### The Dalles Dam Fishway Status Report

01/31/2021

Inspection Period: 01/24-01/30

#### THE DALLES DAM



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

The Dalles Dam	Inspections	Criteria	Total Number of Inspections: 7	7	Temperature: 40.8 °F
i ne Dalles Dam	ooc	Limit	Comments:		Weekly Ave. Secchi: 4.4
		NORTH	FISHWAY (Dewatered 1/2	6)	
Exit differential	0	≤ 0.5'			
Count station differential	0	≤ 0.3'			
Weir crest depth	0	1.0' ± 0.1'			
Entrance differential	0		1.3		
Entrance weir N1	0	depth (≥ 8')	9.6		
Entrance weir N2	0	Closed			
PUD Intake differential	4	≤ 0.5'			
	EA	ST FIS	<b>HWAY (Return operation 1</b>	/25	5)
Exit differential	0	≤ 0.5'			
Removable weirs 154-157	0	Per forebay	156 lagging behind forebay level Adjusting autom	ation	
Weir 158-159 differential	0		Adjusting automation		
Count station differential	0	≤ 0.3'			
153 Weir crest depth	1	1.3' ± 0.1'	Adjusting automation		
Junction pool weir JP6	0	> 7.0'	, ,		
East entrance differential	0	1.0' - 2.0'	1 fish unit operation		
Entrance weir E1	0	No criteria			
Entrance weir E2	0	depth (≥ 8')			
Entrance weir E3	0	depth (≥ 8')			
Collection channel velocity	NA	1.5 - 4 fps			
Transportation channel velocity	NA	1.5 - 4 fps			
North channel velocity	NA	1.5 - 4 fps			
South channel velocity	NA	1.5 - 4 fps			
West entrance differential	2		0.9'		
Entrance weir W1	4	depth (≥ 8')			
Entrance weir W2	4	depth (≥ 8')			
Entrance weir W3	0	No criteria	Closed		
South entrance differential	NA	1.0' - 2.0'	No indication		
Entrance weir S1	NA		No indication		
Entrance weir S2	closed		1 fish unit operation		
			JUVENILE PASSAGE		
Sluicegate operation	0	Units 1, 3, 18			
Turbine trashrack drawdown	0	<1.5', biwkly			
Spill volume/pattern	0	1 to 8			
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly			

#### OTHER ISSUES:

#### **Current Unit Outages**

Line1 OOS. T1 replacement through 2/3/21

MU1 OOS through 2/5/21 annual

MU2 OOS through 2/28/21 overhaul

T10 (MU19 and 20) OOS 10/28/21 acetylene levels

SS01 OOS through 2/1/21 overhaul

FU1 OOS through 2/25/21 overhaul

#### Maintenance

Repaired wind damaged debris guard for north fishladder exit. Installation Feb17.

PUD intake rake out of service due to power track damage. Exploring repair options. Temporary repair planned for 2021 season.

Five of 6 east fishway collection channel dewatering pumps removed for repair/rehab. Work to resume FY21.

Fishway automation (SCADA) continues. Exit in operation. East entrance near complete. West and south on hold due to budget constraints.

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

Troubleshooting new east fishway automation issues. Affecting criteria operation.

North fishway difuser grating and weirs inspected in dry. No problems found.

No calibrations this week.

#### **Predators**

Moderate gull numbers. Refer to avian tab for bird numbers. Bald eagles have arrived to feed on shad fall back.

Green laser use for piscivorous bird hazing testing continues. Effective on roosting birds during low light.

Investigating falconry for forebay tower cormorants.

Pikeminnow dam angling resumes next May. All invasive bass/walleye by-catch release to continue per state requirement.

Recovered 52 PIT tag numbers with ground scanners in SW4, known gull and pelican resting areas.

#### Research/Construction/Contractors

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 on hold. Planning operation with AWS backup water supply during construction.

