

# The Dalles Dam Fishway Status Report

06/02/19

Inspection Period: May 26 - June 01, 2019

## 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: Comments: Repair to Weir 158 motor/brake.	Temperature: Secchi:
<b>NORTH FISHWAY</b>				
Exit differential	0	≤ 0.5'		57.6 °F
Count station differential	0	≤ 0.3'		3.4 feet
Weir crest depth	0	1.0' ± 0.1'		
Entrance differential	0	1.0' - 2.0'	1.4	
Entrance weir N1	0	depth (≥ 8')	10.0	
Entrance weir N2	0	Closed		
PUD Intake differential	0	≤ 0.5'		
<b>EAST FISHWAY</b>				
Exit differential	0	≤ 0.5'		
Removable weirs 154-157	0	Per forebay		
Weir 158-159 differential	0	1.0' ± 0.1'	Motor and brake repaired.	
Count station differential	0	≤ 0.3'		
153 Weir crest depth	0	1.1' ± 0.1'		
Junction pool weir JP6	0	0.0		
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	2.01fps on 5/26 range; 1.54fps at MU13, to 2.46fps at MU4	
Transportation channel velocity	0	1.5 - 4 fps	2.12 fps on 5/26.	
North channel velocity	0	1.5 - 4 fps	1.73 fps on 5/27.	
South channel velocity	0	1.5 - 4 fps	2.52 fps on 5/26.	
West entrance differential	0	1.0' - 2.0'		
Entrance weir W1	0	depth (≥ 8')		
Entrance weir W2	0	depth (≥ 8')		
Entrance weir W3	closed	No criteria		
South entrance differential	0	1.0' - 2.0'		
Entrance weir S1	0	depth (≥ 8')		
Entrance weir S2	0	depth (≥ 8')		
<b>JUVENILE PASSAGE</b>				
Sluiceway operation	0	Units 1, 8, 18;		
Turbine trashrack drawdown	0	<1.5', biweekly	Gatewells inspection 5/16/19.	
Spill volume/pattern	0	None	Gates 1 through 8 open to flex spill pattern.	
Turbine Unit Priority	21	per FPP	MU 5 and 6 OOS for maintenance	
Turbine 1% Efficiency	0	per FPP		

## OTHER ISSUES:

### Operation:

East & North fish ladders in full operation.

Sluiceway open with 6 gates

Spillway open for juvenile passage.

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MU5 FOOS bladeseals and T3 GSU transformer replacement and Overhaul. RTS 8/29/19

MU6 OOS T3 GSU transformer replacement. RTS 8/29/19

T10(MU19 & 20) FOOS through 10/28/21 due to acetylene levels

### Maintenance:

East count station window/crowder brush repaired and functioning.

Calibration check 5/21: East entrance tailwater off by 0.4'. Some entrance weirs off but not affecting criteria. Maintenance notified.

Collection channel dewatering pumps 5 and 6 rehab in progress.

Fishway automation parts purchase ongoing. Labor for assembly and install FY20.

Engineering evaluation of east fishway diffuser valve status to resume.

Fish related /non-fish funded items; Spillway assessment underway. Spillway crane replace and spillgate 9 repair included.

### Predators;

USDA hazing from boat and shore. Increase in gull numbers in powerhouse tailrace and within spillway avian lines.

Cormorant nesting on forebay towers increasing from previous years. Evaluating if results in increased near dam foraging.

No sea lion sightings reported this week.

### Research/Construction/Contractors:

Fish counting contractors (Four Peaks) on site and counting.

For fish count data and ladder passage splits, refer to; [http://www.fpc.org/adults/adult\\_queries/Q\\_adultcoequeries\\_adultrunsum\\_queryv2.php](http://www.fpc.org/adults/adult_queries/Q_adultcoequeries_adultrunsum_queryv2.php)

*AWS backup* - All deficiencies corrected by contractor. Compiling list for follow on contract items and spare parts.

