

The Dalles Dam Fishway Status Report

04/05/20

Inspection Period: 3/29-4/4, 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: 21	Temperature: 45.4 °F
			Comments:	Weekly Average Secchi: 4.2

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'	Average for week = 1.3
Entrance weir N1	0	depth (≥ 8')	Average for week = 8.3
Entrance weir N2	0	Closed	
PUD Intake differential	0	≤ 0.5'	Differential problems likely related to FB index damage.

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'	Average for week = 4.6
Entrance weir E1	0	No criteria	Average for week = 4.6
Entrance weir E2	0	depth (≥ 8')	Average for week = 12.1
Entrance weir E3	0	depth (≥ 8')	Average for week = 12.1
Collection channel velocity	0	1.5 - 4 fps	3.09 fps Range: 3.58 fps MU21 - 2.21 fps MU15
Transportation channel velocity	0	1.5 - 4 fps	2.44 fps
North channel velocity	0	1.5 - 4 fps	2.79 fps 4/3/2020
South channel velocity	0	1.5 - 4 fps	3.79 fps
West entrance differential	0	1.0' - 2.0'	Average for week = 1.5
Entrance weir W1	0	depth (≥ 8')	Average for week = 10.6
Entrance weir W2	0	depth (≥ 8')	Average for week = 10.6
Entrance weir W3	0	No criteria	
South entrance differential	0	1.0' - 2.0'	Average for week = 1.5
Entrance weir S1	0	depth (≥ 8')	Average for week = 8.4
Entrance weir S2	0	depth (≥ 8')	Average for week = 8.4

JUVENILE PASSAGE

Sluiceway operation	0	Units 1, 8, 18	
Turbine trashrack drawdown	0	<1.5', biwkly	3/26/2020 checked
Spill volume/pattern	0	None	
Turbine Unit Priority	0	per FPP	
Gatewells	0	Weekly	4/3/2020 DCCO carcass in MU1-1 gatewell, no fish mortality.

OTHER ISSUES:

Fishway Operations

North and east fish ladders in full operation

Spillway closed

Sluiceway opened with open sluiceways 1-1,1-2,1-3,7-1,7-2,18-2.

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

MU8 OOS 1/21/2020 - 5/17/2020 for Overhaul.

Maintenance

Calibration check 4/3/20; E1, out of calibration, no criteria.

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

East fishway automation replacement installation possibly delayed due to COVID staff plan. PLC box assembly starting hopefully in April.

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

COVID creating major challenges accomplishing maintenance tasks. Maintenance leaders are working on plans to still accomplish as much as possible in safe manner.

Predators

Green laser use for piscivorous bird hazing testing on hold until all safety concerns are addressed. Refer to Avian zones tab.

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

No sea lion observations this week.

Research/Construction/Contractors

Four Peaks fish counting started Apr1.

AWS backup - Commissioning completed. Ready for operation if needed.

