

# The Dalles Dam Fishway Status Report

03/22/20

Inspection Period: 3/15-3/21, 2020

## 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:	Temperature:	43.3 °F
			Comments:	Weekly Average Secchi:	3.6

### 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'	
Entrance weir N1	0	depth (≥ 8')	
Entrance weir 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	0	1.1' ± 0.1'	
Count station differential	0	≤ 0.3'	
153 Weir crest depth	0	1.1' ± 0.1'	
Junction pool weir JP6	0	≤ 7.0'	
East entrance differential	0	1.0' - 2.0'	
Entrance weir E1	0	No criteria	
Entrance weir E2	0	depth (≥ 8')	
Entrance weir E3	0	depth (≥ 8')	
Collection channel velocity	0	1.5 - 4 fps	
Transportation channel velocity	0	1.5 - 4 fps	
North channel velocity	0	1.5 - 4 fps	
South channel velocity	0	1.5 - 4 fps	
West entrance differential	0	1.0' - 2.0'	
Entrance weir W1	0	depth (≥ 8')	
Entrance weir W2	0	depth (≥ 8')	
Entrance weir W3	0	No criteria	
South entrance differential	0	1.0' - 2.0'	
Entrance weir S1	0	depth (≥ 8')	
Entrance weir S2	0	depth (≥ 8')	

### JUVENILE PASSAGE

Sluiceway operation	0	Units 1, 18	
Turbine trashrack drawdown	0	<1.5', biwkly	Differential .1 to .6'. Fish check; No mortalities observed. 3/11/2020
Spill volume/pattern	0	None	
Turbine Unit Priority	0	Units 1, 18	Refer to next page for scheduled and forced outages.
	0		

## OTHER ISSUES:

### Fishway Operations

North fish ladder in full service

East fish ladder in full service

Spillway closed

Sluiceway opened with 2 open sluicegates unit 1 and 2 open unit 18. Open sluicegates to be moved to unit 3 for scheduled line 1 outage next week.

### Unit Outages

T10 (MU19 & 20) FOOS through 10/28/2021 due to acetylene levels

MU1 and MU2 restricted to 160 MW combined through 5/28/2020

MU12 OOS 12/2/2019 - 3/18/2020 T6 GSU Replacement & Annual

MU11 OOS 12/2/2019 - 3/18/2020 T6 GSU Replacement & O/H

MU8 OOS 1/21/2020 - 3/26/2020 for Overhaul.

### Maintenance

Calibration check 3/10/20; E1, S2 out of calibration. Working with maintenance to correct.

Five of 6 east fishway collection channel dewatering pumps removed for repair/rehab. Awaiting new pump motors for installation.

East fishway automation replacement installation starting. Brackets for sensors installed at east entrance. PLC box assembly starting in March.

North fishway lower diffuser valves inspected. Status to be included in overall diffuser valve plan.

North ladder count station malfunctioning diffuser valve removed and repaired. New valve purchased for install next year. Old valve will serve as spare.

Spillway assessment (MRER); No funding for FY20. Spillgate 9 fish priority included.

### Predators

Green laser use for piscivorous bird hazing testing on hold until all safety concerns are addressed.

USDA hazing resumes 4/15/20. Preseason planning meeting complete.

No sea lion observations this week.

### Research/Construction/Contractors

Four Peaks fish counting returning 4/1 Fish counter orientation 3/19. Preparing count stations. Pre season meeting with individuals staff this week.

AWS backup - Commissioning completed. Ready for operation if needed. Trying to address concerns over trashrack cleaning deficiency

