The Dalles Dam Fishway Status Report

4/7/24

Inspection Period 3/24-3/30, 2024

THE DALLES DAM



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

The Dalles Dam	Inspections	Criteria		tal Number of Inspections: 14 mments: Fishways in full operation			Temperature:	. 4 4.5			
The Dalles Dam	OOC	Limit	Comments:				Weekly Ave. Secchi:				
			NORTH FI	SHWA	<u> </u>						
Exit differential	0	≤ 0.5'	Aquatic weeds and la	rge wood acc	umulating	1.					
Count station differential	0	≤ 0.3'									
Weir crest depth	0	1.0' ± 0.1'						,			
Entrance weir N1	0	depth (≥ 8')	Average for the week		10.1						
Entrance Differential	0	1.0' - 2.0'	Average for the week		1.3			,			
N2		Closed									
PUD Intake differential	0	≤ 0.5'	Lots of weed mass ad	ccumulating o	n intake						
			EAST FIS	HWAY							
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'	1.2' per FPP.								
Junction pool weir JP6	0	> 7.0'	Weekly average	11.0							
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5							
Entrance weir E1	0	No criteria	Weekly average	-1.0							
Entrance weir E2	0	depth (≥ 8')	Weekly average	12.4							
Entrance weir E3	0	depth (≥ 8')	Weekly average	12.4							
East channel velocity	0	1.5 - 4 fps	4.25 fps 3/31/24								
Transportation channel velocity	0	1.5 - 4 fps									
North channel velocity	0		3.01 fps 3/29/24								
South entrance	0	1.5 - 4 fps	4.06 fps 3/29/24								
West entrance differential	0	1.0' - 2.0'	Weekly average	1.5							
Entrance weir W1	0	depth (≥ 8')	Weekly average	#DIV/0!							
Entrance weir W2	0	depth (≥ 8')	Weekly average	#DIV/0!							
Entrance weir W3	0	No criteria	Weekly average	#DIV/0!							
South entrance differential	0	1.0' - 2.0'	Weekly average	#DIV/0!							
Entrance weir S1	0	depth (≥ 8')	Weekly average	#DIV/0!							
Entrance weir S2	0	depth (≥ 8')	Weekly average	#DIV/0!							
			JUVENILE	BYPASS	3						
Sluicegate operation	0	Units 1,8, 18	17 sluicegate open w	hile MU18 is	OOS. En	dgate open					
Turbine trashrack drawdown	0										
Spill volume/pattern	0	1 to 22	ITS open								
Turbine Unit Priority	0	per FPP	MU1 and MU17 in criteria due to MU18 OOS. RTS 4/18/24								
Gatewells	0	Weekly	Small Chinook fry in gatewells.								

Current Outages

MU11 OOS 3/25/24 0630 – 5/30/24 1700 – Annual and Thrust Bearing Oil Cooler

MU18 OOS 3/11/24 - 4/25/24 6yr O/H

MU19 & MU20 FOOS 10/07/2018 1205 - 10/31/2025 1700 T10 ACETYLENE

Maintenance

Calibrations performed on 3/30, 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 and tested. Planning operation start mid May pending OM manual.

Maintenance modified extension with lamprey plate for weir E1. Excessive gap from plate to wall. Working with PDT and project maintenance for options.

Predators

No recent otter sign

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, west and south. Mobile Bird Gard operating at east entrance.

Few eagles still on project. DCCO moving back onto BPA towers. ~5 gulls on project daily. Gulls taken at Miller rocks, by week end no gulls at site.

Falconry contract in process. Expecting start mid April. Projecting to use RC boat as well in difficult to reach areas.

The osprey have arrived for nesting. PIT tags recovered under nest platforms indicate significant juvenile salmon predation.

Research/Construction/Contractors

USGS temperature link- March April

4 Peaks fish count Resumed 4/1

Making preparations to sample avian GI/Stomach contents. First two samples collected from Miller rocks take CAGU.

USDA training and prework meeting next week.