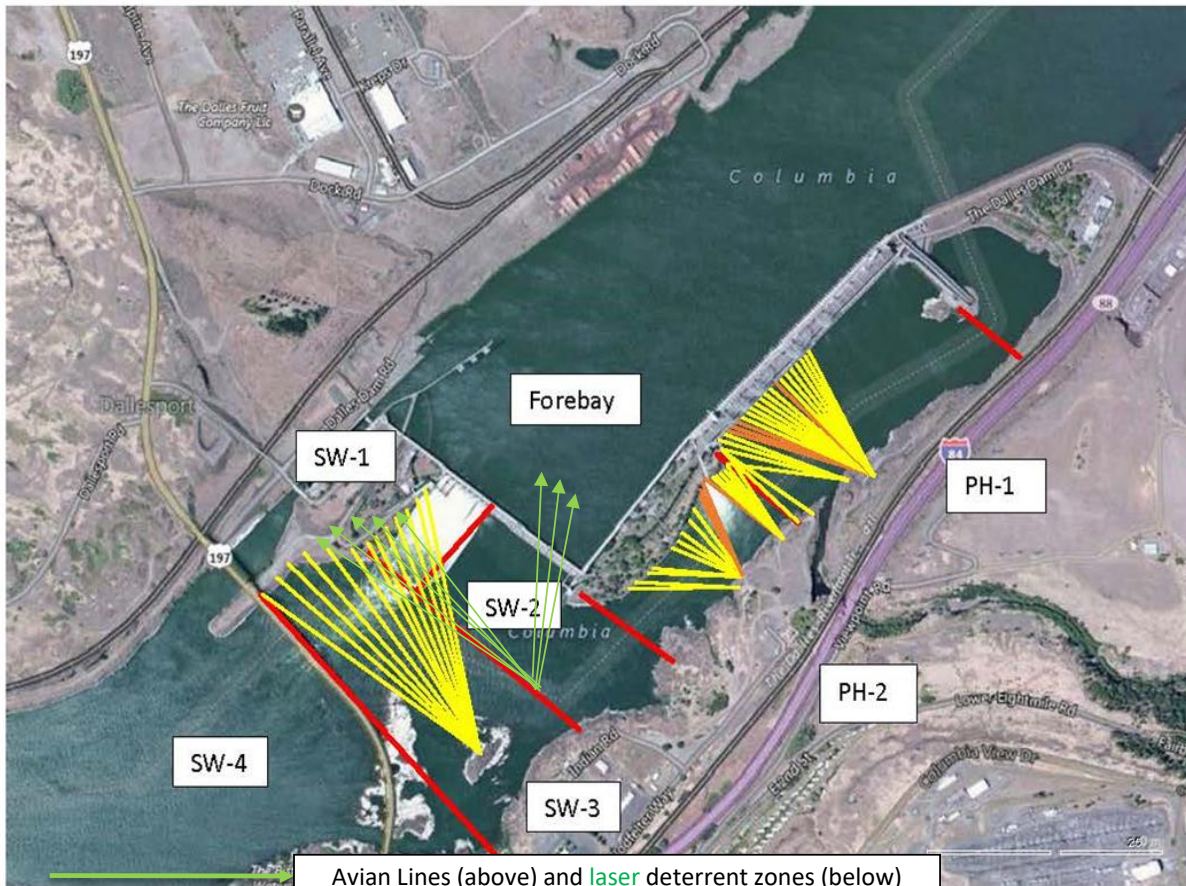
PITAGS north and east fishladder data collection at count stations continues.

Dam angling resumes in May. **Bass/Walleye release due to state classification of game species.**

Fish unit breaker replace.- Completed.