*Transformer replacement* - T3 ongoing. Testing after august completion.

PSMFC weekly sampling for North Wasco County PUD continues. Refer to PCMFC weekly sample report.

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

*Pikeminnow dam angling* - 23 Pikeminnow for the week and 84 YTD. **Bass/Walleye release continues, unlike dam angling conducted at PUD projects.**

ODFW monthly fishway inspections ongoing.

*Lamprey minor mods* - Planning for potential LPS in junction pool.

Univ of Idaho lamprey radiotelemetry - Second season of lamprey passage night flow reduction test to resume in May.

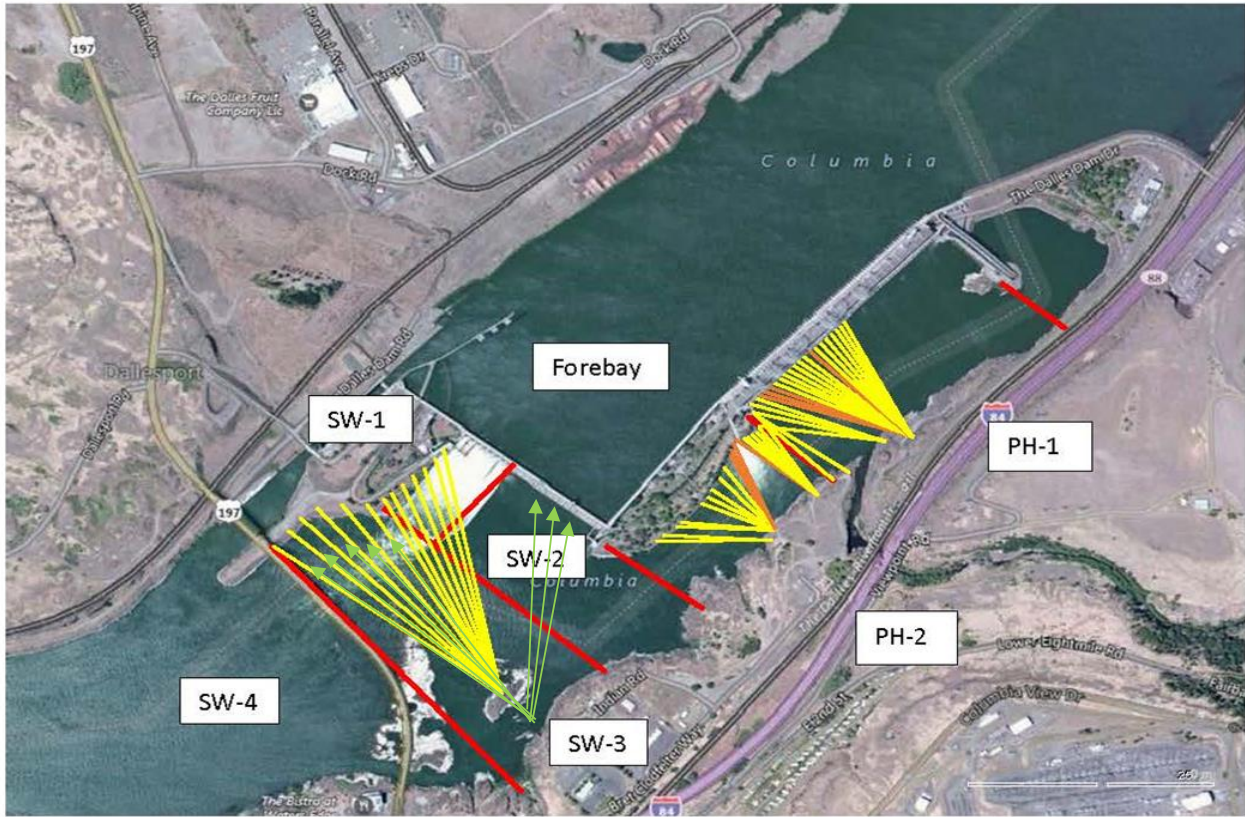
Tribal lamprey trapping - Materials and plans on hand for new hoist system. Install next week.