Operations

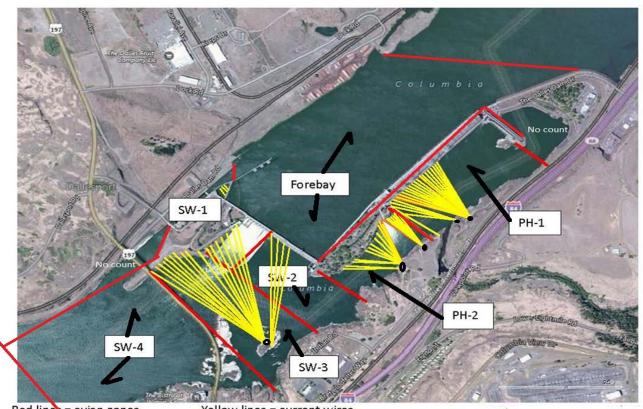
Sluice endgate opened 3/1.

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



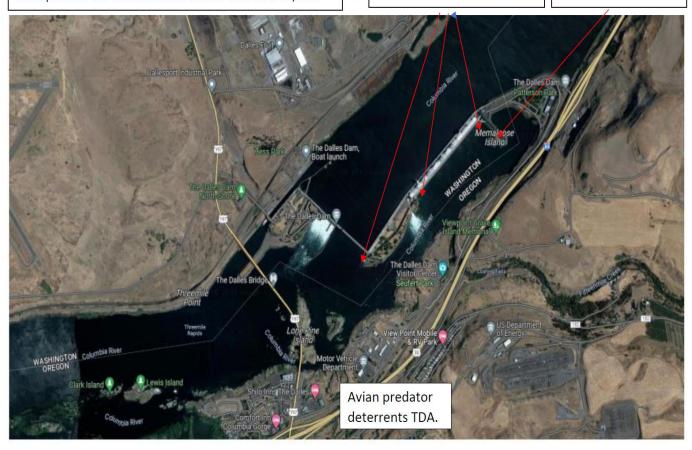
Red lines = avian zones

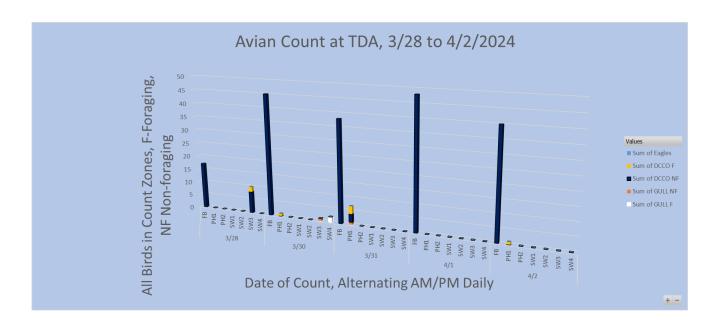
Yellow lines = current wires

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

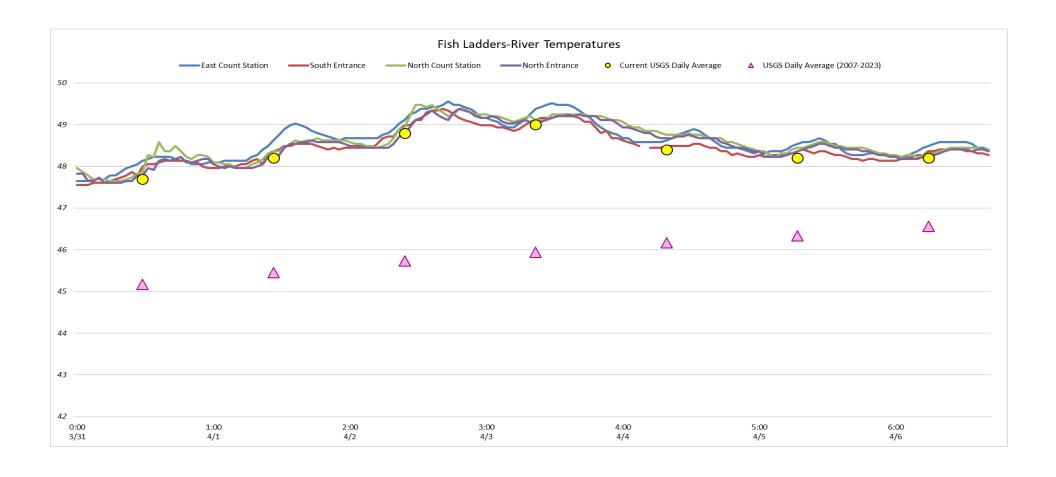
Tori lines at East Ladder entrances.

