

The Dalles Dam Fishway Status Report

3/24/24

Inspection Period 3/17-3/23, 2024

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: 14			Temperature: 45.1
			Comments: Small wild fry in gatewells			Weekly Ave. Secchi: 4.8

NORTH FISHWAY

Exit differential	0	≤ 0.5'							
Count station differential	0	≤ 0.3'							
Weir crest depth	0	1.0' ± 0.1'							
Entrance weir N1	0	depth (≥ 8')	Average for the week	9.8					
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.3					
N2		Closed							
PUD Intake differential	0	≤ 0.5'							

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' ± 0.1'							
Junction pool weir JP6	0	> 7.0'							
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')							
East channel velocity	0	1.5 - 4 fps	5.15 fps	3/2/24					
Transportation channel velocity	0	1.5 - 4 fps							
North channel velocity	0	1.5 - 4 fps	3.38 fps	2/5/24					
South entrance	0	1.5 - 4 fps	3.96 fps	2/19/24					
West entrance differential	0	1.0' - 2.0'							
Entrance weir W1	0	depth (≥ 8')							
Entrance weir W2	0	depth (≥ 8')							
Entrance weir W3	0	No criteria							
South entrance differential	0	1.0' - 2.0'							
Entrance weir S1	0	depth (≥ 8')							
Entrance weir S2	0	depth (≥ 8')							

JUVENILE BYPASS

Sluiceway operation	0	Units 1, 17	1-2,3 & 17-1,2 gates open. Endgate opened 3/1.						
Turbine trashrack drawdown	0	<1.5', biwkly							
Spill volume/pattern	0	1 to 22	ITS opened 3/1/24						
Turbine Unit Priority	0	per FPP							
Gatewells	0	Weekly	Small numbers of chinook fry visible in wells.						

Current Outages

MU19 & MU20 FOOS 10/07/2018 1205 – 10/31/2025 1700 T10 ACETYLENE
MU4 OOS 04/17/2023 0630 – 4/25/2024 1700, BREAKER REPAIR/REPLACEMENT
MU5 OOS 2/12/24 – 3/21/24 6yr O/H
MU6-8 OOS 3/20/24 – 3/28/24 BPA Big Eddy Substation Breaker Maintenance
MU18 OOS 3/11/24 – 4/18/24 6yr O/H

Maintenance

Calibrations performed on 3/20, all within limits
Spillway assessment; Spillgates 1- 9 rehab 2034. Spillway crane replace first priority. Investigating gate operation frequency reduction.
Lamprey LPS contractor installed flumes and holding tank complete. Testing also complete. Planning operation ~2 weeks prior to start of lamprey returns.
Maintenance modified extension with lamprey plate for weir E1. Excessive gap from plate to wall observed. Working with PDT for remedy.

Predators

USDA otter trapping attempts unsuccessful. Postponed for now with continued monitoring.
Bird Gard sound system installed on BPA towers 3/14. Set to cycling on this week during daylight hours for cormorants. Results pending.
Tori lines installed at east, south. Mobile Bird Gard operating at east entrance.
Few eagles still on project. DCCO moving back onto BPA towers. No gulls on project.
Falconry contract in process. Expecting start mid April. Projecting to use RC boat as well in difficult to reach areas.

