The Dalles Dam Fishway Status Report

5/1/22

Inspection Period 4/24-4/30 2022

THE DALLES DAM



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

The Delles Dem	Inspections	Criteria	Total Number of Insp		14	Temperature: 49.1 °F					
The Dalles Dam	ooc	Limit			e RCC restricted FB	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')		1.3							
Entrance Differential	0	1.0' - 2.0'		10.3							
N2	0	Closed									
PUD Intake differential	0	≤ 0.5'									
EAST FISHWAY											
Exit differential	0	≤ 0.5'									
Removable weirs 154-157	0	Per forebay	Note; 155 weir hoist fa	ailed. Foreb	pay restriction applied.						
Weir 158-159 differential	0	1.1' ± 0.1'									
Count station differential	0	≤ 0.3'									
153 Weir crest depth	0	1.0' ± 0.1'									
Junction pool weir JP6	0	> 7.0'	Weekly average	11.1							
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5							
Entrance weir E1	0	No criteria	Weekly average	3.2							
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.5							
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.5							
Collection channel velocity	0	1.5 - 4 fps	st 1.61-east 2.69 fps 4	/16							
Transportation channel velocity	0	1.5 - 4 fps	3.7 fps 4/23								
North channel velocity	0	1.5 - 4 fps	2.69 fps 4/25								
South channel velocity	1	1.5 - 4 fps	5.14 fps 4/23								
West entrance differential	0	1.0' - 2.0'	Weekly average	1.4							
Entrance weir W1	0	depth (≥ 8')	Weekly average	9.0							
Entrance weir W2	2	depth (≥ 8')	Weekly average	9.1	Opening less than 8'	overnight due to AWS operation.					
Entrance weir W3	2	No criteria	Weekly average	-2.2	Opening less than 8'	overnight due to AWS operation.					
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4							
Entrance weir S1	0	depth (≥ 8')	Weekly average	9.1							
Entrance weir S2	2	depth (≥ 8')	Weekly average	9.0	Opening less than 8'	overnight due to AWS operation.					
			JUVENILE	BYPAS	SS						
Sluicegate operation	0	Units 1, 8, 18									
Turbine trashrack drawdown	0	<1.5', biwkly	4/24/22 0k								
Spill volume/pattern	0	1 to 8	Per FPP								
Turbine Unit Priority	0	per FPP									
Gatewells	0	Weekly	4/24/22, small numbe	rs of juv. sa	almonid fish observed.	. No mortality.					

Current Unit Outages

T10 (MU19 & 20) FOOS through 10/27/2022 due to acetylene levels

MU12 OOS 0001 4/12/2021 - 1700 10/27/2022 for Annual & Cooler Upgrades

MU 17 OOS 3/28/2022 0630 – 7/15/2022 1700 for 6 yr. overhaul and top plate

MU19 OOS 0630 6/27/2021 – 1700 10/27/2022 for Top Plate Cover Upgrade and blade linkage inspection

4/27-4/29 FU1 out of service for buss work. AWS in operation to supplement FU2 flow.

Maintenance

East fishladder wier 155 hoist failed. Weir in down position. Half gallon oil lost to fishway. Forebay restriction 157.5 until repaired. ETR Dec 2022.

Permanent oil boom reinstall planned for Apr28 was postponed until further notice due to new high forebay restriction.

Fishway automation replacement entrances and exits in operation. Work resumes in June, pending funding.

Calibrations on east fishway entrances, engineering working to fine tune. All in criteria.

Spillway assessment (MRER); Spillgates 1- 9 rehab date estimate 2034. Includes replacement of spillbay 9 trunnion pin repair. Spillway crane first priority Fish unit rehab Phase 1A on hold. Planning operation with AWS backup water supply during construction.

AWS intake trashrack debris management - No funding FY22.

East ladder window rear crowder brush drive not working. Maintenance notified.

Predators

~45 cormorant nesting pairs on BPA towers. Gulls and cormorants feeding in tailwater. Many gulls within avian lines due to low flows.

USDA shore hazing began 4/15. Boat to start May1.

Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Fish Passage Plan 2022 approved.

Research/Construction/Contractors

USGS river temperatures link April°F

4 peaks visual counting resumed April 1

Operations test results of new PSMFC switchgate/juvenile sampling facility at north ladder PUD. Results provided to FPOM.

