

The Dalles Dam Fishway Status Report

12/13/2020

Inspection Period: 12/6 - 12/12

THE DALLES DAM

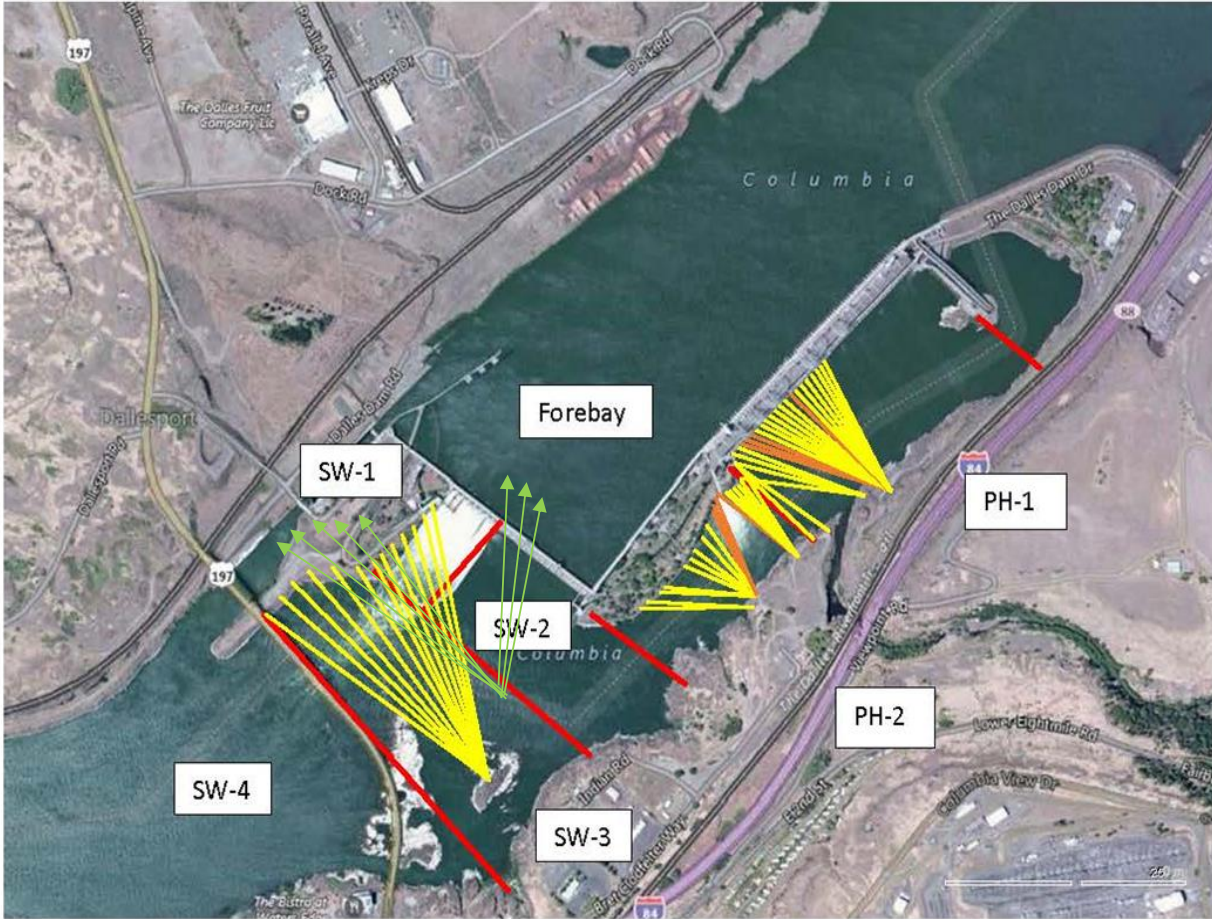


US Army Corps
of Engineers
Portland District

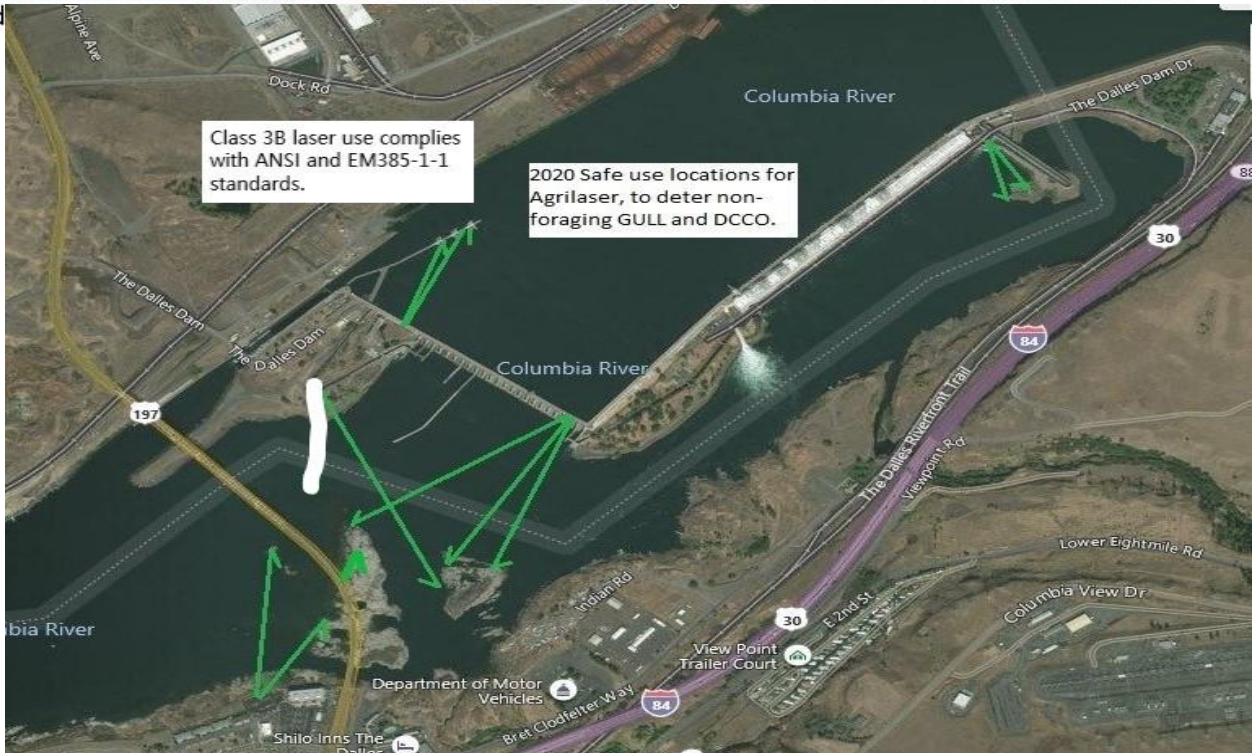
The Dalles Project-Fisheries
P.O. Box 564
The Dalles, OR 97058-9998
Phone: 541-506-3800

The Dalles Dam	Inspections OOC	Criteria Limit	Total Number of Inspections: 21	Temperature: #DIV/0! °F
			Comments: fishways functional	Weekly Average Secchi: 5.0
NORTH FISHWAY				
Exit differential	0	≤ 0.5'		
Count station differential	0	≤ 0.3'		
Weir crest depth	0	1.0' ± 0.1'		
Entrance differential	0	1.0' - 2.0'	1.3	
Entrance weir N1	0	depth (≥ 8')	9.1	
Entrance weir N2	0	Closed		
PUD Intake differential	0	≤ 0.5'	TDM unable to remove significant floating weeds buildup. North FB index data unreliable.	
EAST FISHWAY				
Exit differential	Fishway closed	≤ 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		1.3' ± 0.1'		
Junction pool weir JP6		> 7.0'	Average for week =	0.0
East entrance differential		1.0' - 2.0'	Average for week =	0.0
Entrance weir E1		No criteria	Average for week =	No criteria