Research/Construction/Contractors

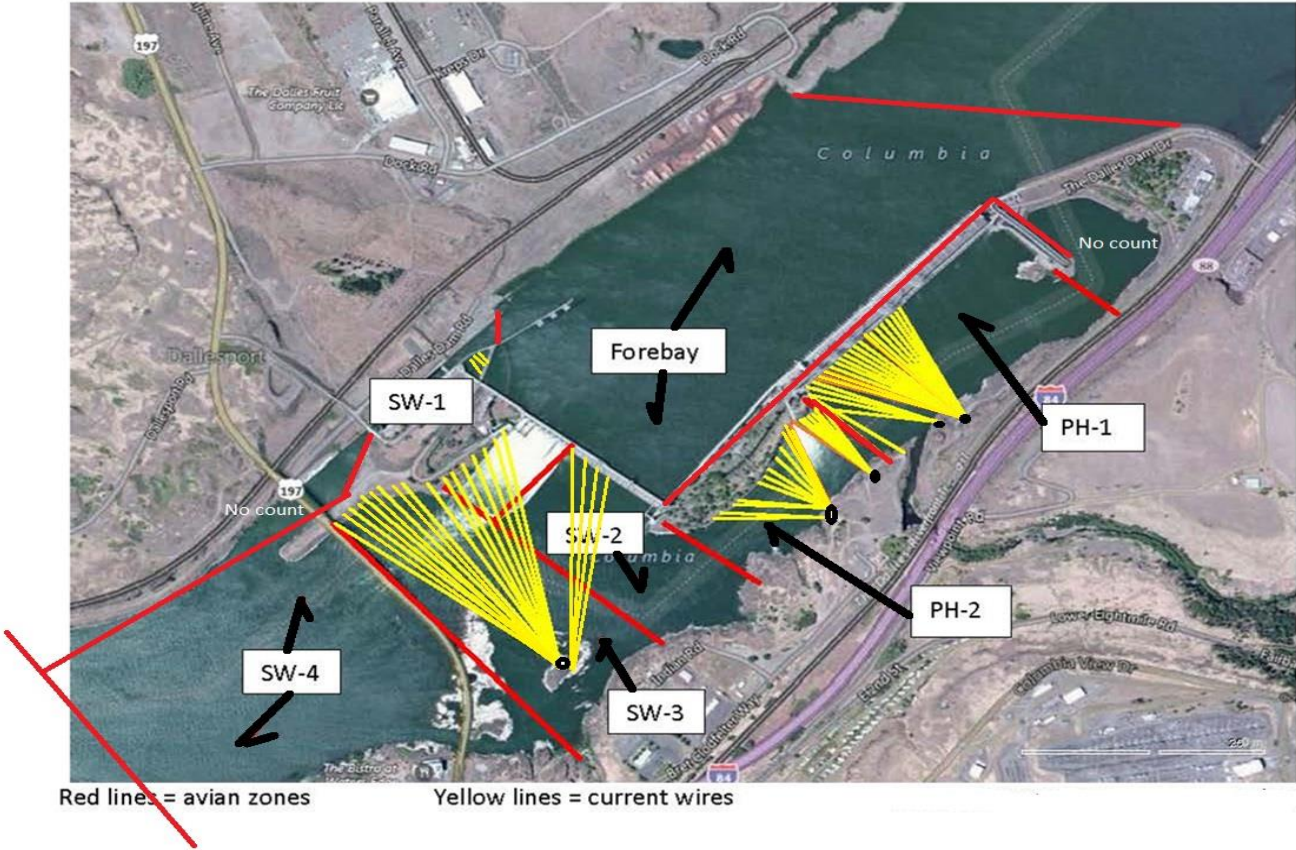
USGS temperature link- [March](#)
4 Peaks fish count ended 10/31
Making preparations to sample avian GI/Stomach contents.