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

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

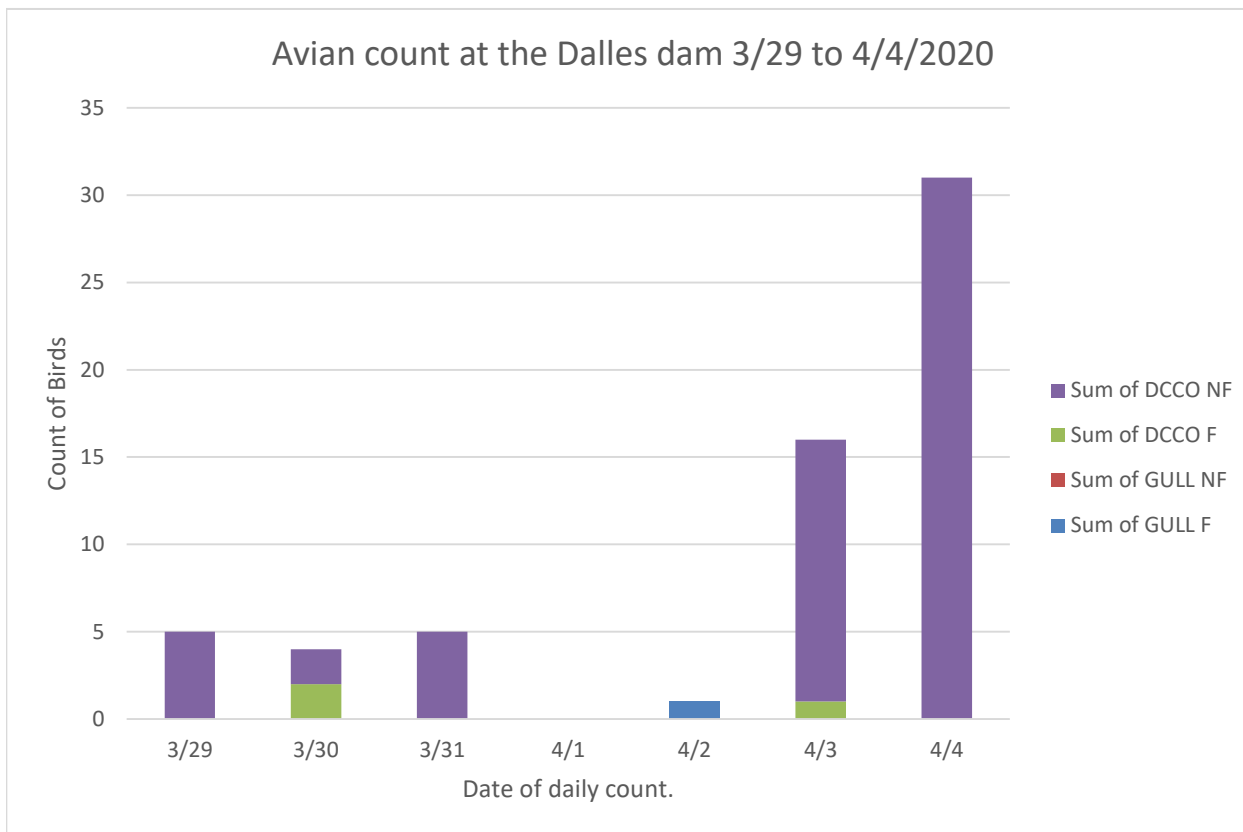


Red lines = avian zones

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

Yellow lines = current wires

Orange lines = down or missing wires

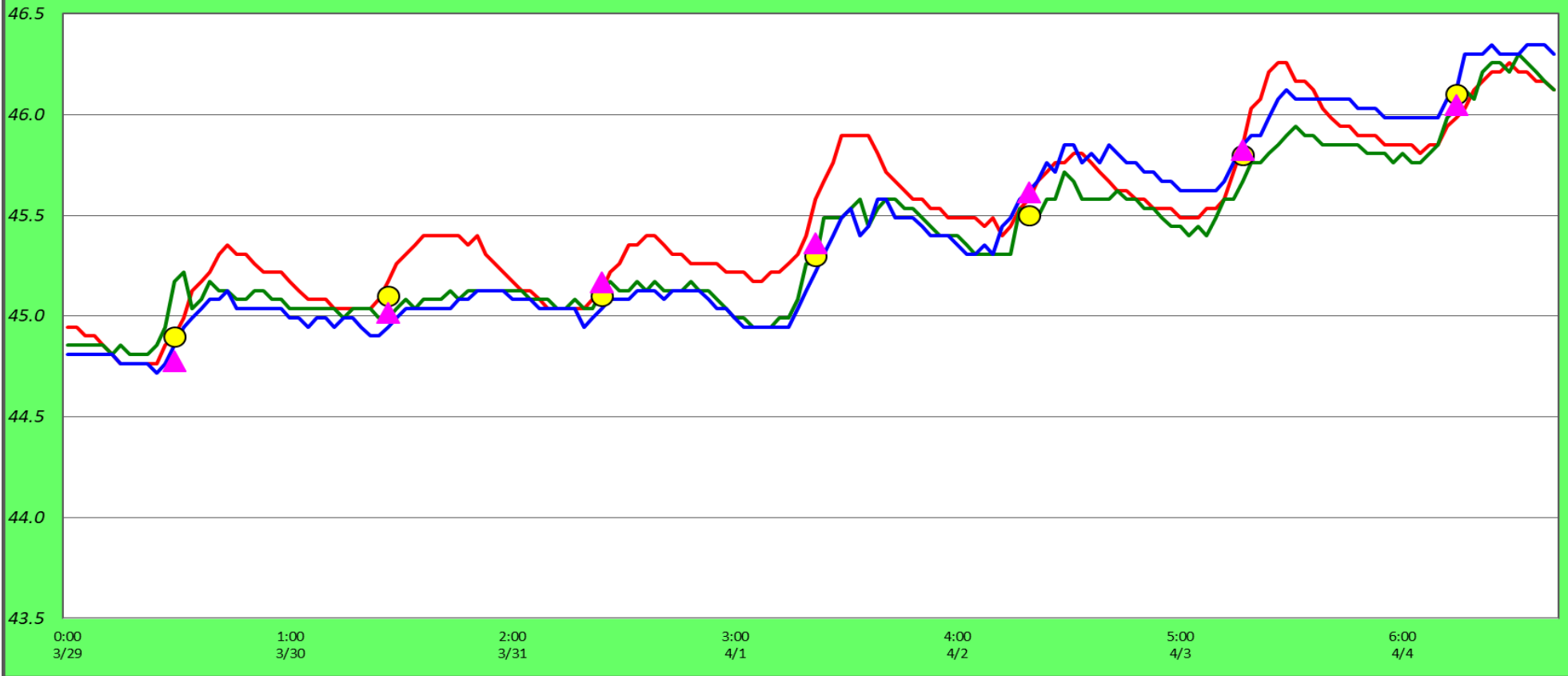


NF= not foraging
 F= foraging
 DCCO= cormorant
 Gull= gull

20 + DCCO present on nests at this time!