Entrance weir E2		depth (≥ 8')	Average for week =	0.0
Entrance weir E3		depth (≥ 8')	Average for week =	0.0
Collection channel velocity		1.5 - 4 fps	2.94fps 11/26/2020	Range: Data unavailable
Transportation channel velocity		1.5 - 4 fps	2.51 fps, 11/26/2020	
North channel velocity		0	1.5 - 4 fps	3.22 fps, 12/6/2020
South channel velocity	Fishway closed	1.5 - 4 fps	4.24fps, 11/26/2020	
West entrance differential		1.0' - 2.0'	Average for week =	0.0
Entrance weir W1		depth (≥ 8')	Average for week =	0.0
Entrance weir W2		depth (≥ 8')	Average for week =	0.0
Entrance weir W3		No criteria		
South entrance differential		1.0' - 2.0'	Average for week =	0.0
Entrance weir S1		depth (≥ 8')	Average for week =	0.0
Entrance weir S2		depth (≥ 8')	Average for week =	0.0
JUVENILE PASSAGE				
Sluiceway operation	0	Units 3, 18	MU8 OOS and MU1-2 OOS	
Turbine trashrack drawdown	0	<1.5', biwklly	11/26/2020 checked, all in criteria.	
Spill volume/pattern	0	1 to 8	Spill closed 9/1/2020.	
Turbine Unit Priority	21	per FPP	All available MUs running; OOC due to forced outages	
Gatewells	0	Weekly	11/26/2020 fish check, no fish mortality seen.	

