

The Dalles Dam Fishway Status Report

10/11/2020

Inspection Period: 10/4-10/10

THE DALLES DAM



US Army Corps
of Engineers
Portland District

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

The Dalles Dam	Inspections OOC	Criteria Limit	Total Number of Inspections: 21	Temperature: 65.1 °F
			Comments: fishways functional	Weekly Average Secchi: 5.1
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	6	≤ 0.5'	Damage to north FB index makes data unreliable.	
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 = 10.9	
East entrance differential	0	1.0' - 2.0'	Average for week = 1.6	
Entrance weir E1	0	No criteria	Average for week = No criteria	
Entrance weir E2	0	depth (≥ 8')	Average for week = 12.0	
Entrance weir E3	0	depth (≥ 8')	Average for week = 12.0	
Collection channel velocity	0	1.5 - 4 fps	2.94 fps, 10/10/2020 Range: 3.58 fps MU 8 to 2.34 fps MU-7	
Transportation channel velocity	0	1.5 - 4 fps	2.26 fps, 10/10/2020	
North channel velocity	0	1.5 - 4 fps	2.69 fps, 10/10/2020	
South channel velocity	0	1.5 - 4 fps	3.05 fps, 10/10/2020	
West entrance differential	0	1.0' - 2.0'	Average for week = 10.9	
Entrance weir W1	0	depth (≥ 8')	Average for week = 10.7	
Entrance weir W2	0	depth (≥ 8')	Average for week = 10.7	
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 = 8.5	
Entrance weir S2	0	depth (≥ 8')	Average for week = 8.5	
JUVENILE PASSAGE				
Sluiceway operation	0	Units 1, 7, 18	MU8 OOS	
Turbine trashrack drawdown	0	<1.5', biwklly	10/10/2020 checked, all in criteria.	
Spill volume/pattern	0	1 to 8	Spill closed 9/1/2020.	
Turbine Unit Priority	1	per FPP	All available MUs running; OOC due to forced outages	
Gatewells	0	Weekly	10/10/2020 fish check, some adult shad MU-21-1 mortality. No salmon seen.	

OTHER ISSUES:

Unit Outages

Line 1, MU1,2, FU1&2 limited to 188MVA for T1 replacement; 1/28/2021
T10 (MU19 & 20) FOOS through 10/28/2021 10/11/2020
MU8 OOS 0630 1/21/2020 - 1700 10/1/2020 for Overhaul
MU22 FOOS through 1700 11/19/2020 due to excessive vibration.
MU21 OOS 8/3/2020 - 12/17/2020 for Annual & Headcover Upgrade
TO-1 OOS 0630 10/5/2020 - 1700 10/15/2020 for Doble Testing
T5 OOS 0630 10/5/2020 - 1200 10/13/2020 for T5 GSU install re-work

Maintenance

PUD intake rake out of service due to power track damage. Exploring repair options with limited budget. Raking with mobile crane as needed.
Calibration check on 10/9, all in criteria. Damage to north FB staff gage giving potential accuracy problems.
Five of 6 east fishway collection channel dewatering pumps removed for repair/rehab. Work to resume FY21.
East fishway automation PLC panels installed. All sensor brackets installed. Conduit runs in progress. East entrance near complete for operation testing.
Spillway assessment (MRER); Spillgate 9 trunnion pin included.

Predators

USDA hazing concluded 7/31. Refer to avian graph tab for bird numbers.
Green laser use for piscivorous bird hazing testing restarted. Potential safety concerns, training and documentation addressed.
Cormorants foraging forebay near east ladder exit and entrance. Several herons foraging east fishladder.
Invasive aquatic weeds subsiding at count station pickets. Zebra mussel samples collected 8/31.
Pikeminnow dam angling concluded w/980 removed. **All invasive bass/walleye by-catch release continues per states gamefish requirements.**

