

The Dalles Dam Fishway Status Report

12/07/19

Inspection Period: 12/1-12/7, 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: FU's off 12/1 for dewatering	Temperature: Secchi:
			7	46.0 °F 5.0 feet
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 =	1.32
Entrance weir N1	0	depth (≥ 8')	Average for week =	9.2
Entrance weir N2	0	Closed		
PUD Intake differential	0	≤ 0.5'		
EAST FISHWAY - Dewatered for annual maintenance				
Exit differential	0	≤ 0.5'		
Removable weirs 154-157	0	Per forebay		
Weir 158-159 differential	0	1.0' ± 0.1'		
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		
Transportation channel velocity	0	1.5 - 4 fps		
North channel velocity	0	1.5 - 4 fps		
South channel velocity	0	1.5 - 4 fps		
West entrance differential	0	1.0' - 2.0'		
Entrance weir W1	0	depth (≥ 8')		
Entrance weir W2	0	depth (≥ 8')		
Entrance weir W3	0	1.0' - 2.0'		
South entrance differential	0	1.0' - 2.0'		
Entrance weir S1	0	depth (≥ 8')		
Entrance weir S2	0	depth (≥ 8')		
JUVENILE PASSAGE				
Sluiceway operation	0	Units 1, 8, 18		
Turbine trashrack drawdown	0	<1.5', biweekly		
Spill volume/pattern	0	None		
Turbine Unit Priority	0	per FPP		
Gatewells				

OTHER ISSUES:

Operations

North fish ladder in operation

East fish ladder dewatered to tailwater 12/2, due to pump failure(s) dewater below tailwater scheduled for 12/10

Spillway closed

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

MU13 OOS 0600 9/23/2019 - 1700 7/22/2020 for Hydraulic Oil System Repairs

MU2 FOOS through 1/2/2019 for hydraulic repairs

MU12 OOS 0001 11/26/2019 - 1700 2/10/2020 T6 GSU Replacement & Annual

MU11 OOS 0400 11/26/2019 - 1700 2/20/2020 T6 GSU Replacement & O/H

F1 & F2 OOS 0001 12/1/2019 - 1700 2/10/2020 for Annual, O/H, FUBB

T1 & T3 OOS 0600 12/2/2019 - 1700 1/7/2020 for FUBB Upgrades

Maintenance

Calibration check 11/18/19, all entrances in criteria.

Collection channel dewatering pumps 5 and 6 out of service. New pump motor ordered.

Fishway automation installation beginning 12/2.

Engineering evaluation of east fishway diffuser valve status/rehab to resume.

Preparing for dewater south entrance auxiliary water conduit to repair failed diffuser valves.

Preparing for improved 3 expansion joint repairs on east fishladder.

Preparing for count station concrete crack injection seal.

Spillway assessment (MRER); No funding for FY20. Importance of spillgate 9 fish priority included.

Weir 157 secured out of ladder. Manual operation through remainder of the passage season. Forebay soft constraint 159.5' through 11/30.

West entrance weir W1 closed due to cable problems. Repair during winter outage. Weir W3 operated in its place providing two weirs at >8' depth

Predators

Green laser used to haze piscivorous birds for effectiveness testing. Report to follow.

USA hazing resumes 4/15/20

Cormorant and gull numbers fluctuating daily, with expected fall numbers.

Sea Lion observed May 9th in SW3, not feeding.

Research/Construction/Contractors

Four Peaks fish counting concluded October 31. Cleaning count stations

AWS backup - Follow on contract in progress. Return to service delayed due to parts delivery. Commissioning scheduled third week Feb.