*Fish unit breaker replace* - Fish units returned to service. Substantial cleanup likely next winter. Determining affect to winter maintenance planning.

*Fish unit rehab* - Ongoing for phase 1A.

Approved by: Mike Colesar acting for Ron Twiner

Operation Project Manager The Dalles Dam



Red lines = avian zones

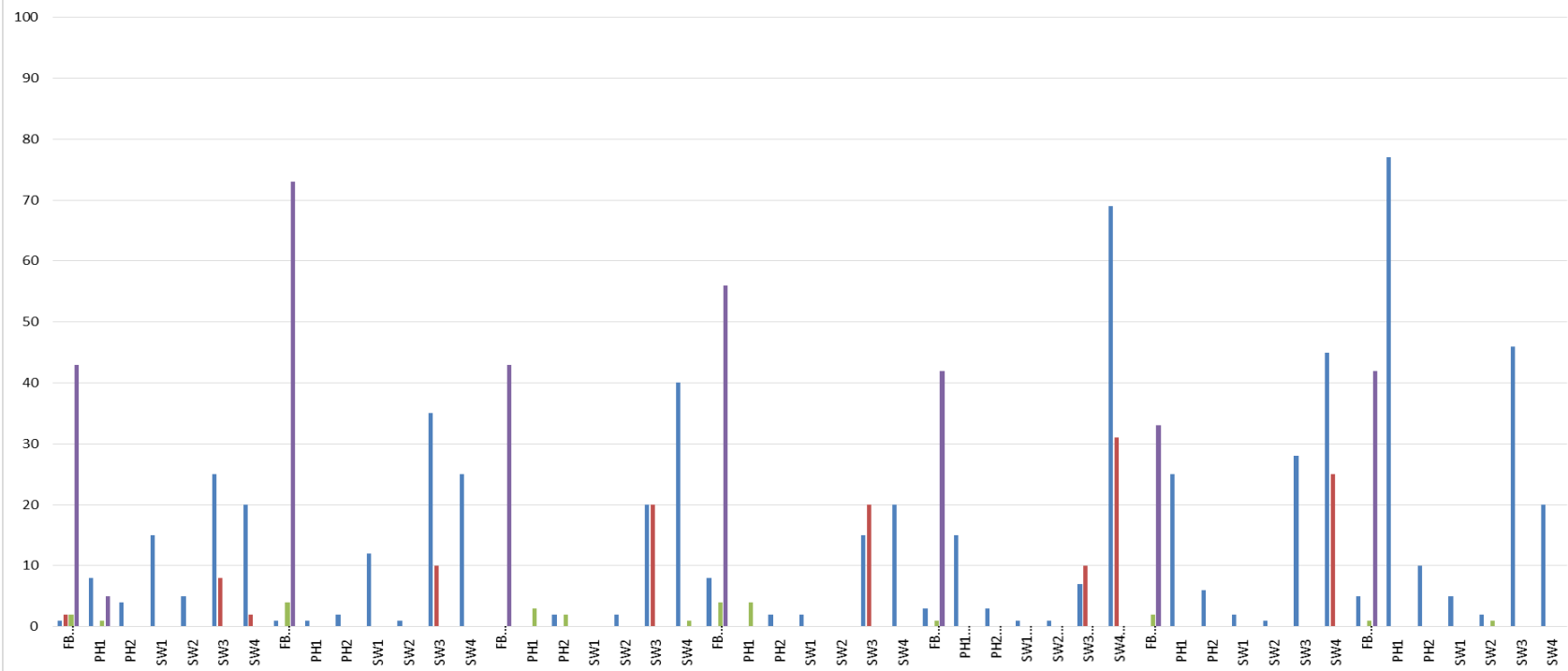
Yellow lines = current wires

Orange lines = down or missing wires

→ Additional avian lines installed 9/2018

### Gull and Cormorant Activity

■ GULL F ■ GULL NF ■ DCCO F ■ DCCO NF

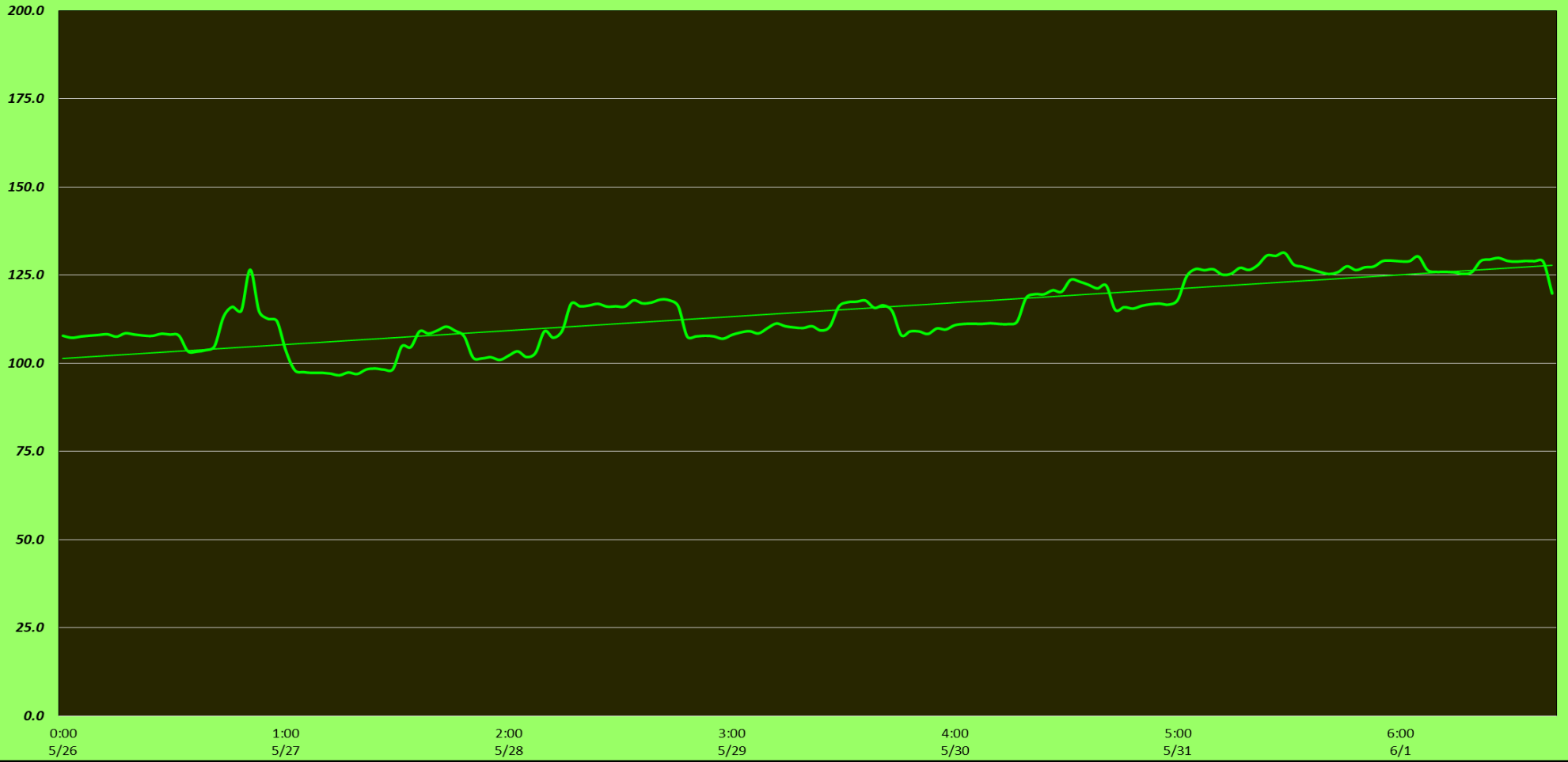


# The Dalles Dam Fish Ladder/River Temperatures

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



# Spill KCFS



	Secchi:		USGS: Temperatures
5/26	3.5	Sun	56.6
5/27	3.5	Mon	57.0
5/28	3.5	Tue	57.1
5/29	3.5	Wed	57.4
5/30	3.5	Thurs	58.1
5/31	3.0	Fri	58.2
