

The Dalles Dam Fishway Status Report

07/12/2020

Inspection Period: 7/5-7/11

THE DALLES DAM



US Army Corps
of Engineers
Portland District

The Dalles Project-Fisheries
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The Dalles Dam	Inspections OOB	Criteria Limit	Total Number of Inspections:	21	Temperature:	63.6 °F
			Comments: Increasing spill volume and GULL #.		Weekly Average Secchi:	4.9

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')	10.0
Entrance weir N2	0	Closed	
PUD Intake differential	1	≤ 0.5'	Aquatic weed build-up requires frequent raking

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	1.3' ± 0.1'	
Junction pool weir JP6	0	> 7.0'	Average for week = 12.7
East entrance differential	0	1.0' - 2.0'	Average for week = 1.5
Entrance weir E1	0	No criteria	Average for week = 8.8
Entrance weir E2	0	depth (≥ 8')	Average for week = 12.4
Entrance weir E3	0	depth (≥ 8')	Average for week = 12.5
Collection channel velocity	0	1.5 - 4 fps	2.70 fps, 7/9/2020 Range: 3.19 fps MU 21 to 2.21 fps MU 2
Transportation channel velocity	0	1.5 - 4 fps	1.96 fps, 7/11/2020
North channel velocity	0	1.5 - 4 fps	2.26 fps, 7/10/2020
South channel velocity	0	1.5 - 4 fps	3.16 fps, 7/11/2020
West entrance differential	0	1.0' - 2.0'	Average for week = 1.4
Entrance weir W1	0	depth (≥ 8')	Average for week = 11.7
Entrance weir W2	0	depth (≥ 8')	Average for week = 11.7
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 = 8.5

JUVENILE PASSAGE

Sluiceway operation	1	Units 1, 4, 18	MU1 off due to maintenance 7/9 am; reopened 7/9 pm
Turbine trashrack drawdown	0	<1.5', biwkly	6/20/2020 checked, all in criteria.
Spill volume/pattern	1	1 to 8	high spill ordered 7/11
Turbine Unit Priority	6	per FPP	All available MUs running; OOB due to forced outages
Gatewells	0	Weekly	checked 7/10/20: salmonids present in 1,2,3,4,5,6,7,9,12,17,18,21. No salmonid mortality

OTHER ISSUES:

Fishway Operations

North and east fish ladders in full operation.
Spillway open 40% for juvenile passage with Fish Passage Plan pattern
Sluiceway opened with open sluiceways 1-1,1-2,1-3,7-2,7-3,18-2.
Fish present in most gatwells

Unit Outages

T10 (MU19 & 20) forced out of service through 10/28/2021 due to acetylene levels
MU1 and MU2 restricted to 160 MW combined through 5/28/2020
MU8 out of service through 7/10/2020 for Overhaul
MU13 and 14 out for T7 replacement through 9/24/20
MU15 and 16 out for ground switch through 7/6/20

Maintenance

Calibration check 7/8; all entrances and gates in calibration and criteria.
Five of 6 east fishway collection channel dewatering pumps removed for repair/rehab. Work in progress.
East fishway automation replacement underway. PLC box assembly installing at east entrance.
Spillway assessment (MRER); No FY20 funding. Spillgate 9 trunnion pin included.