Fish Accords Lamprey Passage plan ongoing at 60% DDR junction pool LPS. Investigating mods for entrance and exit wiers.

PTAGIS fishladder data collection at in service count station continues.

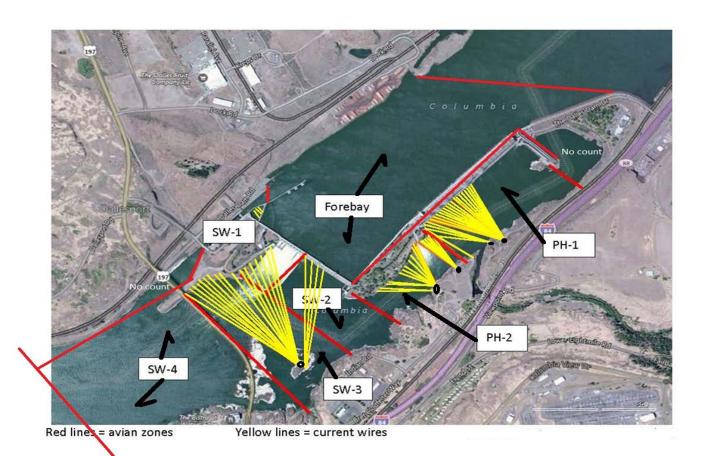
Operations

Ice Trash sluiceway endgate Open. Sluicegates open per FPP. Modifications to gate openings made due to forced unit outages.

East and North fishways in full service

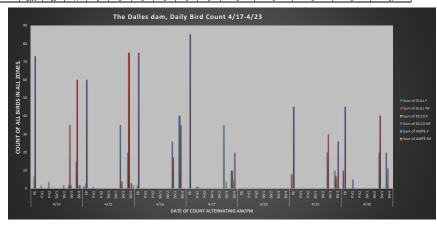
Approved by: Ron Twiner, Operation Project Manager, The Dalles Dam

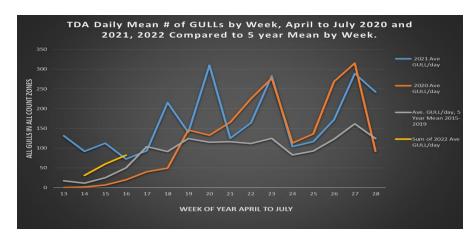
Bird Count Zones, Avian Lines and Laser Deterrent Sites