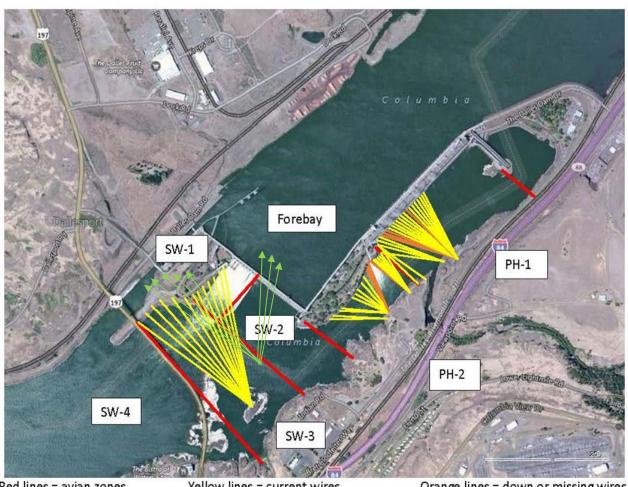
#### Fishway Operations

North fishway in full operation to 1/26

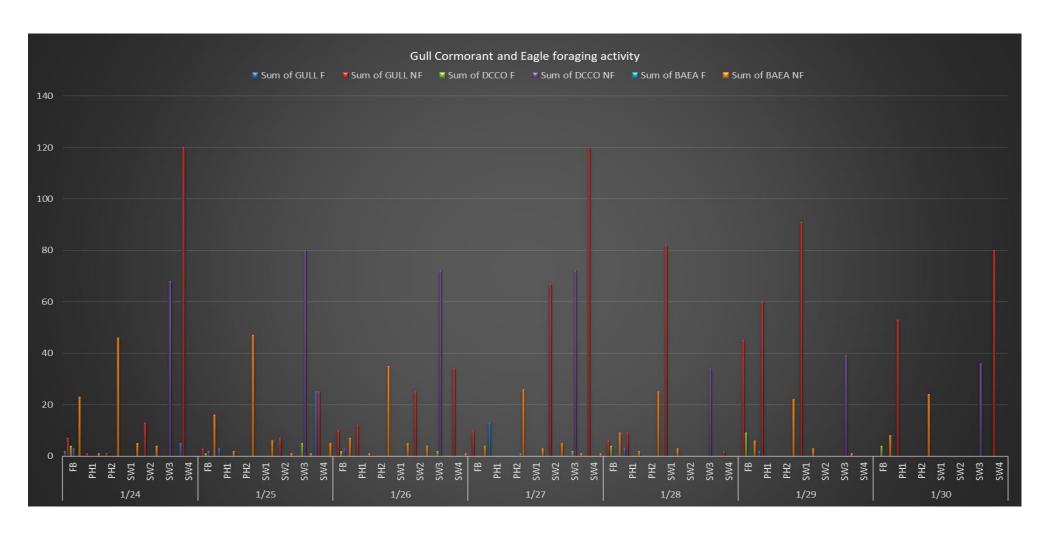
East ladder return 1/20. Single fish unit operation 1/25

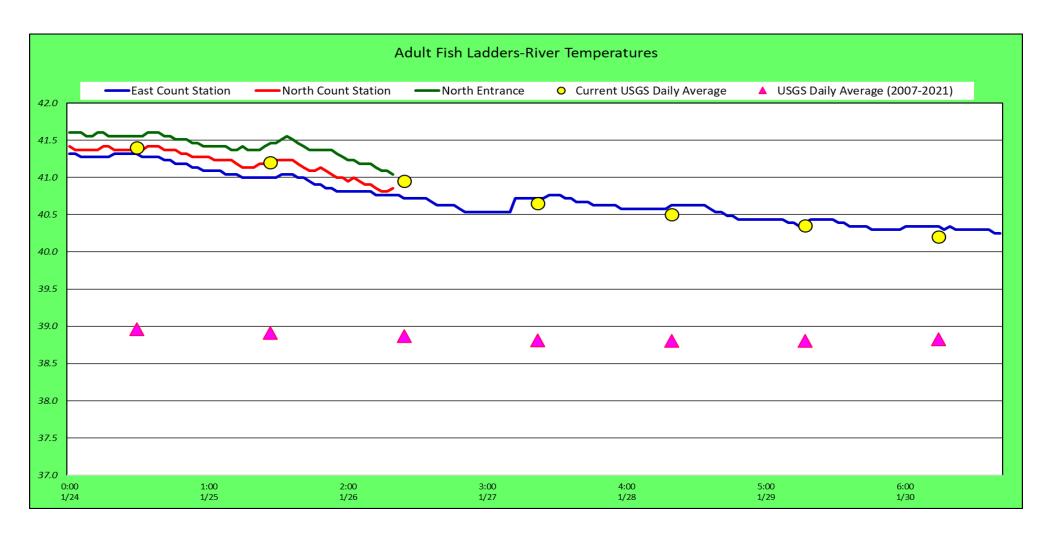
Approved by: Ron Twiner, Operation Project Scanning for PITs.

# New Avian Lines and laser deterrent zones









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	Secchi:		°F
1/17	4.0	Sun	41.4
1/18	4.0	Mon	41.2
1/19	4.0	Tue	41.0
1/20	4.0	Wed	40.7
1/21	4.5	Thurs	40.5
1/22	5.0	Fri	40.4
1/23	5.0	Sat	40.2
	4.4	AVG	40.8

USGS Jan

## The Dalles Dam Daily Readings and Averages for

Temperatures, Secchi, Entrances, and Spill

SCADA INSPECTION out of criteria

	North Ladder		East Ladder											
Date:			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
1/24	1.3	9.6												
1/25	1.3	9.6												
1/26								1.3	3.1	2.5	0.6			
1/27								0.9	7.4	7.5	-0.7			
1/28	dewatered				no power			0.9	7.2	7.2	-0.9			
1/29								1.0	7.7	7.7	-0.4			
1/30								1.0	8.1	8.1	0.0			
AVG:	1.3	9.6						1.0	6.7	6.6	-0.3			

Fishways are inspected once daily.



New sluiceway cover to prevent spray and icing