

# The Dalles Dam Fishway Status Report

11/1/2020

Inspection Period: 10/25-10/31

## 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:	20	Temperature:	57.2 °F
Comments: fishways functional				Weekly Average Secchi: 5.7		
<b>NORTH FISHWAY</b>						
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')	9.0			
Entrance weir N2	0	Closed				
PUD Intake differential	0	≤ 0.5'	Damage to north FB index makes data unreliable.			
<b>EAST FISHWAY</b>						
Exit differential	0	≤ 0.5'				
Removable weirs 154-157	1	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 =	9.5		
East entrance differential	0	1.0' - 2.0'	Average for week =	1.5		
Entrance weir E1	0	No criteria	Average for week =	No criteria		
Entrance weir E2	0	depth (≥ 8')	Average for week =	11.5		
Entrance weir E3	0	depth (≥ 8')	Average for week =	11.6		
Collection channel velocity	0	1.5 - 4 fps	2.87fps 11/1/2020	Range: 3.91 fps MU 1 to 2.77 fps MU-17		
Transportation channel velocity	0	1.5 - 4 fps	2.22 fps, 11/1/2020			
North channel velocity	0	1.5 - 4 fps	2.64 fps, 11/1/2020			
South channel velocity	0	1.5 - 4 fps	3.14 fps, 11/1/2020			
West entrance differential	0	1.0' - 2.0'	Average for week =	1.5		
Entrance weir W1	0	depth (≥ 8')	Average for week =	9.9		
Entrance weir W2	0	depth (≥ 8')	Average for week =	9.9		
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		
<b>JUVENILE PASSAGE</b>						
Sluiceway operation	0	Units 3, 7, 18	MU8 OOS and MU1-2 OOS			
Turbine trashrack drawdown	0	<1.5', biwklly	10/19/2020 checked, all in criteria.			
Spill volume/pattern	0	1 to 8	Spill closed 9/1/2020.			
Turbine Unit Priority	8	per FPP	All available MUs running; OOC due to forced outages			
Gatewells	0	Weekly	11/1/2020 fish check, no fish mortality seen.			

## OTHER ISSUES:

### Unit Outages

Line 1, MU1,2 OOS 10/26/2020 - 2/28/21 for T1 replacement; 1/28/2021  
T10 (MU19 & 20) FOOS through 10/28/2021 due to acetylene levels  
M8 OOS through 11/15/20 overhaul  
MU21 OOS 8/3/2020 - 12/17/2020 for Annual & Headcover Upgrade  
MU9 & MU10 OOS through 11/2/2020 for T5 C phase Cooling Repairs  
MU11 & MU12 OOS through 11/2/2020 due to L4 Trip on T5 Energization

### Maintenance

PUD intake rake out of service due to power track damage. Exploring repair options. Raking with mobile crane as needed.  
Calibration check entrances 10/29, 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 operation testing in progress.  
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. Looks promising for roosting birds during low light conditions.  
Cormorants foraging forebay near east ladder exit and entrance. Several herons foraging east fishladder.  
Invasive aquatic weeds significant at count station pickets and north exit. No Zebra mussels present on substrate, veliger samples sent to lab. 9/29.  
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 concluded 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 rehab - Phase 1A. Planning operation with AWS backup water supply during construction. On hold.