Predators

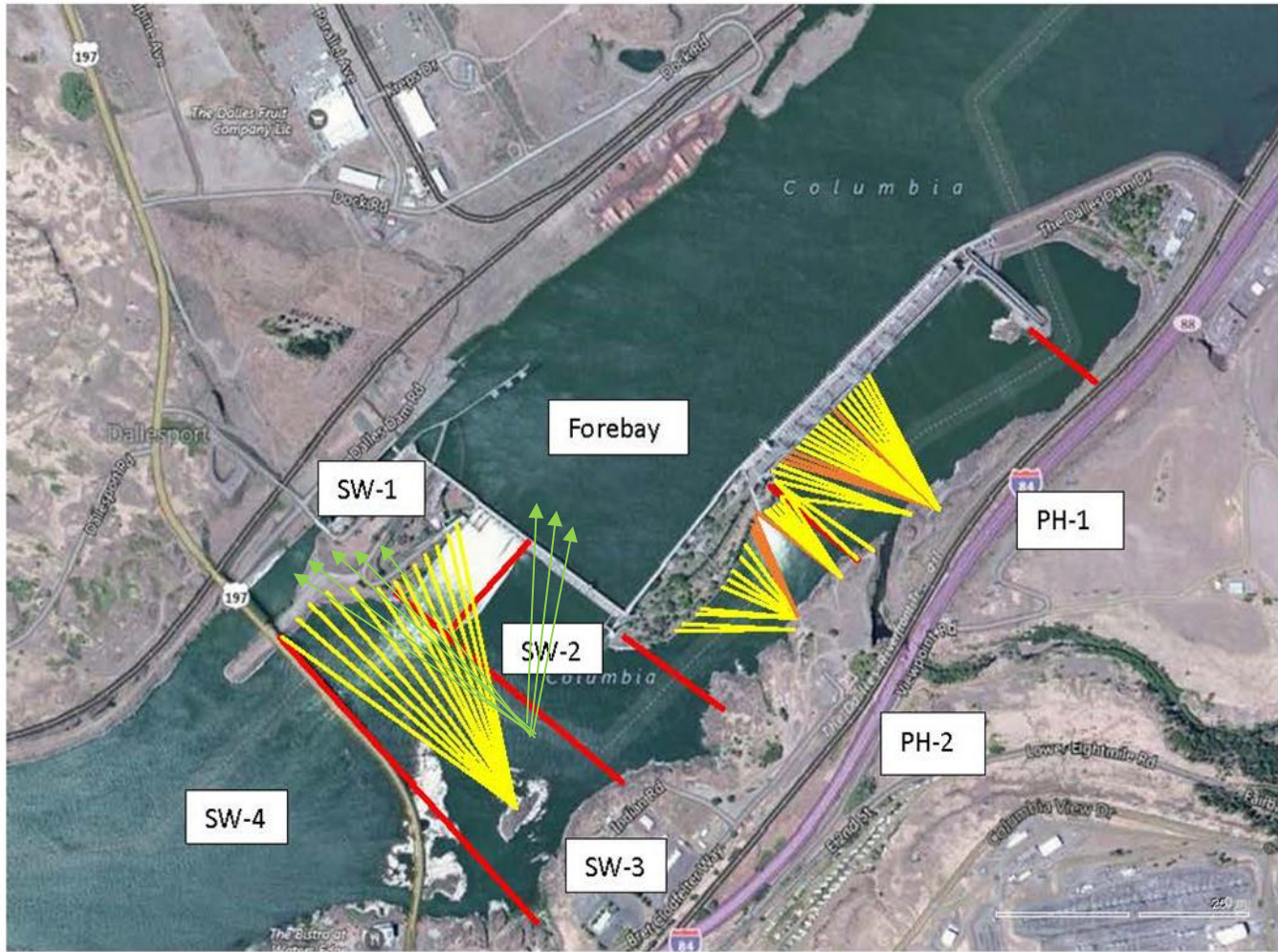
USDA hazing ongoing of gulls only. Pelicans outnumbering gulls in many areas.
Green laser use for piscivorous bird hazing testing on hold. Potential safety concerns being addressed.

Research/Construction/Contractors

Four Peaks fish counting ongoing. Installing communication upgrade.
AWS backup - Investigating rake need. Alarm system completion planning underway. Waiting for no wind to ROV inspection of trashrack for suspected gap.
PITAGS north and east fishladder data collection at count stations continues. Some interference problems on east antennas. PITAGS troubleshooting.
Pikeminnow dam angling 136 this week/585 harvested through 7/12. **All invasive bass/walleye by-catch release continues per states gamefish requirements.**
Fish unit breaker replacement completed. Calculation item needed for completion.
Fish unit rehab - Phase 1A. Planning operation scenario with AWS backup water supply during construction. Effort underway to finish report this year.