6/1	3.0	Sat	58.8
	3.4	AVG	57.6

May  
June

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

SCADA INSPECTION  
= Out of criteria

Date:	North Ladder Entrance		East Ladder											
			East Entrance- open					West Entrance			South Entrance			
	Differential	N1 Depth	Differential	E1 Depth	E2 Depth	E3 Depth	JP 6	Differential	W1	W2	W3	Differential	S1	S2
5/26			1.8		13.8	13.9	14.6	1.5	8.5	8.5		1.3	8.7	8.7
	1.4	10.0	1.8		13.7	13.7	14.5	1.5	8.5	8.5		1.4	8.5	8.5
	1.3	10.0	1.8		13.8	13.8	14.6	1.4	8.5	8.5		1.4	8.5	8.5
5/27			1.7		13.8	13.9	14.1	1.5	8.5	8.5		1.3	8.6	8.5
	1.3	10.0	1.7		13.6	13.8	14.0	1.5	8.5	8.5		1.4	8.4	8.4
	1.4	10.0	1.7		13.8	13.7	14.4	1.6	8.4	8.4		1.4	8.4	8.5
5/28			1.9		13.8	13.7	14.7	1.5	8.6	8.6		1.4	8.4	8.5
	1.4	10.0	1.8		13.9	13.8	15.2	1.5	8.9	8.9		1.3	9.0	8.9
	1.4	10.0	1.8		13.8	13.9	15.3	1.5	8.9	8.9		1.3	9.1	9.1