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

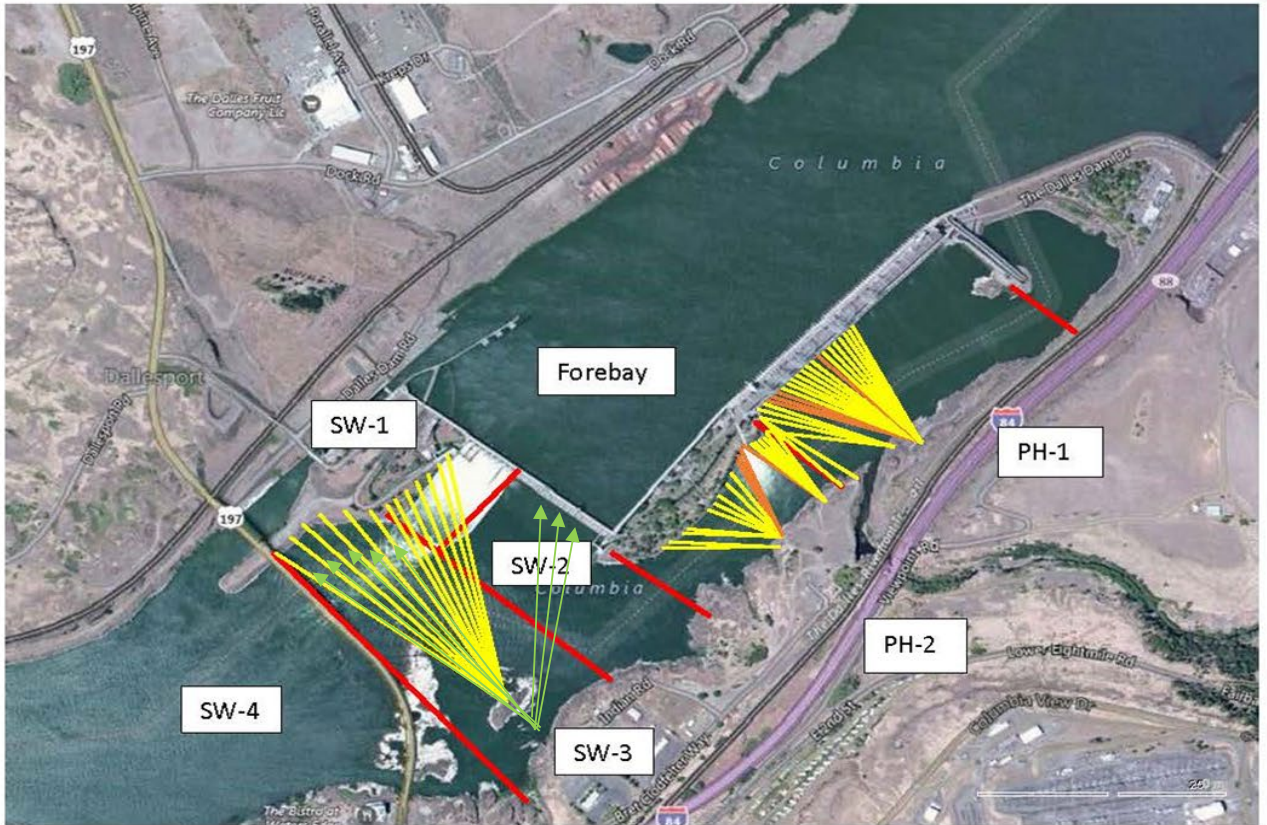
Dam angling 2019 total 2228 pikeminnow, 98 smallmouth bass and 6 walleye caught. **Bass/Walleye released.**

Fish unit breaker replace.- Planning third season work Dec1-end Jan. Commissioning first week of Feb.

Fish unit rehab - Phase 1A. Planning operation scenario during construction. No funding.