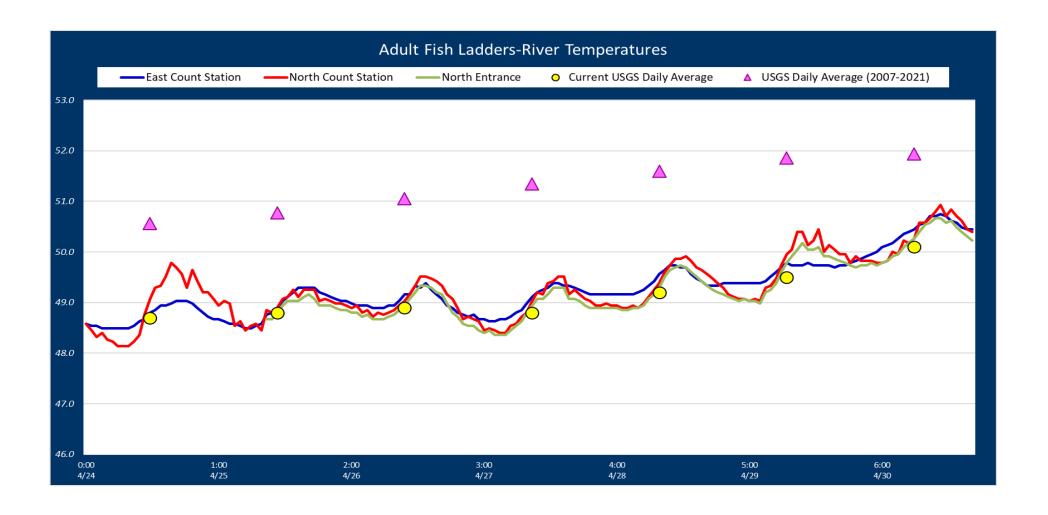
									F=forag								
Date	Observer	Time	ZONE	GULL F	GULL NF	DCCO F	DCCO NF	TERN F	TERN NF	Grebe F	Grebe NF	AWPE F	AWPE NF	OtherF	OtherNF	Total	comn
4/24			FB	0	0	7	73	0	0	0	0	0	0	0	0	80	4
4/24			PH1	0	0	2	0	0	0	0	0	0	0	0	0	2	_
4/24	JED	AM	PH2 SW1	0	0	4	0	0	0	0	0	0	0	0	0	0	_
4/24 4/24	JED AW	AIVI	SW1	0	0	2	0	0	0	0	0	0	0	0	0	2	-
			SW3	2	35	2	0	0	0	0	0	0	0	0	0	39	-
4/24 4/24			SW3	15	60	1	2	0	0	0	0	0	0	0	0	39 78	-
1/25	_		FB	1	0	3	60	0	0	0	0	0	0	1	0	65	-
1/25	+ 1		PH1	Ó	0	1	0	0	0	0	0	0	0	0	ő	1	-
/25	t l		PH2	0	0	0	0	0	0	0	0	0	0	1	0	1	-
1/25	JED	PM	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	-
1/25	ULD		SW2	0	0	0	0	0	0	0	0	0	0	0	ő	0	-
1/25	t l		SW3	35	4	0	0	0	0	0	0	ő	0	ĭ	ő	40	-1
/25	t l		SW4	20	75	0	3	0	0	0	0	0	2	0	ő	100	┪
/26	\vdash		FB	0	0	2	75	0	0	0	0	0	0	0	0	77	-1
/26	t l		PH1	0	0	0	0	0	0	0	0	0	0	0	ő	0	-1
/26	t l		PH2	0	Ö	0	0	0	0	0	0	0	0	ő	ő	ő	-1
/26	JWR	AM	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	_
/26	t i		SW2	0	0	0	0	0	0	0	0	0	0	0	ő	Ö	7
/26	t l		SW3	26	17	0	0	0	0	0	0	Ö	0	Ö	Ö	43	_
/26	f I		SW4	40	35	0	0	0	0	0	0	0	0	0	0	75	_
27			FB	0	0	0	85	0	0	0	0	0	0	0	0	85	7
27			PH1	0	0	1	1	0	0	0	0	0	0	0	0	2	_
/27			PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
27	JED	PM	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
/27			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
/27			SW3	35	0	4	0	0	0	0	0	0	0	0	0	39	
/27			SW4	10	10	5	20	0	0	0	0	0	0	0	0	45	
/28			FB	0	0	0	0	0	0	0	0	0	0	0	0	0	
/28	i l		PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	
/28	t l		PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	_
/28	f I	AM	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	_
/28	t l		SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
/28	f I		SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	_
/28	i l		SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	7
/29			FB	0	8	0	45	0	0	0	0	0	0	0	0	53	7
29			PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
29			PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
/29	MM	PM	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
29			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	_]
/29			SW3	20	30	0	0	0	0	0	0	0	0	0	0	50	╝
/29			SW4	10	7	6	26	0	0	0	0	0	0	0	0	49	
/30			FB	0	10	0	45	0	0	0	0	0	0	0	0	55	
/30			PH1	0	0	0	5	0	0	0	0	0	0	0	0	5	╝
/30			PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
/30	MM	AM	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	_
/30			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	_
/30			SW3	20	40	0	0	0	0	0	0	0	0	0	0	60	4
1/30	1 1		SW4	20	11	0	0	0	0	0	0	0	0	0	0	31	- 1