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

Avian Lines and laser deterrent zones



Red lines = avian zones

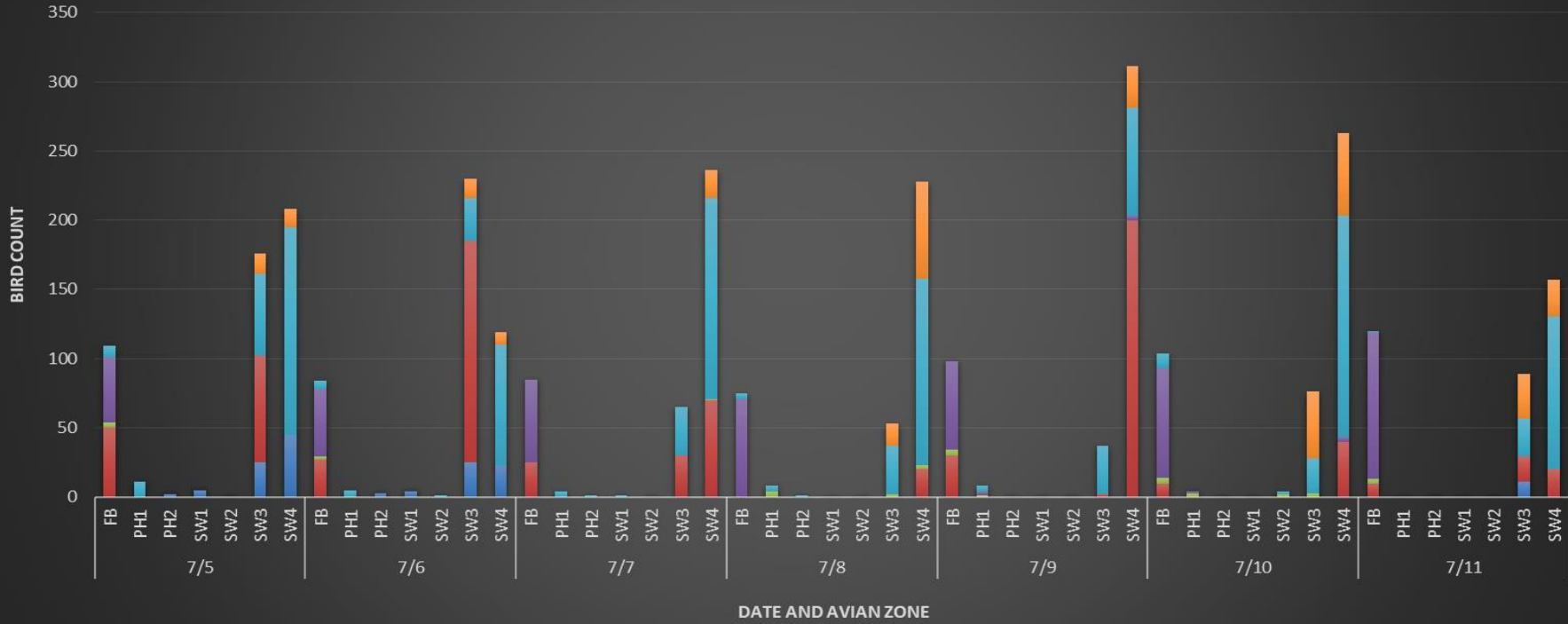
Yellow lines = current wires

Orange lines = down or missing wires

Avian Activity by Zone

F= foraging
NF= non-foraging

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



Adult Fish Ladders-River Temperatures

Series1

Series2

Series3

Series4

Series5

1.2

1.0

0.8

0.6

0.4

0.2

0.0



	Secchi:		°F
7/5	5.0	Sun	62.9
7/6	5.0	Mon	63.1
7/7	5.0	Tue	63.2
7/8	5.0	Wed	63.4
7/9	5.0	Thurs	63.7
7/10	4.5	Fri	64.1
7/11	4.5	Sat	64.6
	4.9	AVG	63.6