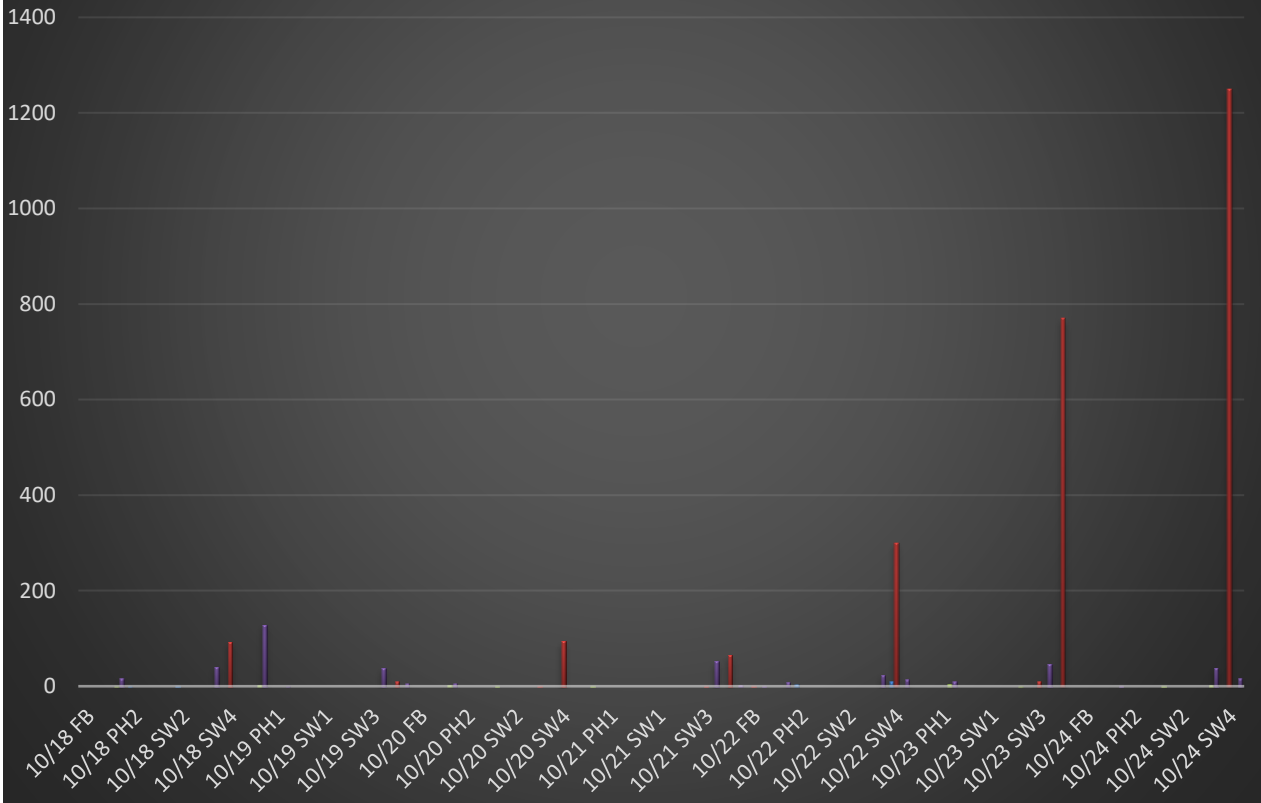
### Fishway Operations

North and east fish ladders in full operation.