Row Labels	Sum of GULL F Sum of GULL N		Sum of DCCO F Sum of D	CCO NF Sum of AW	PE F Sum of AV	VPE NE
4/24	17	95	18	75	0	0
FB	0	0	7	73	0	0
PH1	0	0	2	0	0	0
PH2	0	0	4	0	0	0
SW1	ō	ō	ó	ō	ō	ō
SW2	0	0	2	0	0	0
SW3	2	35	2	0	0	0
SW4	15	60	1	2	0	0
4/25	56	79	4	63	ō	2
FB	1	0	3	60	0	0
PH1	0	0	1	0	0	0
PH2	0	0	0	0	0	0
SW1	0	0	0	0	0	0
SW2	0	0	0	0	0	0
SW3	35	4	0	0	0	0
SW4	20	75	0	3	0	2
4/26	66	52	2	75	0	0
FB	0	0	2	75	0	0
PH1	0	0	0	0	0	0
PH2	0	0	0	0	0	0
SW1	0	0	0	0	0	0
SW2	o o	o	o o	0	0	0
SW3	26	17	0	0	0	0
SW4	40	35	0	0	0	0
4/27	45	10	10	106	ő	ő
FB	0	0	0	85	0	0
PH1	o o	o	1	1	0	0
PH2	ő	ō	ò	ò	0	0
SW1	ő	ō	o o	0	0	0
SW2	o o	o	o o	0	0	0
SW3	35	0	4	0	0	0
SW4	10	10	5	20	0	0
4/28	o o	0	ŏ	0	ő	ő
FB	0	0	0	0	0	0
PH1	ő	ō	o o	0	0	0
PH2	ő	ō	o o	0	0	0
SW1	0	ō	0	o o	ō	0
SW2	0	ō	0	0	0	0
SW3	0	ō	0	o o	ō	0
SW4	ō	ō	ō	ō	ō	0
4/29	30	45	6	71	0	0
FB	0	8	0	45	0	0
PH1	0	ō	0	0	ō	0
PH2	ō	ō	0	ō	ō	0
SW1	ō	ō	0	ō	ō	0
SW2	Ó	0	0	0	0	0
SW3	20	30	0	0	0	0
SW4	10	7	6	26	ō	0
4/30	40	61	0	50	0	0
FB	0	10	0	45	0	0
PH1	o o	0	0	5	0	0
PH2	0	0	0	0	0	0
SW1	o o	0	0	0	0	0
SW2	o o	0	0	0	0	0
SW3	20	40	0	0	0	0
SW4	20	11	0	0	0	0
Grand Total	254	342	40	440	0	2

36.28 per day F 48.85 per day NF



Secchi:		USGS°F
3.5	Sun	48.7
5.0	Mon	48.8
5.0	Tue	48.9
5.0	Wed	48.8
5.0	Thurs	49.2
5.0	Fri	49.5
5.0	Sat	50.1
4.8	AVG	49.1

Reporting week data

	North	addor						East L						
Date:	North	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
4/24	1.3	10.3	1.4	3.1	12.7	12.8	11.1	1.4	9.7	9.7	-2.0	1.5	9.6	9.4
	1.1	10.5	1.5	3.8	13.4	13.5	11.8	1.5	8.4	8.4	-3.3	1.5	9.7	9.4
4/25	1.2	10.4	1.6	2.8	12.0	12.1	10.7	1.6	9.0	9.0	-2.5	1.3	10.0	9.8
	1.2	10.2	1.5	3.1	12.5	12.6	11.1	1.4	9.5	9.5	-2.0	1.3	10.0	9.8
4/26	1.3	10.3	1.5	2.9	12.4	12.6	10.9	1.6	9.3	9.4	-2.4	1.4	9.7	9.5
	1.2	10.4	1.7	2.7	10.0	10.0	10.7	1.4	8.0	8.0	-2.6	1.4	8.0	7.9
4/27	1.3	10.3	1.4	3.3	10.6	10.6	11.3	1.3	8.2	8.3	-2.0	1.4	7.8	7.9
	1.2	10.3	1.6	3.0	9.6	10.3	11.0	1.4	8.2	8.3	-2.3	1.4	8.0	7.9
4/28	1.4	10.3	1.5	3.5	9.8	11.0	11.2	1.4	8.3	8.4	-2.2	1.4	7.9	7.9
	1.4	10.2	1.6	3.6	9.5	10.7	11.3	1.3	7.9	8.0	-1.9	1.0	7.7	7.7
4/29	1.3	10.4	1.5	3.4	12.1	12.5	11.1	1.5	9.7	9.9	-2.2	1.4	9.8	9.7
	1.3	10.3	1.6	3.3	12.1	12.4	11.0	1.4	9.7	9.9	-2.2	1.5	9.5	9.3
4/30	1.5	10.0	1.3	3.8	12.6	13.0	11.5	1.3	10.2	10.4	-1.7	1.4	10.0	9.9
	1.3	10.2	1.5	3.3	12.1	12.4	11.0	1.4	9.8	9.9	-2.2	1.3	10.0	9.8
AVG:	1.3	10.3	1.5	3.2	11.5	11.9	11.1	1.4	9.0	9.1	-2.2	1.4	9.1	9.0
Fishways are inspected twice daily.											found out	of criteria		





Weir 155 damage