

The Dalles Dam Fishway Status Report

1/3/2021

Inspection Period: 12/27/2020 - 1/2/2021

THE DALLES DAM



The Dalles Project-Fisheries
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The Dalles Dam	Inspections OOC	Criteria Limit	Total Number of Inspections: 4	Temperature: 43.2 °F
			Comments: North fishway functional	Weekly Average Secchi: 6.0

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')	9.3
Entrance weir N2	0	Closed	
PUD Intake differential	3	≤ 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	2.69 fps, 12/26/2020
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

Sluicgate operation	0	Units 1, 3, 18	Sluice closed 1,3,18 gates open to flush.
Turbine trashrack drawdown	0	<1.5', biwkly	11/26/2020 checked, all in criteria.
Spill volume/pattern	0	1 to 8	Spill closed 9/1/2020.
Turbine Unit Priority	0	per FPP	
Gatewells	0	Weekly	11/26/2020 fish check, no fish mortality seen.

OTHER ISSUES:

Current Unit Outages

FU1 and 2 out through 1/21/20 for winter maintenance
MU1 and 2 out through 2/28/21 for T1 replacement
SSO1 out through 1/14/21 for overhaul
MU9 and 10 out through 1/5 for T6 trip circuit
MU11 and 12 out through 1/5 for oil leak repair
MU19 and 20 out through 10/28/21 for T10 acetylene levels

Maintenance

Repairing wind damaged debris guard for north fishladder exit.
PUD intake rake out of service due to power track damage. Exploring short and long term options.
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.
Grating gaps discovered at east entrance through ROV inspection. Dive repair planned for week of Jan11.

Predators

Moderate to high gull numbers. Refer to avian graph tab for bird numbers.
Green laser use for piscivorous bird hazing testing continues. Effective on roosting birds during low light.
Investigating falconry for forebay tower cormorant deterrence
Pikeminnow dam angling resumes next May. **All invasive bass/walleye by-catch release to continue per state requirement.**

Research/Construction/Contractors

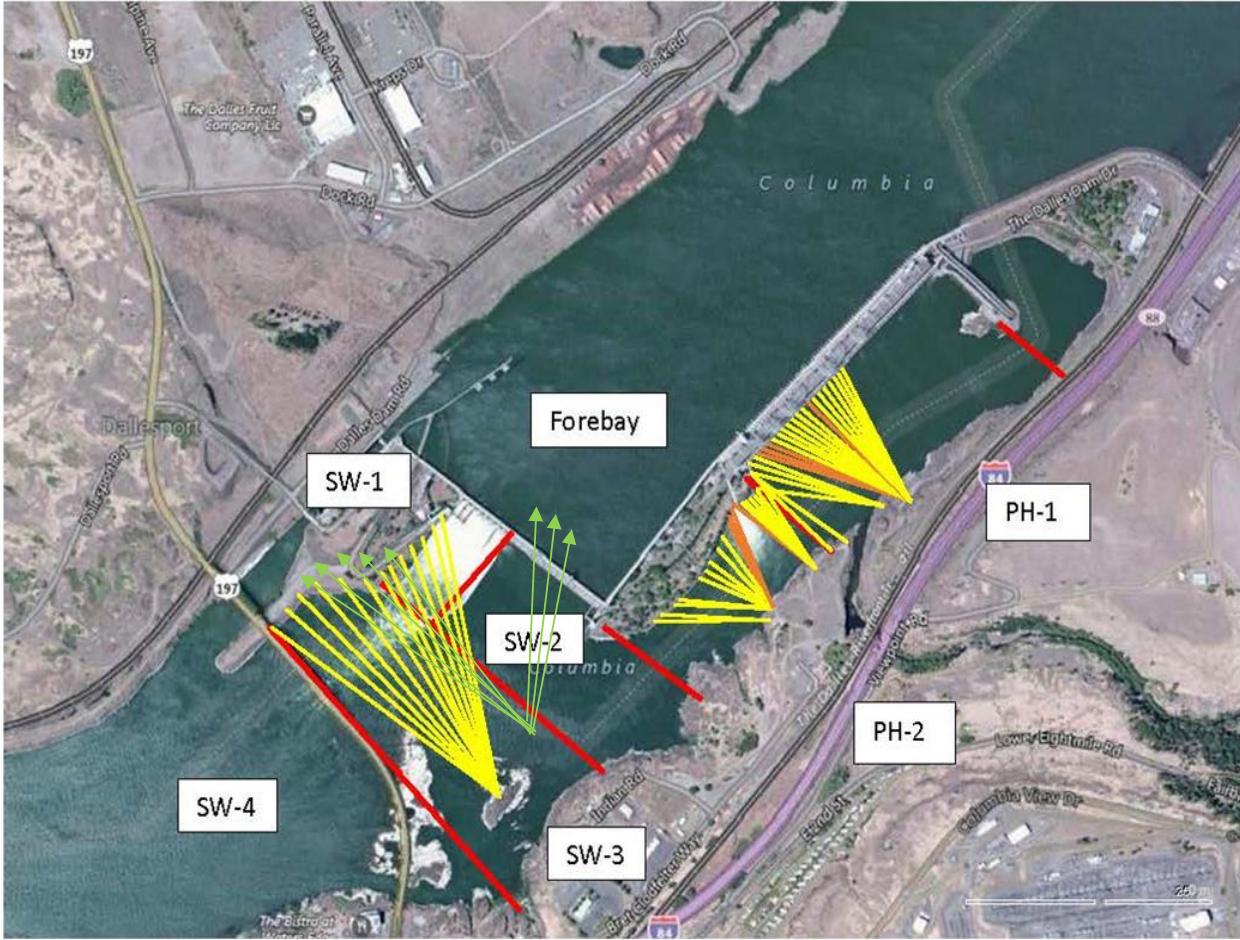
PIT scanning in east ladder done by project staff. Approx 20 tags recorded. Investigating possible source. Data entered in PITAGS
AWS intake trashrack - EDR funded for FY21 to investigate solution for debris plugging issue. Awaiting planning meetings
PITAGS north and east fishladder data collection at 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.