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

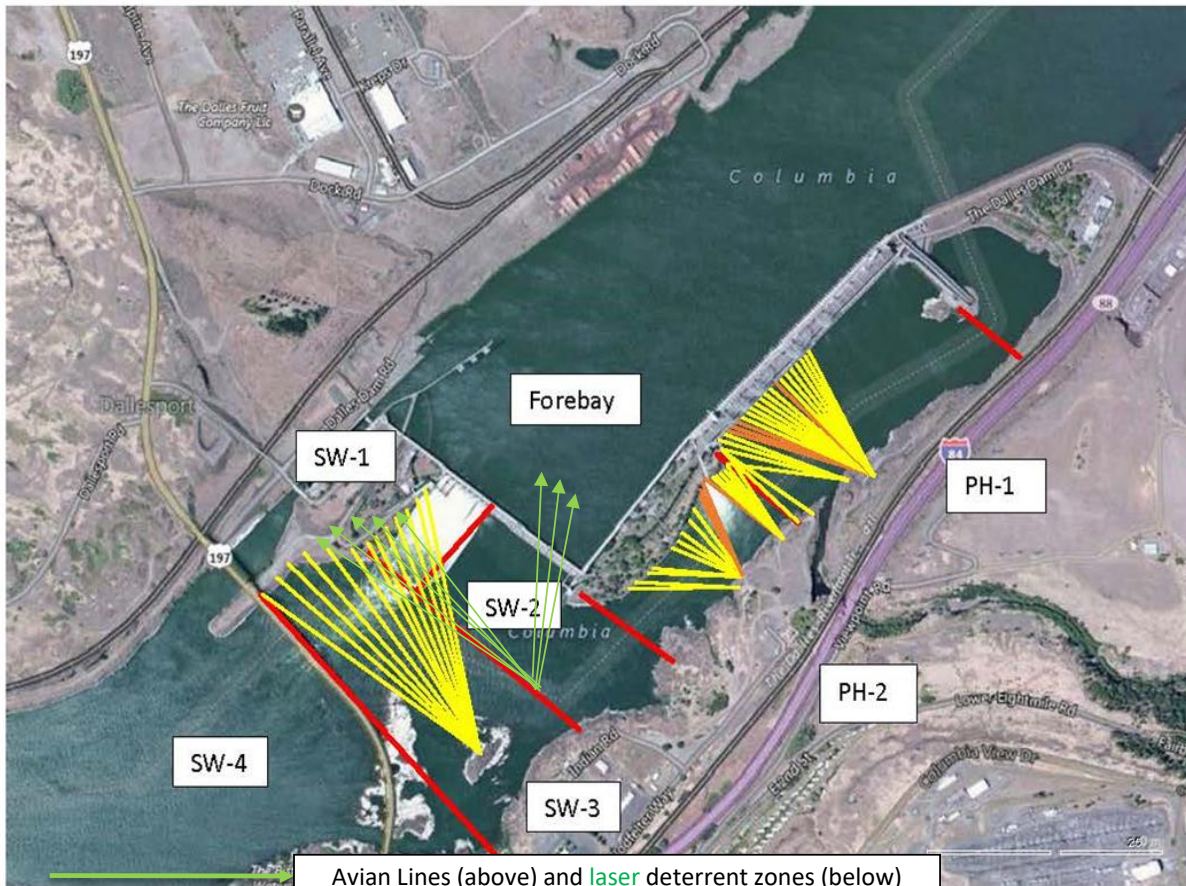
Dam angling 2020 resumes in May/June. **Still hoping that OR and WA relax the catch and release practice of invasive Bass and Walleye.**

Fish unit breaker replace.- Work complete. Operating fish units on T3/line 3.

Fish unit rehab - Phase 1A. Planning operation scenario with AWS backup water supply during construction. No funding.

Transformer replacement - Possible schedule shift due to delay concerns. May swap T1 (scheduled for 3/23) outage with T7.

Approved by: Mike Colesar, Operation Project Manager, The Dalles Dam



Red lines = avian zones

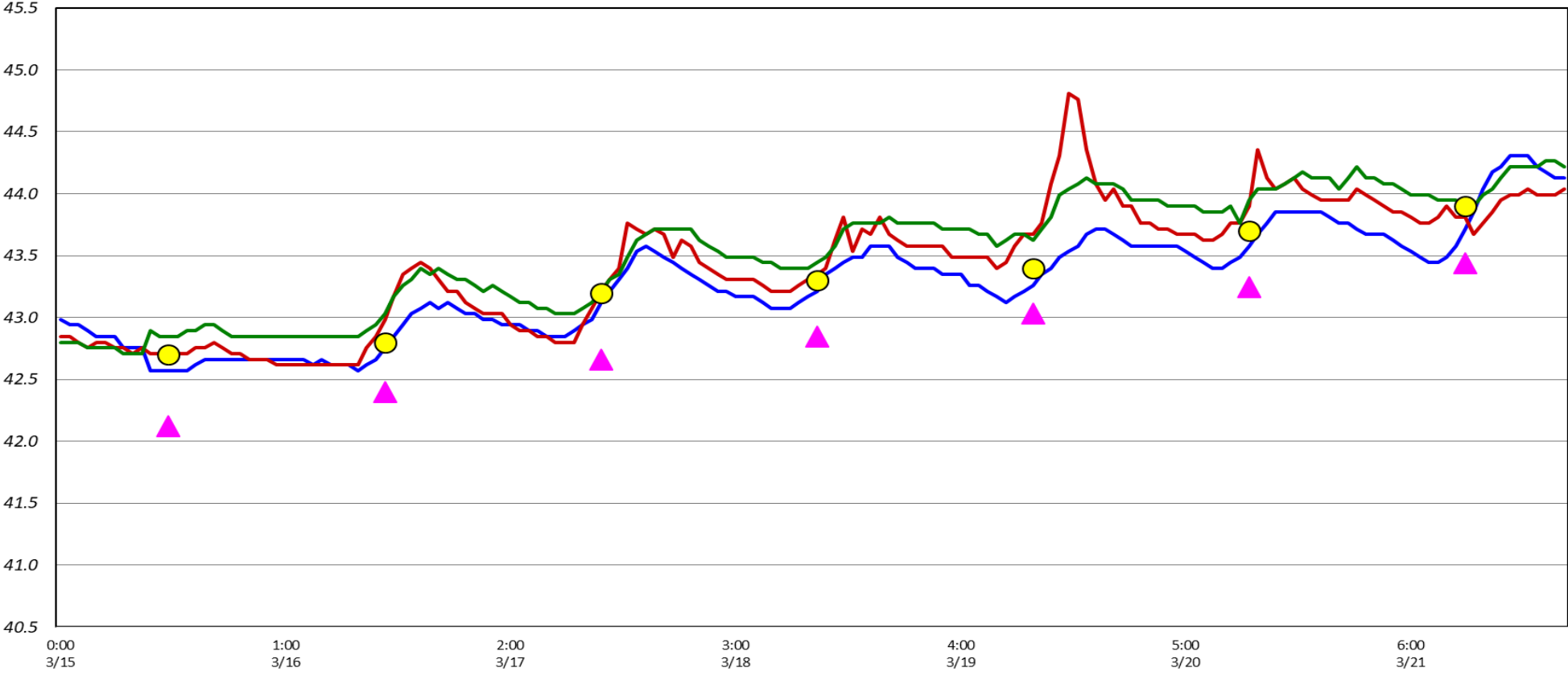
Avian Lines (above) and laser deterrent zones (below)