Adult Fish Ladder(s) - River Temperatures

— East Count Station — North Count Station — North Entrance ● Current USGS Daily Average ▲ USGS Daily Average (2007-2019)



			USGS:
	Secchi:		°F
3/29	4.5	Sun	44.9
3/30	5.0	Mon	45.1
3/31	4.5	Tue	45.1
4/1	4.0	Wed	45.3
4/2	4.0	Thurs	45.5
4/3	3.5	Fri	45.8
4/4	4.0	Sat	46.1
	4.2	AVG	45.4

[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										South Entrance		
	Differential	N1 Depth	East Entrance					West Entrance			W3	Differential	S1	S2	
			Differential	E1 Depth	E2 Depth	E3 Depth	JP 6	Differential	W1	W2					
3/29			4.0	4.0	11.9	11.9	10.1	1.4	10.6	10.6	Closed	1.4	8.3	8.4	
	1.3	8.9	4.0	4.0	11.9	11.9	10.3	1.5	10.5	10.5		1.5	8.4	8.4	
	1.3	9.1	4.0	4.0	12.1	12.1	10.3	1.5	10.6	10.6		1.4	8.3	8.4	
3/30					12.0	12.0	10.1	1.4	10.4	10.4		1.5	8.2	8.3	
	1.4	9.0	4.5	4.5	12.6	12.6	11.7	1.5	10.5	10.5		1.6	8.2	8.4	
	1.3	9.1	3.9	3.9	12.0	11.9	10.1	1.5	10.4	10.4		1.5	8.2	8.2	
3/31			3.9	3.9	12.0	11.9	11.6	1.6	10.5	10.5		1.7	8.2	8.3	
	1.4	8.9	4.1	4.1	12.7	12.6	11.1	1.6	11.0	11.0		1.5	8.6	8.5	
	0.0	0.0	4.1	4.1	12.6	12.5	10.3	1.4	10.7	10.6		1.3	8.6	8.5	
4/1			4.1	4.1	12.0	12.0	11.2	1.6	10.7	10.7		1.6	8.5	8.5	
	1.3	9.0	5.5	5.5	12.1	12.1	11.1	1.5	10.6	10.6		1.5	8.5	8.5	
	1.4	8.9	5.5	5.5	12.0	12.0	11.7	1.4	10.7	10.7		1.4	8.5	8.5	
4/2			5.9	5.9	12.0	12.0	12.0	1.7	10.7	10.7		1.5	8.5	8.5	
	1.4	8.8	5.9	5.9	12.0	12.0	12.0	1.5	11.0	11.0	1.5	8.5	8.5		
	1.4	9.0	6.0	6.0	12.1	12.1	11.6	1.5	11.0	11.0	1.5	8.4	8.4		
4/3			6.1	6.1	12.1	12.1	10.9	1.2	11.1	11.1	1.4	8.5	8.5		
	1.4	8.9	4.0	4.0	12.0	12.0	10.8	1.6	10.2	10.2	1.5	8.4	8.4		
	1.3	9.0	3.9	3.9	12.0	11.9	10.4	1.5	10.4	10.4	1.5	8.4	8.4		
4/4			4.0	4.0	12.1	12.1	9.8	1.4	10.3	10.3	1.4	8.5	8.5		
	1.3	9.0	4.1	4.1	12.0	12.0	10.7	1.5	10.3	10.3	1.5	8.5	8.5		
	1.3	8.9	4.0	4.0	12.0	11.9	9.9	1.4	10.3	10.3	1.4	8.5	8.5		
AVG:	1.3	8.3	4.6	4.6	12.1	12.1	10.8	1.5	10.6	10.6	1.5	8.4	8.4		

Fishways are inspected once daily plus one SCADA inspection.