Research/Construction/Contractors

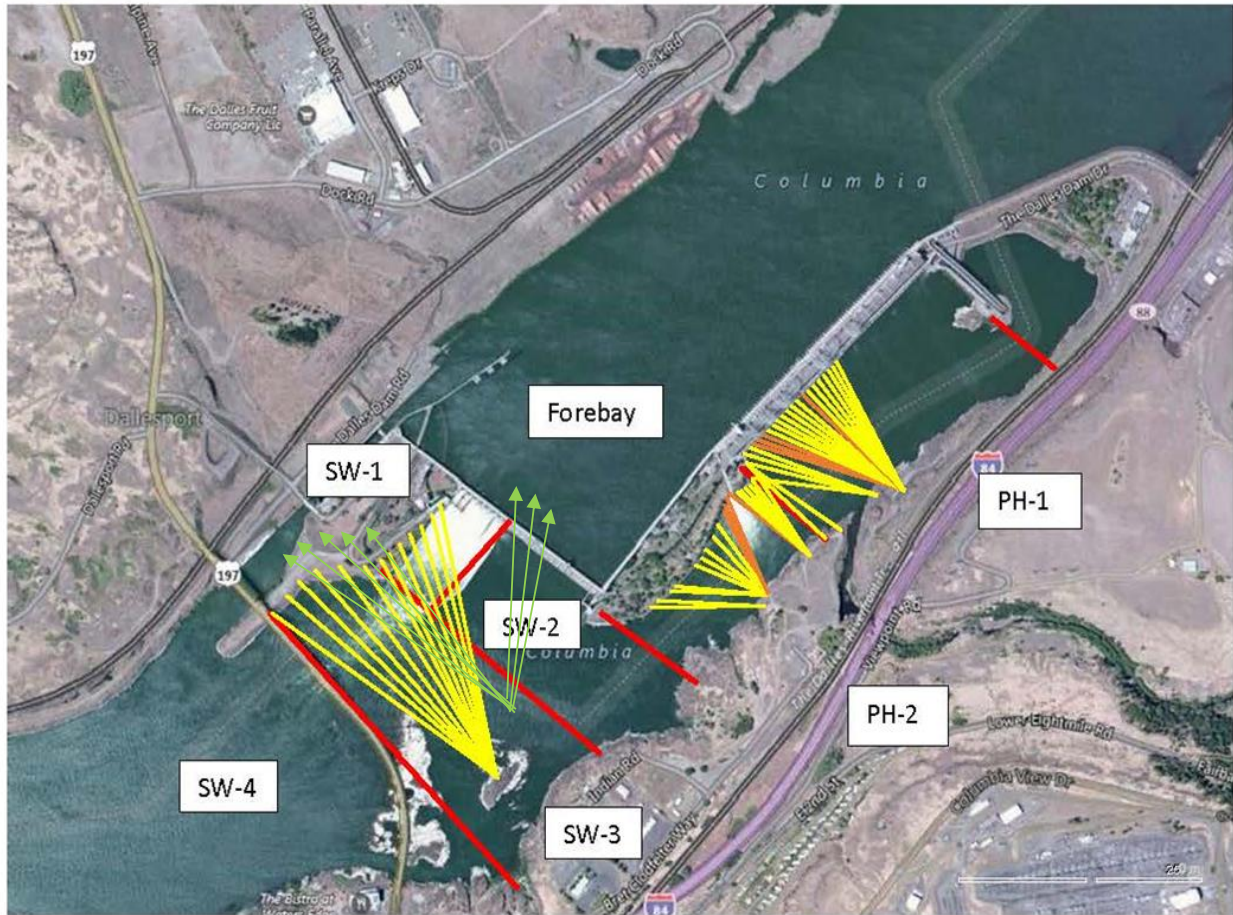
PSMFC concluded juvenile sampling at PUD 7/31
Four Peaks fish counting ongoing through 10/31.
CRITFC lamprey trapping concluded 9/3 . 526 total lamrey captures YTD
PITAGS north and east fishladder data collection at count stations continues.
Fish unit breaker replacement completed.
Fish unit rehab - Phase 1A. Planning operation with AWS backup water supply during construction. On hold.