New Avian Lines and laser deterrent zones



Red



OTHER ISSUES:

Current Unit Outages

- Line 1, MU1, & MU2 OOS for T1 replacement MU2 Overhaul and MU1 Annual through 2/28/2021
- T10 (MU19 & 20) FOOS through 10/28/2021 due to acetylene levels
- SSO1 OOS for Overhaul and DC Governor oil Pump Install 0630 11/2/2020 - 1700 1/14/2021
- FU1 OOS 0001 12/1/2020 – 1700 1/21/2021 for Overhaul & TA Vault Demo
- FU2 OOS 0001 12/1/2020 – 1700 1/21/2021 for Annual & TA Vault Demo
- T6 OOS 0630 12/14/2020 - 1700 12/21/2020 for GSU Re-Work, Oil Leak Repairs

Maintenance

East fish ladder dewatered to tail water 12/2, minimal fish handled, details available
PUD intake rake out of service due to power track damage. Exploring repair options. Attempting to rake with mobile crane.
Five of 6 east fishway collection channel dewatering pumps removed for repair/rehab. Work to resume FY21.
East and north fishway automation PLC panels installed. All sensors installed. Programming underway. Completion target end Jan.
Spillway assessment (MRER); Spillgate 9 trunnion pin included.
Calibration checks on North fishway entrance and exits 12/11/20, all within criteria.

Predators

Moderate/high gull numbers. Refer to avian graph tab for bird numbers.
Green laser use for piscivorous bird hazing testing continues. Effective tool for roosting birds during low light.
Invasive aquatic weeds significant at count station pickets and north exit.
Pikeminnow dam angling resumes next May. **All invasive bass/walleye by-catch release to continue per state requirement.**

Research/Construction/Contractors

District Dive office to ROV east fishway diffuser grating, AWS and east exit trashracks for condition 12/28-29
AWS intake trashrack - EDR funded for FY21 to investigate solution for debris plugging issue.
PITAGS north and east fishladder data collection at north count stations continues. East antenna annual maintenance this month during dewatering.
Fish unit rehab - Phase 1A. Planning operation with AWS backup water supply during construction on hold.
WDFW sturgeon tagging successful during east fishladder dewatering 12/2, more details to follow