USGS July

The Dalles Dam Daily Readings and Averages for

Temperatures, Secchi, Entrances, and Spill

SCADA INSPECTION

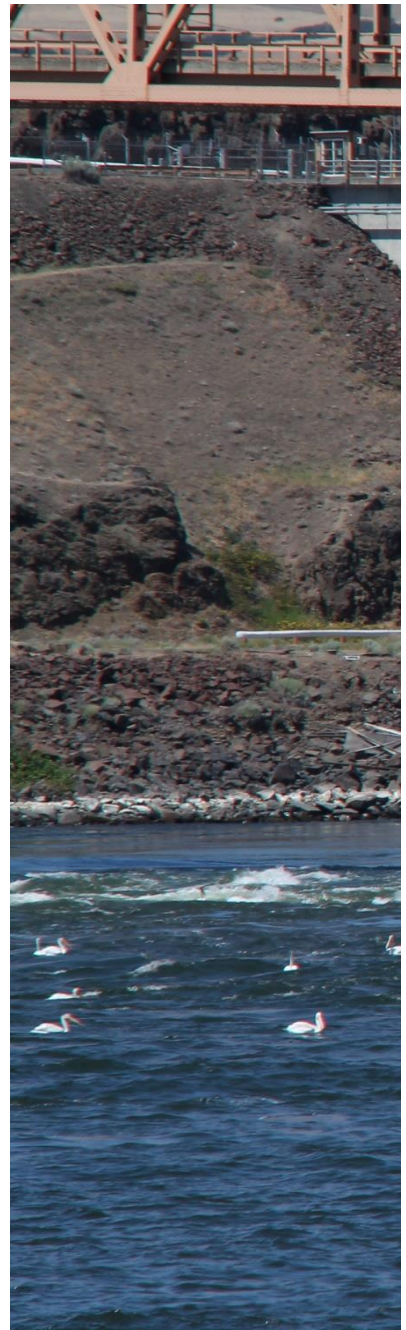
out of criteria

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
7/5			1.3	11.0	12.5	12.5	13.4	1.2	12.6	12.6	4.1	1.5	8.4	8.4
	1.3	10.0	1.5	9.9	12.5	12.5	13.9	1.5	12.5	12.5	1.4	1.5	8.3	8.3
	1.3	9.9	1.6	9.9	12.5	12.5	14.5	1.5	12.5	12.5	1.5	1.5	8.3	8.3
7/6			1.3	9.9	12.5	12.6	11.2	1.0	12.5	12.5	1.6	1.4	8.3	8.3
	1.2	9.9	1.3	9.9	12.5	12.5	11.9	1.1	12.5	12.5	1.2	1.5	8.4	8.4
	1.1	10.1	1.6	7.4	12.6	12.5	12.2	1.5	11.0	11.0	-2.2	1.6	8.3	8.3
7/7			1.6	7.5	12.5	12.5	12.5	1.6	11.0	11.0	-2.0	1.6	8.4	8.3
	1.4	10.0	1.5	7.6	12.6	12.6	12.8	1.7	10.9	11.0	-2.0	1.6	8.4	8.3
	1.3	9.9	1.5	7.4	12.4	12.4	12.8	1.5	11.6	11.1	-1.9	1.6	8.4	8.5
7/8			1.5	7.5	12.5	12.5	12.0	1.4	11.6	11.6	-2.4	1.5	8.5	8.5
	1.2	10.1	1.5	7.5	12.5	12.5	12.0	1.4	11.6	11.6	-2.4	1.4	8.6	8.6
	1.3	9.9	1.5	7.4	12.6	12.4	12.3	1.5	11.4	11.4	-2.2	1.6	8.5	8.5
7/9			1.5	7.7	11.4	12.5	11.9	1.3	11.4	11.6	-2.4	1.5	8.5	8.5
	1.2	10.0	1.7	8.8	12.5	12.4	13.0	1.5	11.6	11.5	-1.5	1.5	8.5	8.6
	1.3	9.9	1.5	9.3	12.5	12.6	13.0	1.5	11.5	11.5	-1.5	1.5	8.5	8.6
7/10			1.6	9.1	12.4	12.4	13.0	1.6	11.5	11.5	-1.6	1.5	8.5	8.5
	1.3	9.9	1.6	9.3	12.5	12.4	13.0	1.6	11.5	11.5	-1.6	1.5	8.6	8.6
	1.2	10.1	1.6	9.3	12.5	12.6	13.4	1.6	11.5	11.5	-1.3	1.5	8.5	8.5
7/11			1.5	9.3	12.5	12.5	12.8	1.5	11.6	11.6	-1.8	1.5	8.4	8.5
	1.3	9.9	1.6	9.2	12.5	12.6	12.9	1.5	11.6	11.6	-1.7	1.4	8.6	8.7
	1.4	10.1	1.6	9.1	12.4	12.6	13.2	1.4	11.6	11.6	-1.4	1.5	8.4	8.5
AVG:	1.3	10.0	1.5	8.8	12.4	12.5	12.7	1.4	11.7	11.7	-1.0	1.5	8.4	8.5

Fishways are inspected once daily plus one SCADA inspection.



7/9/2020 in SW4 downstream of spillway. More than 100 foraging Pelicans searching for injured fish. Prey item



is unidentified.