Fishway Operations

North and east fish ladders in full operation.

Approved by: Bryan Hert acting for Mike Colesar, Operation Project Manager, The Dalles Dam

Avian Lines and laser deterrent zones

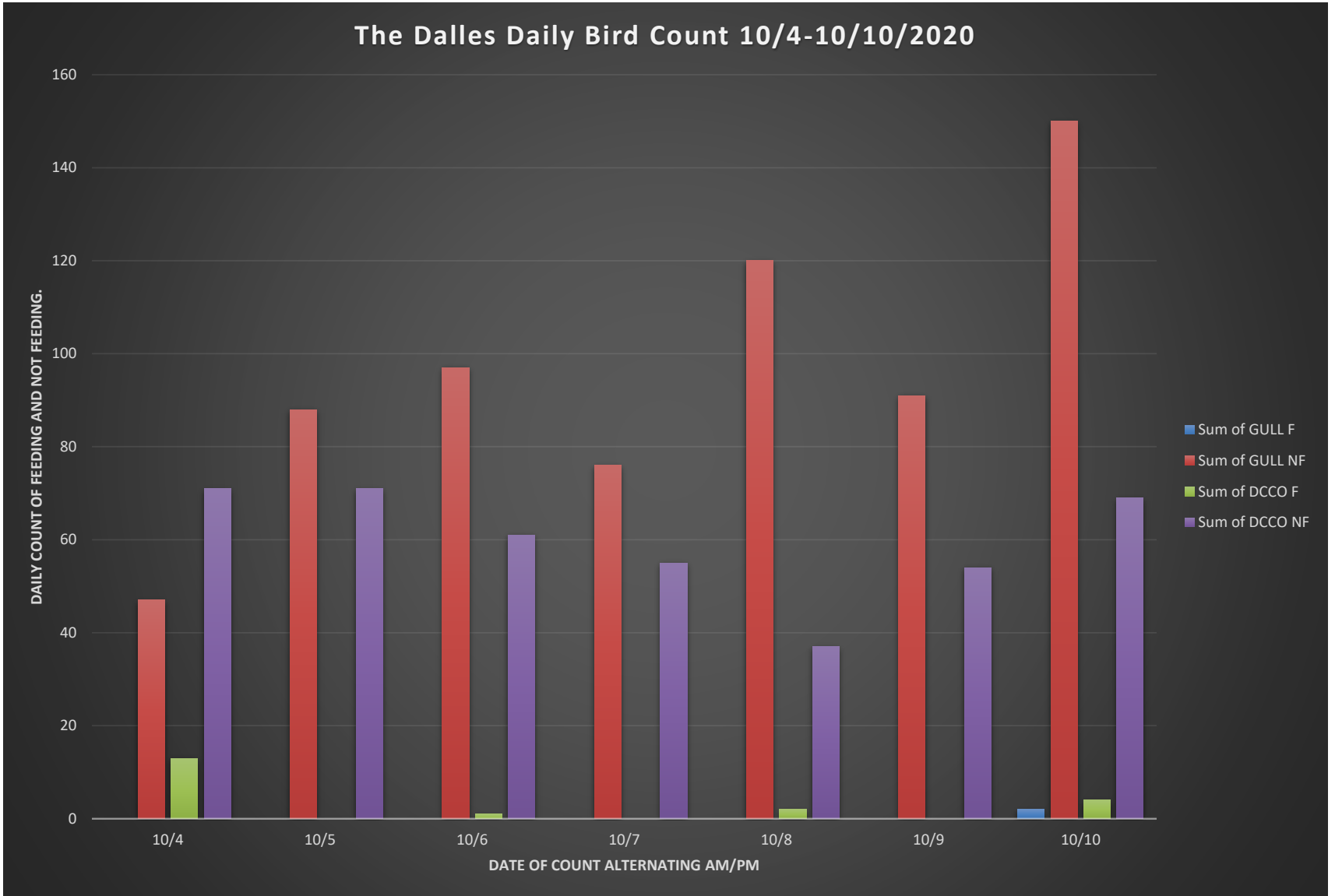


Red lines = avian zones