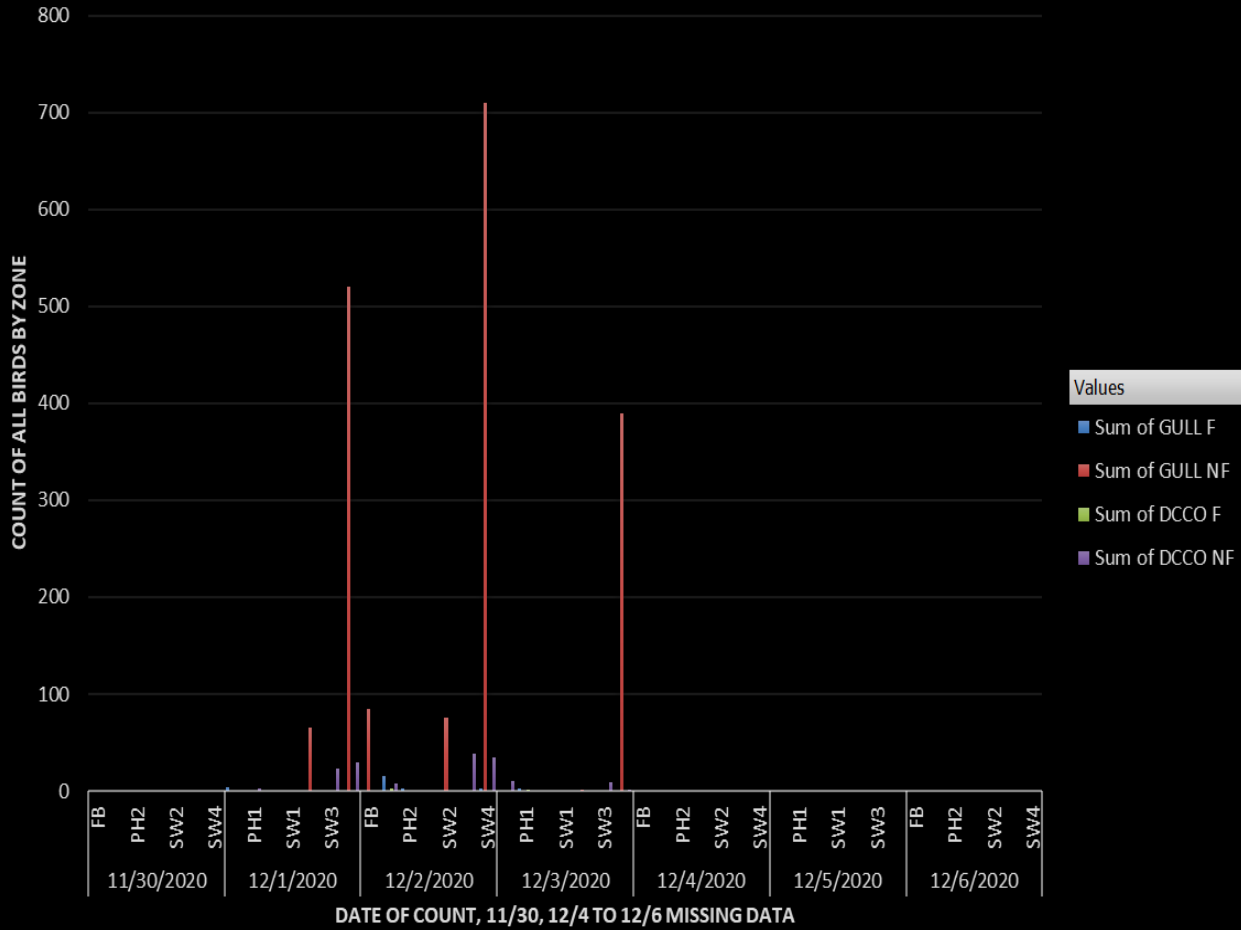
Fishway Operations

North fish ladder in full operation-East ladder dewatered 12/2 -mostly shad, some sturgeon, coho, steelhead

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

Sum of GULL F Sum of GULL NF Sum of DCCO F Sum of DCCO NF

The Dalles Dam Daily Count Piscivorous Birds 11/30 to 12/6/2020



Date ZONE

+ -

USGS River Temperatures

○ Current USGS daily tailwater average ▲ USGS daily tailwater average (2007-2019)



Secchi:		°F	USGS Dec
12/6	5.0	Sun	
12/7	5.0	Mon	
12/8	5.0	Tue	
12/9	5.0	Wed	
12/10	5.0	Thurs	
12/11	5.0	Fri	
12/12	5.0	Sat	
	5.0	AVG	#DIV/0!

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

SCADA INSPECTION
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
12/6	1.3	9.2	East Ladder dewatered										
12/7	1.3	9.0											
12/8	1.4	9.0											
12/9	1.3	9.1											
12/10	1.3	9.0											
12/11	1.4	9.1											
12/12	1.2	9.3											
AVG:	1.3	9.1											

Fishways are inspected once daily plus one SCADA inspection.



Guides receiving plating for improved lamprey passage

Vertical line of text on the left side of the page.