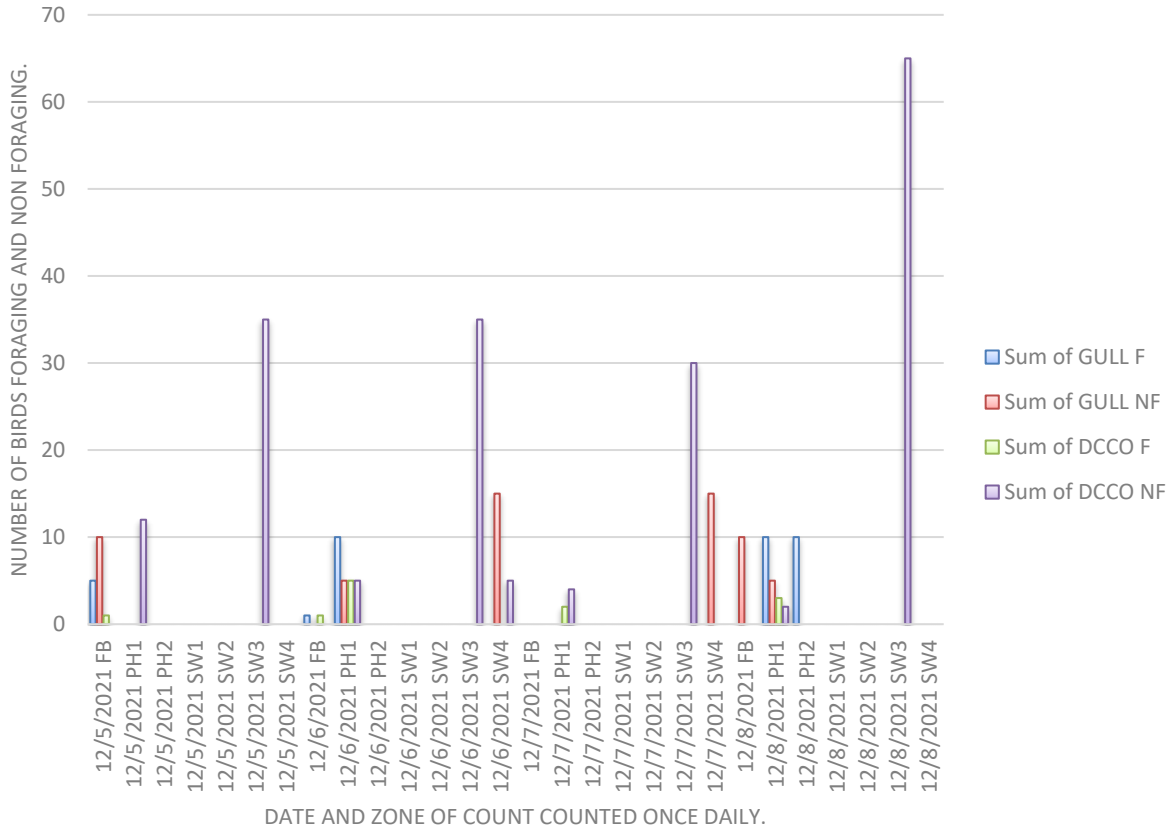
Orange lines = down or missing wires



Use complies with EM 385-1-1, ANSI

Agrilaser safe use locations for DCCO and GULL deterrence 2021.

Avian predators at TDA from 12/5 to 12/8/2021



Secchi:		USGS°F
6.0	Sun	48.8
5.0	Mon	48.8
5.0	Tue	48.7
	Wed	48.8
3.0	Thurs	48.4
3.0	Fri	48.2
2.0	Sat	48.3
4.0	median	48.7

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

E1 and W3 no criteria
out of criteria

Date:	North Ladder		East Ladder										
	Differential	N1 Depth	East Entrance					West Entrance				South Entrance	
			Differential	E1 Depth	E2 Depth	E3 Depth	JP 6	Differential	W1	W2	W3	Differential	S1
12/5	1.5	9.5	Fish Turbines off at 00:00 12/1 EL dewatered 12/2										
12/6	1.4	9.4											
12/7	1.4	9.4											
12/8	EFL dewater below tailwater												
12/9	1.4	9.7											
12/10	1.4	9.8											
12/11	1.3	9.7											
AVG:	1.4	9.6											

Fishways are inspected twice daily. Overnight trend monitored via Old SCADA operating at west entrance.



Lamprey found 12/4/2021 stranded in east ladder above tailwater. Recovery and examination 12/7/2021 MFR provided to FPOM. Continuing search to resolve this problem. Lamprey improvement team notified.



Dewater lower channel 12/8/2021