Fishway Operations

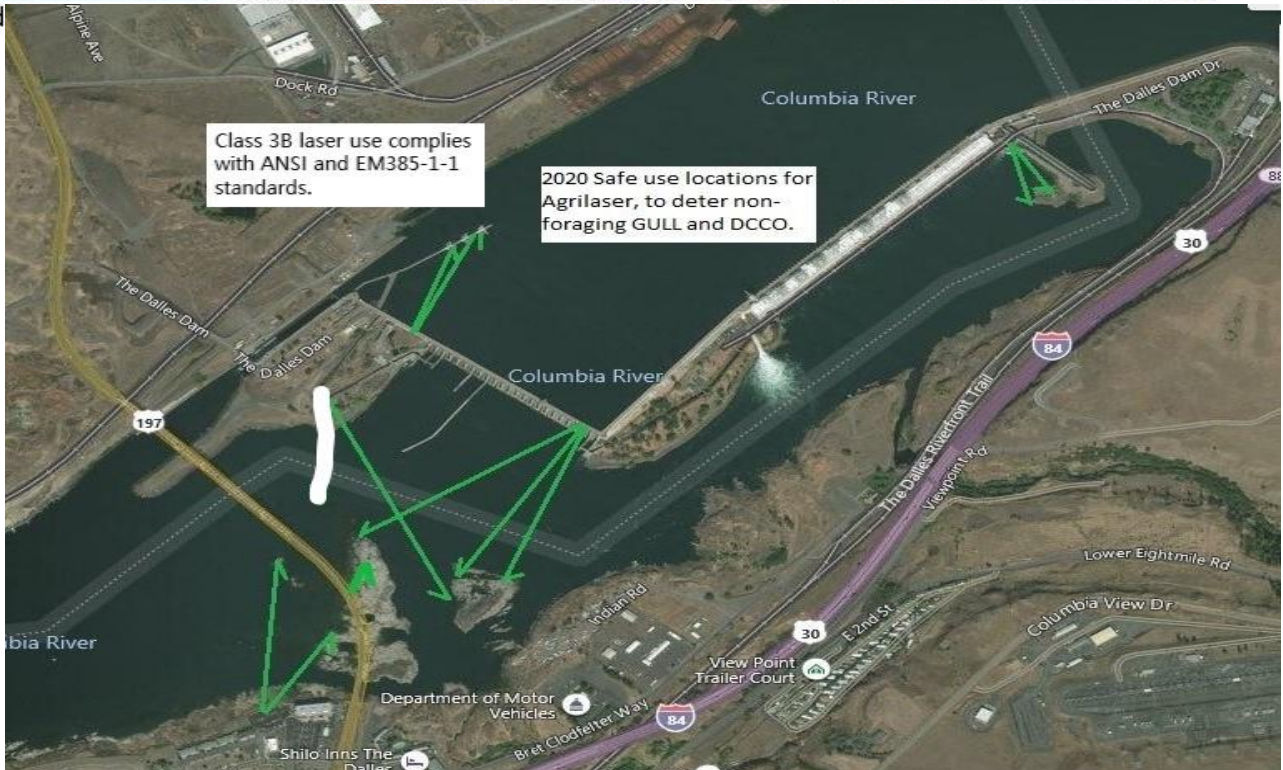
North fish ladder in full operation
East ladder dewatered Dec2
Sluiceway closed until Mar1