Operations

Sluice endgate opened 3/1.
Both fishladder in full operation.
Spillway closed

Approved by: Ron Twiner, Operation Project Manager, The Dalles Dam

Bird Count Zones, Avian Lines and Deterrent Sites

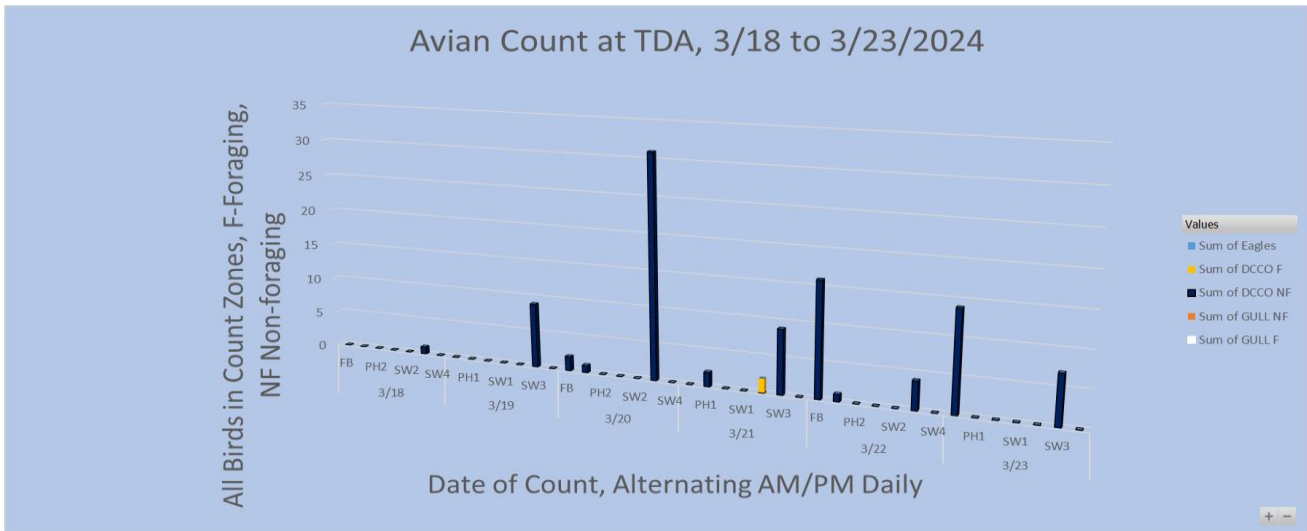


Avian predator tori lines and audio distress Bird Gard. 10/2023

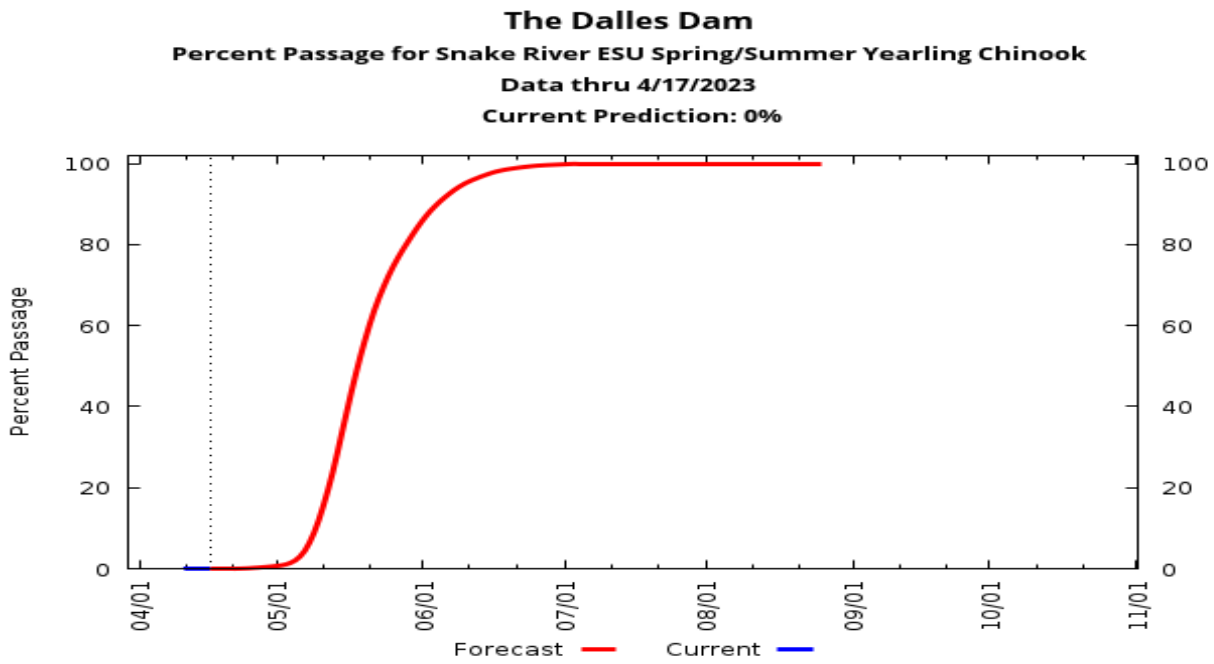
Tori lines at East Ladder entrances.

Bird Gard audio deterrent.





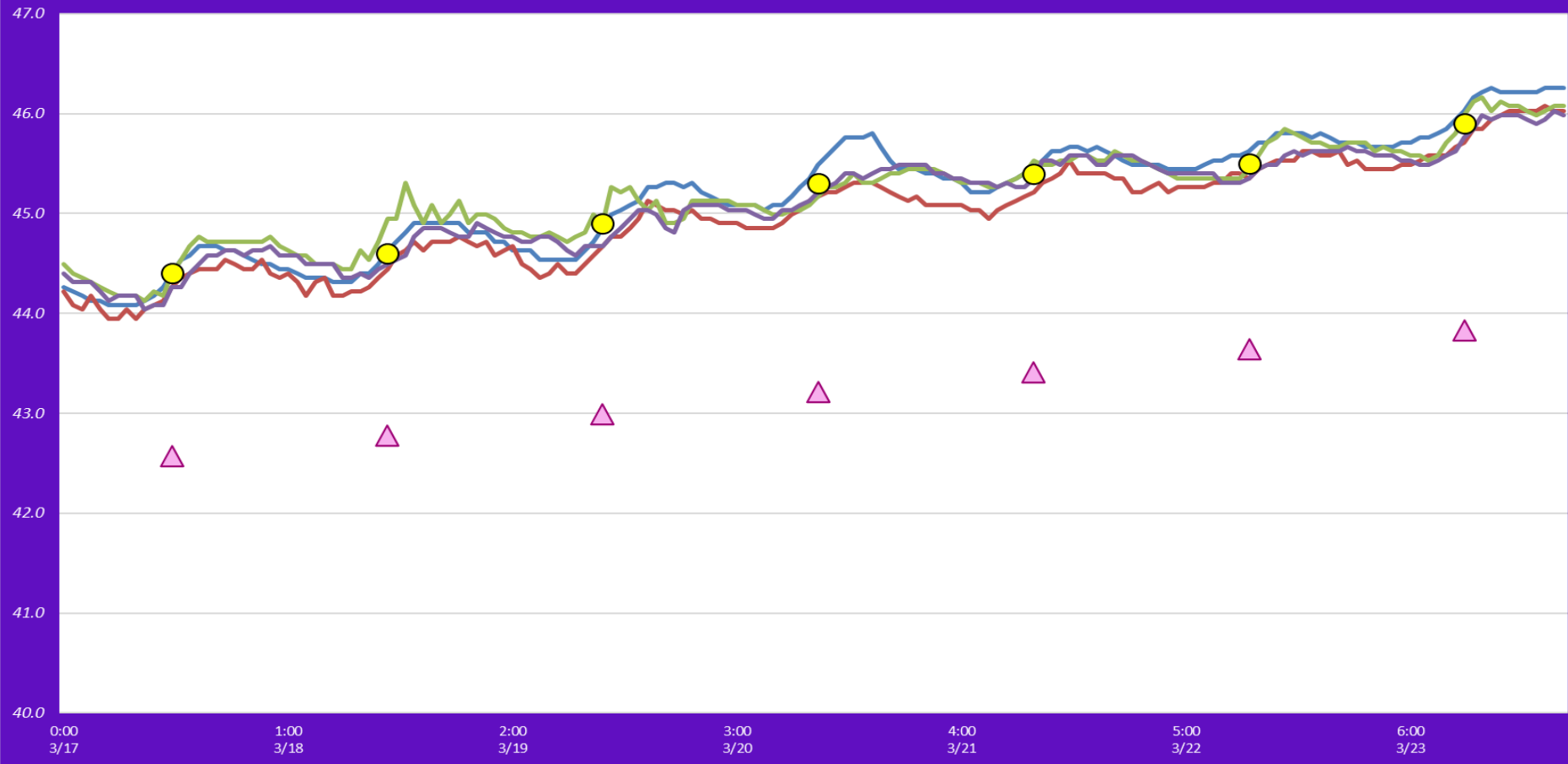
DCCO returning to BPA towers in spite of Bird Gard.