Yellow lines = current wires

Orange lines = down or missing wires

# Fish Ladder(s) - River Temperatures

— East Count Station — North Count Station — North Entrance ● Current USGS Daily Average ▲ USGS Daily Average (2007-2017)



		USGS:	
Secchi:			°F
3/15	3.5	Sun	42.7
3/16	4.0	Mon	42.8
3/17	4.5	Tue	43.2
3/18	3.5	Wed	43.3
3/19	3.5	Thurs	43.4
3/20	3.5	Fri	43.7
3/21	3.0	Sat	43.9
	3.6	AVG	43.3

[March Temps](#)

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	S2
3/15			1.2	11.0	11.5	11.5	10.7	1.4	10.0	10.0	3.1	1.5	10.0	10.0
	1.3	9.2	1.3	11.0	11.5	11.5	11.1	1.4	10.0	10.0	3.0	1.4	8.3	8.3
	1.3	9.1	1.6	8.4	11.5	11.5	10.5	1.4	10.0	10.0	3.1	1.4	8.4	8.4
3/16			1.5	8.8	11.7	11.7	11.3	1.6	9.7	9.7	3.1	1.4	8.4	8.4
	1.3	9.2	1.5	7.0	11.5	11.5	11.3	1.4	10.0	10.0	4.0	1.6	8.3	8.3
	1.3	9.1	1.6	7.1	11.6	11.6	11.4	1.5	10.1	10.1	4.1	1.5	8.5	8.5
3/17			1.7	7.0	11.5	11.5	11.6	1.5	10.0	10.0	3.9	1.6	8.2	8.2
	1.31	9.3	1.6	7.0	11.5	11.5	11.6	1.4	10.1	10.1	3.9	1.5	8.3	8.3
	1.32	9.3	1.5	7.1	11.6	11.6	11.6	1.4	10.0	10.0	3.5	1.3	8.2	8.2
3/18			1.6	7.5	11.5	11.5	11.9	1.5	10.0	10.0	3.9	1.6	8.3	8.3
	1.34	9.2	1.5	7.6	11.5	11.5	12.0	1.6	10.0	10.0	3.8	1.6	8.4	8.4
	1.39	9.1	1.4	6.5	11.5	11.5	10.8	1.4	9.9	9.9	3.9	1.4	8.4	8.4
3/19			1.6	6.5	11.5	11.5	11.0	1.3	10.0	10.0	4.1	1.6	8.3	8.3
	1.2	9.2	1.5	8.0	11.4	11.4	10.9	1.4	10.0	10.0	3.9	1.5	8.2	8.2
	1.2	8.9	1.4	4.0	11.5	11.5	9.2	1.6	9.4	9.4	-4.1	1.5	8.2	8.2
3/20			1.8	4.0	11.5	11.5	10.2	1.8	9.5	9.5	-3.1	1.7	8.2	8.2
	1.1	9.1	1.5	6.7	11.5	11.5	10.1	1.5	9.9	9.9	-3.2	1.5	8.5	8.5
	1.2	9.0	1.4	5.4	11.5	11.5	9.2	1.4	10.1	10.1	-4.0	1.4	8.2	8.2
3/21			1.2	5.5	11.5	11.5	9.2	1.4	10.1	10.1	-4.1	1.5	8.3	8.3
	1.1	9.1	1.4	2.0	11.4	11.4	9.0	1.5	9.9	9.9	-4.5	1.4	8.2	8.2
	1.2	9.0	1.6	2.3	11.5	11.5	9.1	1.5	9.9	9.9	-4.1	1.5	8.3	8.3
<b>AVG:</b>	<b>1.3</b>	<b>9.1</b>	<b>1.5</b>	<b>6.7</b>	<b>11.5</b>	<b>11.5</b>	<b>10.7</b>	<b>1.5</b>	<b>9.9</b>	<b>9.9</b>	<b>1.2</b>	<b>1.5</b>	<b>8.4</b>	<b>8.4</b>

***Fishways are inspected once daily plus one SCADA inspection.***

GULL and DCCO daily count at The Dalles Dam