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

New Avian Lines and laser deterrent zones

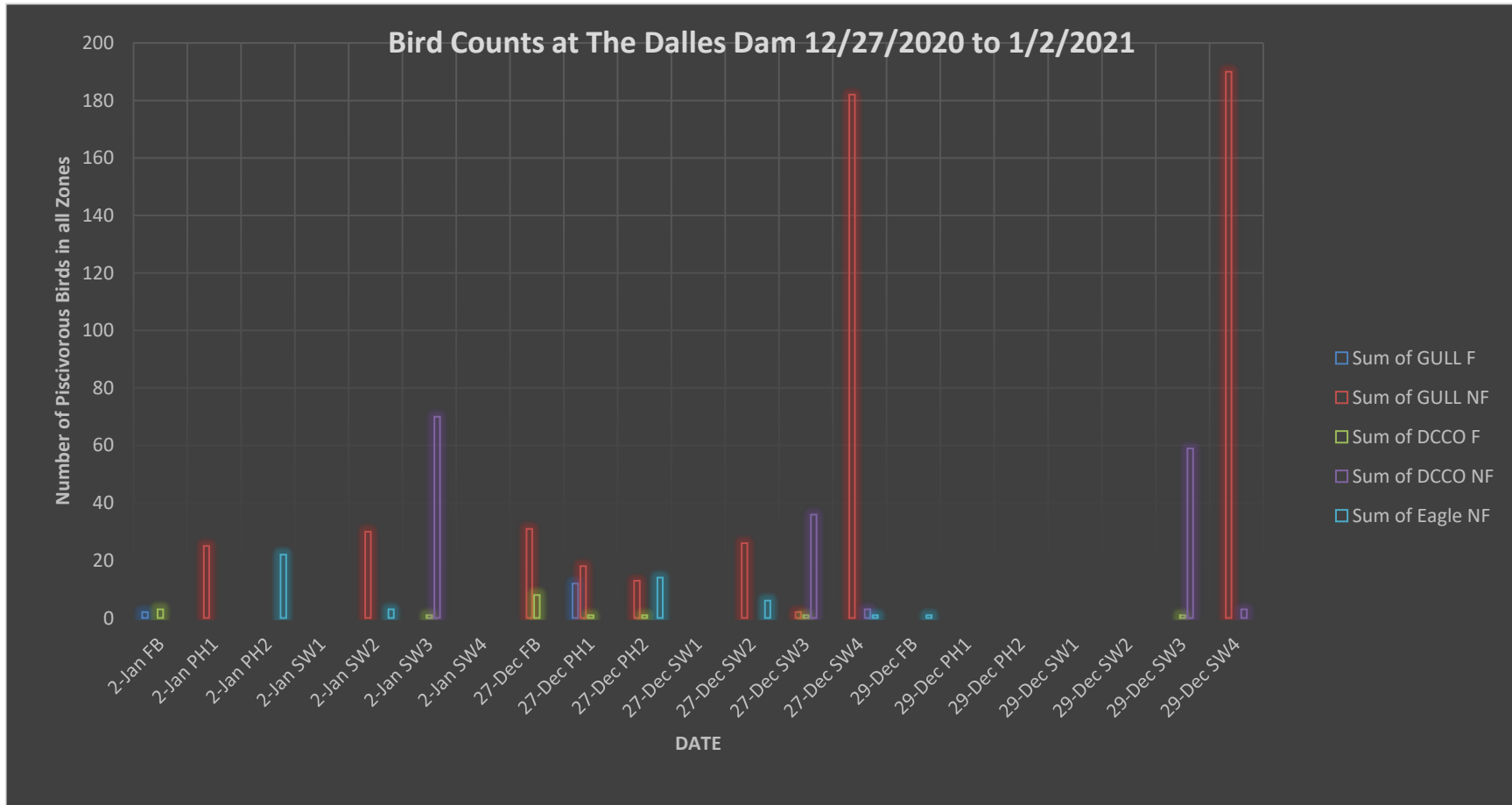


Red



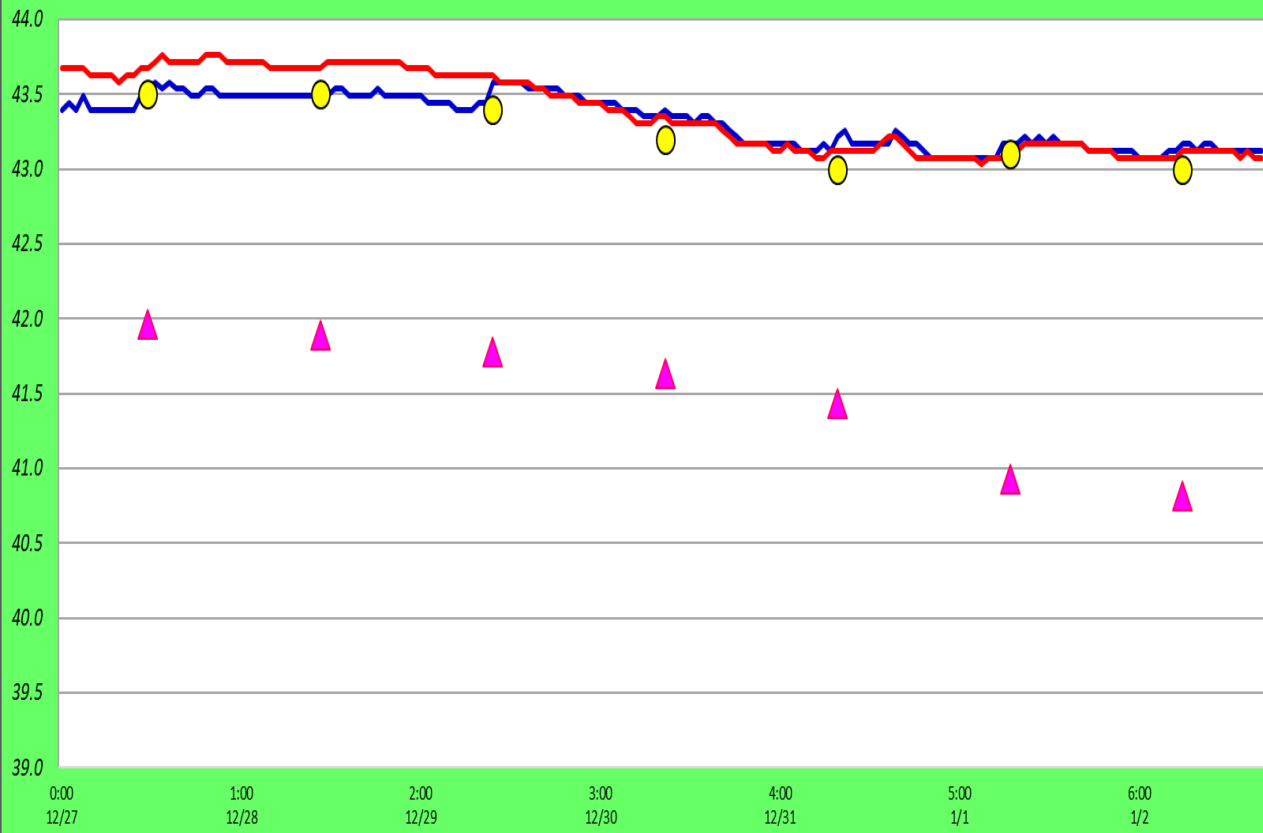
3-Jan-21

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North Fish Ladder-River Temperatures

— North Count Station — North Entrance ○ Current USGS daily tailwater average ▲ USGS daily tailwater average (2007-2019)



	Secchi:		°F
12/27	6.0	Sun	43.5
12/28	6.0	Mon	43.5
12/29	6.0	Tue	43.4
12/30	6.0	Wed	43.2
12/31	6.0	Thurs	43.0
1/1	6.0	Fri	43.1
1/2	6.0	Sat	43.0
	6.0	AVG	43.2

USGS Dec
USGS Jan

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

SCADA INSPECTION

out of criteria

1/1.

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
12/27	1.0	9.4											
12/28	1.2	9.3											
12/29	1.2	9.1											
12/30	1.3	9.4											
12/31	1.5	9.1											
1/1	1.4	9.4											
1/2	1.3	9.3											
AVG:	1.3	9.3											

East Ladder dewatered

Fishways are inspected once daily. No SCADA inspection.



Find the eagle.