Waiting for fish

Adult Fish Ladders-River Temperatures

— East Count Station — South Entrance — North Count Station — North Entrance ● Current USGS Daily Average ▲ USGS Daily Average (2007-2023)



	Secchi:		USGS
3/17	5.0	Sun	44.4
	5.0	Mon	44.6
	5.0	Tue	44.9
	4.0	Wed	45.3
	6.0	Thurs	45.4
3/23	4.5	Fri	45.5
	4.0	Sat	45.9
	4.8	AVG	45.1

Reporting week data

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
3/17	1.3	9.7	1.6	2.1	11.6	11.6	10.1	1.3	10.5	10.6	-3.4	1.3	10.2	10.2
	1.3	9.2	1.6	1.8	11.4	11.6	9.8	1.4	10.2	10.2	-3.7	1.4	10.1	9.7
3/18	1.2	9.5	1.6	1.9	11.1	11.5	9.9	1.3	10.6	10.5	-4.0	1.4	10.3	10.0
	1.4	9.6	1.6	1.3	11.3	11.4	9.3	1.4	10.3	10.0	-4.4	1.4	10.1	9.8
3/19	1.2	9.4	1.6	1.6	11.4	11.3	9.6	1.3	10.5	10.6	-3.9	1.3	10.6	10.5
	1.5	9.4	1.6	1.1	11.6	11.6	9.1	1.4	10.1	10.1	-4.3	1.3	10.3	10.0
3/20	1.4	9.8	1.4	3.8	11.8	11.6	11.8	1.3	11.1	11.2	-1.9	1.2	11.6	11.2
	1.0	10.1	1.5	2.6	11.7	11.7	10.6	1.3	10.4	10.5	-2.7	1.3	10.6	10.2
3/21	1.3	9.8	1.5	3.6	11.9	11.8	11.5	1.2	11.0	11.1	-2.0	1.3	11.1	10.8
	1.1	10.0	1.6	2.3	11.7	11.8	10.3	1.5	10.2	10.2	-3.2	1.4	10.3	9.8
3/22	1.3	10.2	1.6	3.3	11.5	11.6	11.3	1.3	10.4	10.5	-2.1	0.9	11.2	11.2
	1.3	10.1	1.4	3.7	11.9	11.0	11.7	1.3	10.8	10.9	-1.9	1.4	10.1	9.8
3/23	1.3	10.3	1.4	4.0	11.9	11.9	12.0	1.2	10.8	10.9	-1.5	1.3	11.0	11.0
	1.3	10.2	1.6	3.4	11.9	12.0	11.4	1.3	10.4	10.5	-1.9	1.3	10.8	10.7
AVG:	1.3	9.8	1.5	2.6	11.6	11.6	10.6	1.3	10.5	10.6	-2.9	1.3	10.6	10.3

Fishways inspected twice daily



Middle tower walkway after nest removal on 3/14.. Speaker for Bird Gard is in corner of walkway.