Bird Gard audio deterrent.





Cormorants have begun to feed and congregate around the project structures in anticipation of breeding.

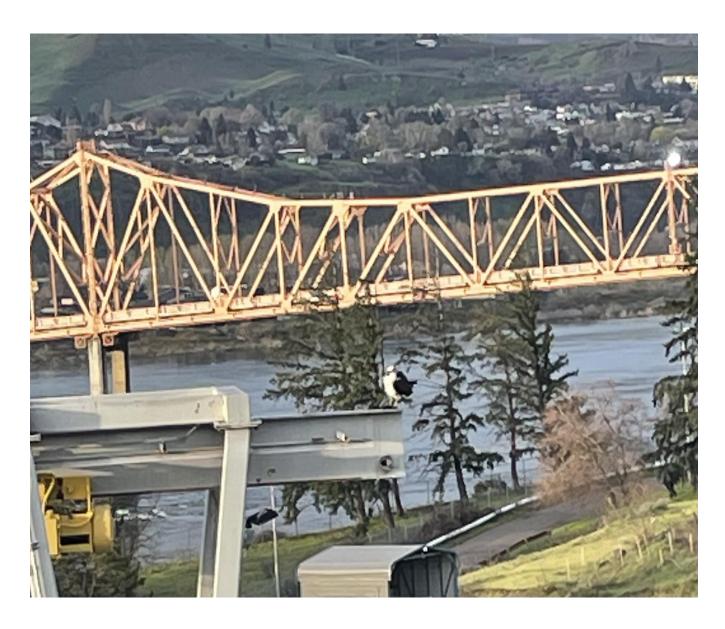


Secchi:		USGS
5.0	Sun	47.7
5.0	Mon	48.2
5.0	Tue	48.8
4.0	Wed	49.0
4.0	Thurs	48.4
4.0	Fri	48.2
4.0	Sat	48.2
4.5	AVG	48.4

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
3/31	1.4	10.2	1.6	3.8	11.3	11.4	11.8	1.4						
	1.2	10.3	1.4	3.4	11.9	12.1	11.4	1.4						
4/1														
	1.3	11.2	1.6	3.1	11.6	11.9	11.1	1.6						
	1.2	10.0	1.5	2.6	11.9	11.9	10.6	1.5						
4/2	1.1	10.1	1.4	3.6	12.1	12.1	11.6							
	1.2	10.0	1.6	2.1	11.7	11.8	10.1	1.3						
4/3														
	1.3	9.9	1.4	2.7	12.2	12.4	10.7							
	1.3	9.9	1.6	-5.3	12.8	13.1	10.7							
4/4														
	1.3	9.8	1.5	-5.0	13.0	13.0	11.1							
	1.3	9.9	1.5	-5.0	13.0	12.9	11.0							
4/5														
	1.4	9.8	1.5	-4.1	13.3	13.2	11.9	1.6						
	1.3	10.1	1.6	-5.3	12.9	13.0	10.7	1.6						
4/6														
	1.2	10.1	1.5	-5.3	13.0	12.9	10.7	1.5						
	1.2	10.0	1.6	-5.4	12.9	12.8	10.6	1.5					_	
AVG:	1.3	10.1	1.5	-1.0	12.4	12.5	11.0	1.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Fishways inspected twice daily



Osprey perched near nesting paltform by PUD. Multiple PIT tags for salmon found under the nest platform last year. Nesting platform originally installed to prevent nesting attempts on working cranes and other equipment in the area.