5/29			1.8		13.9	13.9	14.8	1.4	8.6	8.6		1.3	8.5	8.5
	1.4	10.0	1.7		13.9	13.9	14.9	1.4	8.9	8.9		1.3	9.0	9.0
	1.3	10.0	1.8		13.8	13.9	15	1.3	9.2	9.2		1.2	9.0	9.0
5/30			1.8		13.8	13.8	15	1.4	9	9		1.3	9.0	9.0
	1.3	10.0	1.8		13.9	13.9	15.1	1.3	9.1	9.1		1.3	9.0	9.0
	1.3	10.0	1.9		13.8	13.8	15.4	1.5	9.1	9.1		1.3	9.0	9.0
5/31			1.9		13.7	13.7	15.5	1.5	9.1	9.1		1.4	8.9	8.9
	1.4	10.0	1.9		13.9	13.9	16.1	1.5	9	9		1.3	9.0	9.0
	1.4	10.0	1.8		13.8	13.8	16.2	1.4	9.1	9.1		1.3	9.1	9.1
6/1			1.9		13.9	13.7	16.6	1.4	9	9		1.3	9.0	9.0
	1.4	9.9	1.8		13.9	13.8	16.2	1.4	9.1	9.1		1.4	9.0	9.0
	1.4	10.0	1.9		13.8	13.8	16.1	1.4	9.1	9.1		1.3	9.0	9.0
<b>AVG:</b>	<b>1.4</b>	<b>10.0</b>	<b>1.8</b>		<b>13.8</b>	<b>13.8</b>	<b>15.2</b>	<b>1.4</b>	<b>8.8</b>	<b>8.8</b>		<b>1.3</b>	<b>8.8</b>	<b>8.8</b>

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