Approved by: Mike Colesar

Operation Project Manager The Dalles Dam



Red lines = avian zones

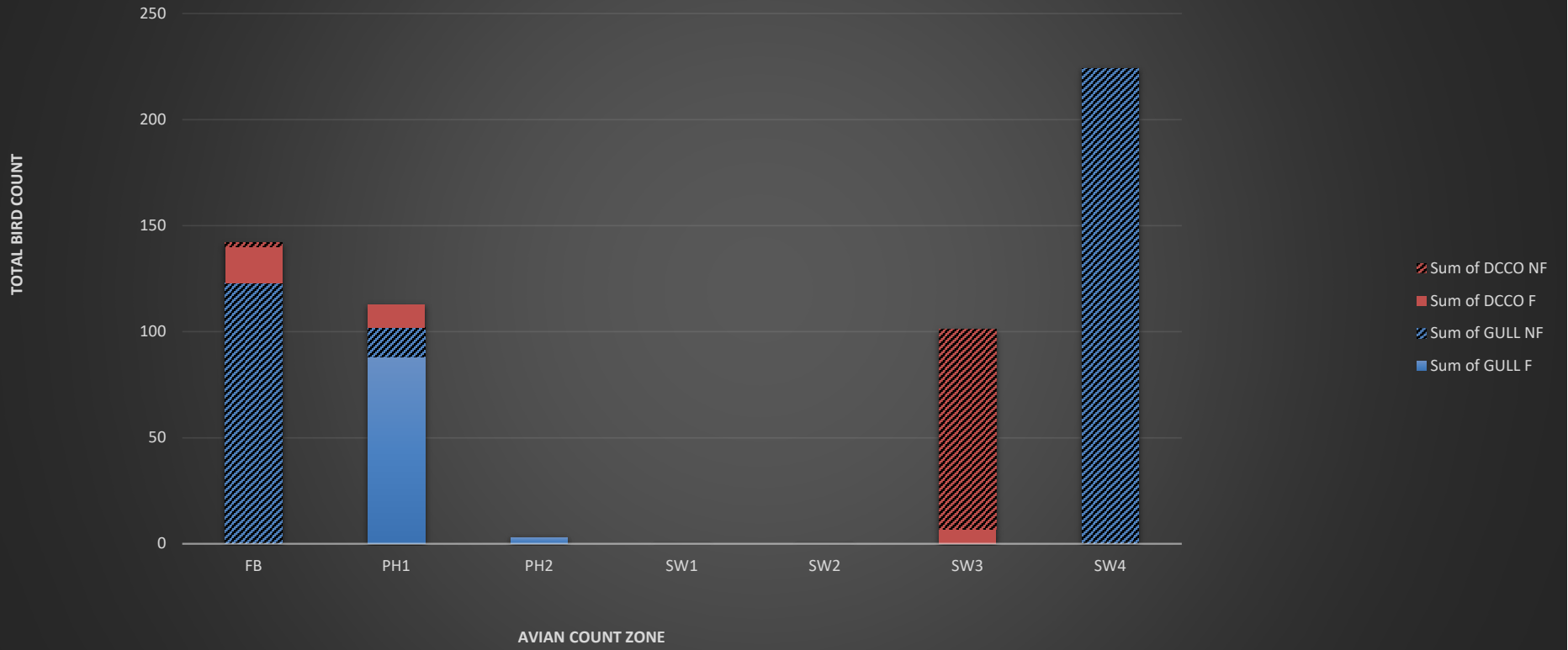
Yellow lines = current wires

Orange lines = down or missing wires

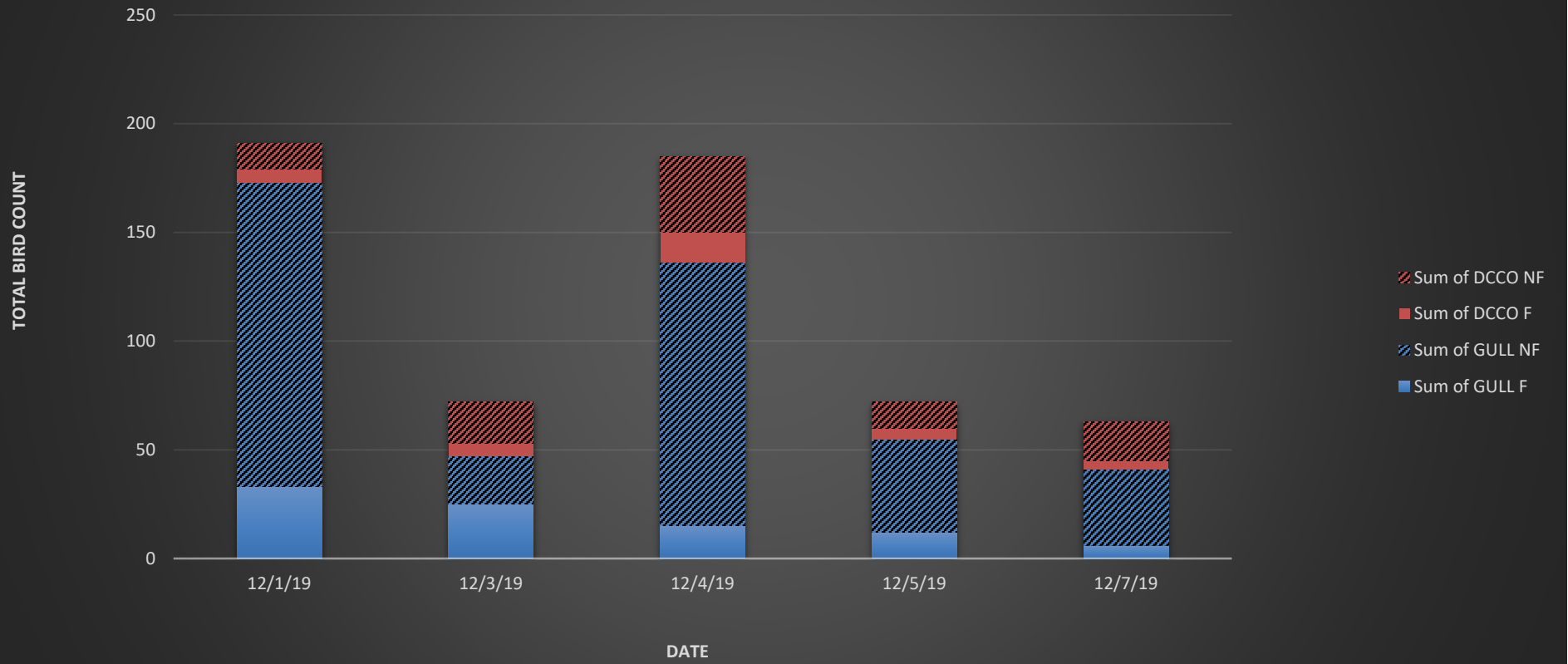


Additional avian lines installed 9/2018

Bird Activity by Zone 12/1 - 12/7



Bird Activity by Date



The Dalles Dam Fish Ladder(s)-River Temperatures

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



East Ladder taken out of service 12/1

USGS:		
Secchi:		Temperatures
12/1	5.0	Sun 47.0
12/2	5.0	Mon 46.7
12/3	5.0	Tue 46.4
12/4	5.0	Wed 46.0
12/5	5.0	Thurs 45.7
12/6	5.0	Fri 45.2
12/7	5.0	Sat 44.9
	5.0	AVG 46.0

[Dec temps](#)

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

Date:	North Ladder Entrance		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						
12/1	1.4	9.1	Ladder dewatered for winter maintenance																	
12/2	1.4	9.1																		
12/3	1.3	9.2																		
12/4	1.3	9.3																		
12/5	1.3	9.3																		
12/6	1.3	9.3																		
12/7	1.2	9.4																		
AVG:	1.3	9.2																		

Fishways are inspected once daily during winter maintenance period.