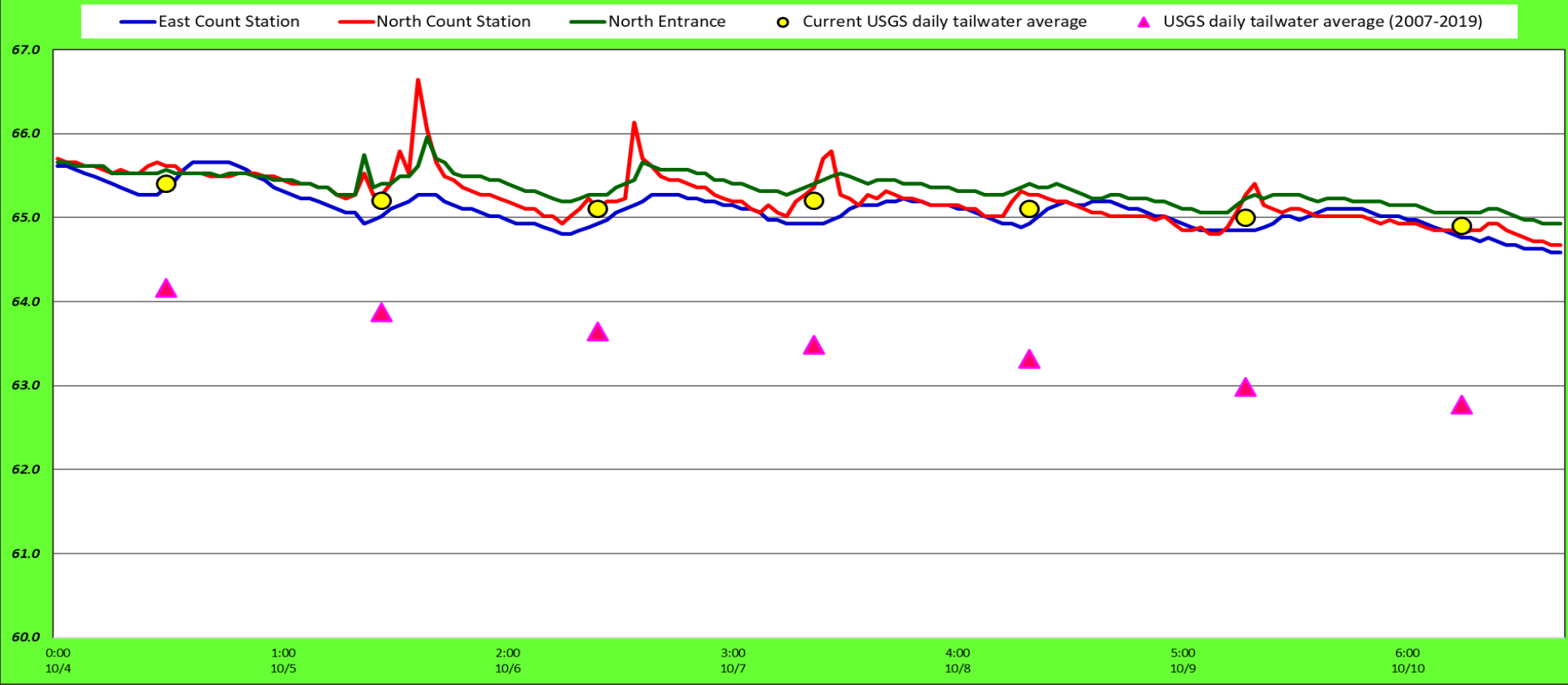
Yellow lines = current wires

Orange lines = down or missing wires

Period: 10/2-10/010



Adult Fish Ladders-River Temperatures



Secchi:		°F
10 ⁻⁴	Sun	65.4
10 ⁻⁵	Mon	65.2
10 ⁻⁶	Tue	65.1
10 ⁻⁷	Wed	65.2
10 ⁻⁸	Thurs	65.1
10 ⁻⁹	Fri	65.0
10 ⁻¹⁰	Sat	64.9
	AVG	65.1