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

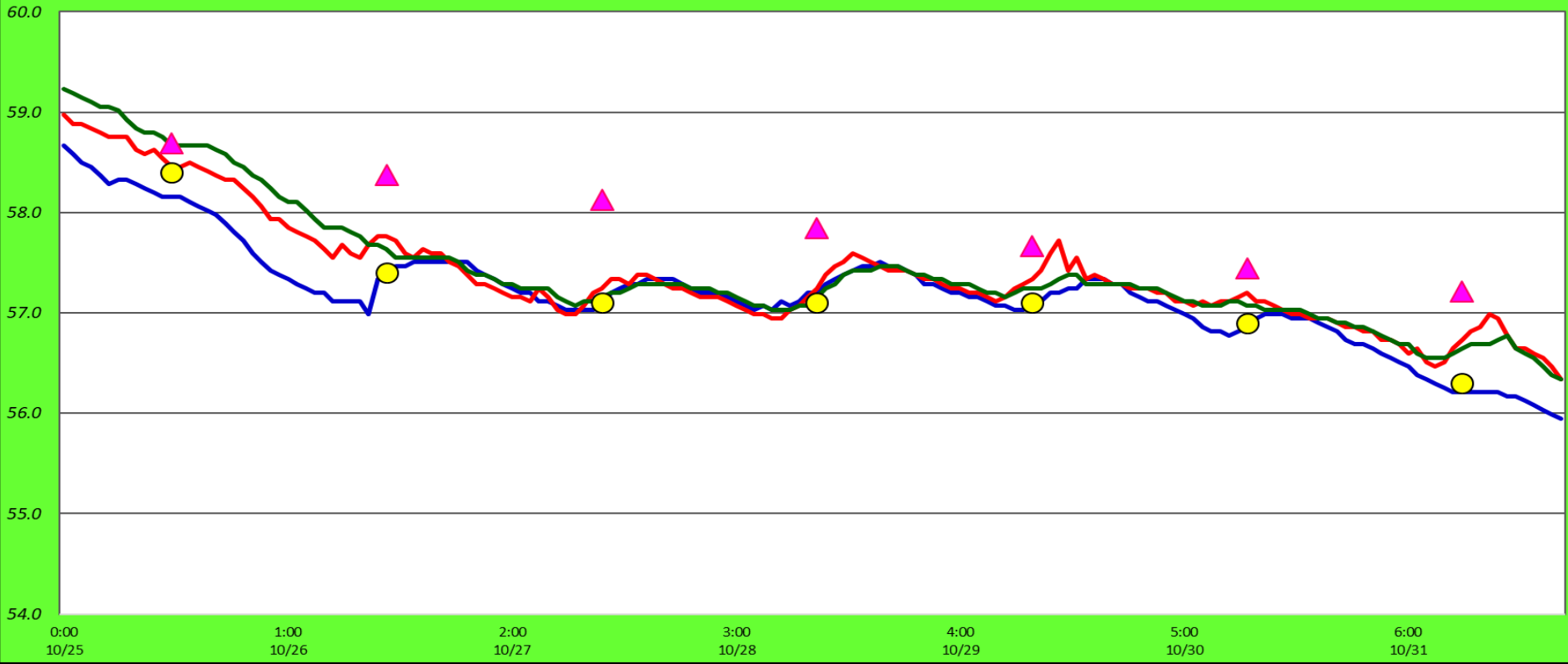


# Gull and Cormorant



### Adult Fish Ladders-River Temperatures

— East Count Station — North Count Station — North Entrance ● Current USGS daily tailwater average ▲ USGS daily tailwater average (2007-2019)



Secchi:		°F
10/25	Sun	58.4
10/26	Mon	57.4
10/27	Tue	57.1
10/28	Wed	57.1
10/29	Thurs	57.1
10/30	Fri	56.9
10/31	Sat	56.3
	AVG	57.2

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											
			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
10/25			1.5	2.6	11.0	11.0	9.2	1.6	8.7	8.7	-4.5	1.5	7.6	7.7
	1.3	9.0	1.7	3.5	11.7	11.6	9.6	1.6	9.4	9.5	-3.7	1.6	8.5	8.4
	1.3	9.1	1.7	3.5	11.7	11.7	9.8	1.6	9.6	9.5	-3.5	1.5	8.5	8.5
10/26			1.8	3.6	11.9	11.9	10.7	1.8	9.5	9.5	-2.7	1.6	8.6	8.6
	1.4	9.1	1.6	6.5	11.5	11.5	10.8	1.5	10.5	10.5	-2.7	1.5	8.5	8.5
	1.4	9.0	1.5	6.5	11.6	11.6	9.6	1.4	10.6	10.6	-3.5	1.4	8.6	8.6
10/27			1.4	6.6	11.6	11.5	9.5	1.4	10.5	10.5	-3.9	1.6	8.5	8.5
	1.3	9.2	1.1	7.0	12.0	12.0	10.6	1.5	10.6	10.5	-3.3	1.3	8.8	8.7
			1.6	6.5	11.5	11.5	11.2	1.6	10.4	10.4	-2.7	1.7	8.5	8.5
10/28			1.6	6.5	11.5	11.5	11.2	1.6	10.4	10.4	-2.7	1.7	8.5	8.5
	1.4	9.2	1.6	6.5	11.5	11.5	11.2	1.6	10.6	10.6	-2.7	1.6	8.6	8.6
	1.4	9.1	1.6	6.5	11.6	11.5	10.2	1.4	10.5	10.5	-3.2	1.5	8.5	8.5
10/29			1.0	6.5	11.4	11.4	8.9	1.5	10.5	10.5	-5.1	1.3	8.5	8.5
	1.2	9.1	1.4	4.1	11.4	11.4	8.9	1.6	9.6	9.6	-4.5	1.5	8.5	8.6
	1.2	9.1	1.5	3.1	11.4	11.6	8.0	1.5	9.5	9.5	-5.2	1.4	8.6	8.5
10/30			1.4	3.0	11.5	11.6	8.4	1.6	9.5	9.5	-4.8			
	1.1	8.9	1.5	2.5	11.4	11.5	8.0	1.5	9.5	9.5	-5.1	1.6	8.4	8.4
	1.2	8.7	1.6	2.5	11.6	11.5	7.7	1.4	9.5	9.5	-5.3	1.4	8.5	8.5
10/31			1.6	2.4	11.5	11.5	9.3	1.7	9.6	9.5	-4.1			
	1.5	8.8	1.5	5.4	11.4	11.6	9.6	1.6	9.9	9.9	-3.7	1.5	8.6	8.5
	1.4	8.8	1.4	5.0	11.6	11.6	9.4	1.5	10.1	10.1	-3.8	1.4	8.5	8.6
<b>AVG:</b>	<b>1.3</b>	<b>9.0</b>	<b>1.5</b>	<b>4.7</b>	<b>11.5</b>	<b>11.6</b>	<b>9.5</b>	<b>1.5</b>	<b>9.9</b>	<b>9.9</b>	<b>-3.9</b>	<b>1.5</b>	<b>8.5</b>	<b>8.5</b>

Fishways are inspected once daily plus one SCADA inspection.



Yes, we have no Zebra mussels! 9/29/2020.