USGS October

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

SCADA INSPECTION

out of criteria

Date:	North Ladder		East Ladder					West Entrance			South Entrance			
	Differential	N1 Depth	East Entrance					Differential	W1	W2	W3	Differential	S1	S2
			Differential	E1 Depth	E2 Depth	E3 Depth	JP 6							
10/4			1.9	2.7	10.9	10.9	10.9	10.9	9.3	9.3	-2.6	1.8	7.7	7.8
	1.4	9.1	1.7	4.1	12.0	12.0	11.1	11.1	10.5	10.6	-2.6	1.5	8.7	8.8
	1.5	8.9	1.8	4.1	12.1	12.0	11.6	11.6	10.8	10.6	-2.1	1.5	8.7	8.8
10/5			1.7	4.1	12.1	12.1	11.3	11.3	10.7	10.7	-2.3	1.6	8.7	8.7
	1.4	9.2	1.6	5.5	12.0	12.0	11.0	11.0	11.0	11.0	-2.6	1.4	8.6	8.6
	1.4	9.2	1.5	7.1	12.1	12.1	11.1	11.1	11.0	11.0	-2.5	1.5	8.6	8.6
10/6			1.5	7.0	12.0	12.0	10.5	10.5	10.9	10.9	-2.9	1.4	8.5	8.5
	1.3	9.2	1.4	6.9	11.9	11.9	10.2	10.2	10.9	10.9	-3.1	1.5	8.4	8.4
	1.3	9.3	1.5	6.1	12.0	12.0	10.3	10.3	11.0	11.0	-3.0	1.5	8.6	8.6
10/7			1.6	5.9	12.0	12.0	10.9	10.9	10.4	10.4	-2.7	1.5	8.5	8.5
	1.3	9.3	1.5	5.9	12.0	12.0	10.9	10.9	10.4	10.4	-2.7	1.6	8.4	8.4
	1.3	9.5	1.5	6.1	12.1	12.2	12.0	12.0	10.5	10.5	-2.0	1.5	8.6	8.6
10/8			1.4	6.0	12.0	12.0	11.0	11.0	10.8	10.8	-2.6	1.5	8.5	8.5
	1.4	9.3	1.5	6.1	12.0	12.0	11.5	11.5	10.8	10.8	-2.3	1.5	8.5	8.5
	1.3	9.4	1.6	6.0	12.1	12.1	11.6	11.6	10.9	10.9	-2.2	1.6	8.4	8.4
10/9			1.5	6.1	12.0	12.0	10.5	10.5	10.6	10.6	-2.8	1.2	8.5	8.5
	1.3	9.4	1.5	6.0	12.0	12.0	10.6	10.6	10.9	10.9	-2.7	1.5	8.5	8.5
	1.3	9.3	1.5	6.1	12.1	12.1	10.6	10.6	11.1	11.1	-2.9	1.4	8.5	8.5
10/10			1.5	6.1	12.0	12.1	10.5	10.5	10.9	10.9	-2.7	1.4	8.6	8.5
	1.3	9.5	1.5	6.0	11.9	12.0	10.8	10.8	10.5	10.5	-2.7	1.6	8.5	8.4
	1.3	9.4	1.7	6.9	11.9	12.0	10.4	10.4	10.5	10.5	-2.8	1.4	8.5	8.6
AVG:	1.3	9.3	1.6	5.8	12.0	12.0	10.9	10.9	10.7	10.7	-2.6	1.5	8.5	8.5

Fishways are inspected once daily plus one SCADA inspection.



Small oil spill near north fishway exit. Absorbent containment. No oil made it to water