

The Dalles Dam Fishway Status Report

7/18/22

Inspection Period 7/10-7/17 2022

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: 65.9 °F
			Comments: W155 failure RCC restricted FB		Weekly Ave. Secchi: 5.0

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')		11.1	
Entrance Differential	0	1.0' - 2.0'		1.3	
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 failed. Forebay restriction minimum 157' applied.		
Weir 158-159 differential	0	1.1' ± 0.1'			
Count station differential	0	≤ 0.3'	Count station pickets plugging up with weeds requiring frequent raking to restore differential.		
153 Weir crest depth	0	1.3' ± 0.1'	Some fluctuations in weir 153 height due to significant weed debris buildup on east pickets.		
Junction pool weir JP6	0	> 7.0'	Weekly average	15.0	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir E1	0	No criteria	Weekly average	7.0	Requires regular manual corrections due to high tailwater.
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.7	Requires regular manual corrections due to high tailwater.
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.7	Requires regular manual corrections due to high tailwater.
Collection channel velocity	0	1.5 - 4 fps	1.92 fps 7/9		
Transportation channel velocity	0	1.5 - 4 fps	3.7 fps 7/9		
North channel velocity	0	1.5 - 4 fps	2.6 fps 7/9		
South channel velocity	0	1.5 - 4 fps	4.2 fps 7/9		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir W1	0	depth (≥ 8')	Weekly average	9.8	
Entrance weir W2	0	depth (≥ 8')	Weekly average	10.3	
Entrance weir W3	0	No criteria	Weekly average	1.5	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	0	depth (≥ 8')	Weekly average	11.0	
Entrance weir S2	0	depth (≥ 8')	Weekly average	8.8	

JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18	Pattern per FPP.		
Turbine trashrack drawdown	0	<1.5', biwklly	7/9/22 All MUs in criteria somewhat higher than normal Diff. FUs being flushed as needed.		
Spill volume/pattern	0	1 to 22	Pattern per FPP according to volume.		
Turbine Unit Priority	0	per FPP	Fish Unit flow may be below 2500cfs due hydraulics in flow and screen plugging with weeds.		
Gatewells	0	Weekly	7/9/22, small numbers of subyearlings observed. No mortality.		

Current Outages

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

MU12 OOS 0001 4/12/2021 – 1700 10/27/2022 fr 7/10/2022

Inspection Period 7/3-7/9 2022

Spillgate 14 forced out of service due to operational issues. RTS after spill season. Nine of 15 gates south of spillwall now OOS.

Maintenance

East fishladder wier 155 hoist failed. Weir in down position. Return to service Jan 2023, depending on funding. Forebay restriction 157.

Permanent oil boom reinstall planned for April was postponed until this winter. Plan to extend to cover AWS intake.

Calibrations on east fishway entrances. E-2 ~6" out of calibration, Remainder in criteria.

Spillway assessment (MRER); Spillgates 1- 9 rehab 2034. Includes spillbay 9 trunnion pin repair. Spillway crane first priority

Fish unit rehab Phase 1A awaiting funding.

AWS intake trashrack debris management - restart meeting july 13.

Fish unit intake differential monitored. 7/9 FU2 1.5' differential. Intake ROV insepction 8/16

Predators

Falconry completed on 7/14/2022. Continuing to track gull/cormorant numbers.

USDA hazing by shore and boat continues. Falconers presented demonstrations to visitors.

Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Permit pending.

Large numbers of pelicans around project. Up to 2 pelicans inside east fishway.

Research/Construction/Contractors

USGS river temperatures link [June°F](#)

4 peaks visual counting resumed April 1

Planned improvements to tribal lamprey trapping equipment. Reduced to bare minimum due to funding constraints

Pikeminnow removal program reporting period 5/30-6/26 40/YTD

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

PTAGIS fishladder data collection at count stations continues.

Operations

Ice Trash sluiceway endgate open. Sluiceways 1,8,18 open per FPP.

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



2022 Piscivorous Birds

F=foraging, NF=non-foraging

Date	Observer	Time	ZONE	GULL F	GULL NF	DCCO F	DCCO NF	TERN F	TERN NF
7/9	M M	AM	FB	0	0	0	50	0	0
7/9			PH1	0	0	0	0	0	0
7/9			PH2	0	0	0	0	0	0
7/9			SW1	0	0	0	0	0	0
7/9			SW2	0	0	0	0	0	0
7/9			SW3	0	16	0	11	0	0
7/9			SW4	0	20	0	0	0	0
7/10	MM	PM	FB	0	0	0	50	0	0
7/10			PH1	0	0	0	0	0	0
7/10			PH2	0	0	0	0	0	0
7/10			SW1	0	0	0	0	0	0
7/10			SW2	0	0	0	0	0	0
7/10			SW3	0	25	0	27	0	0
7/10			SW4	0	25	0	0	0	0
7/11	MM	AM	FB	47	0	0	56	0	0
7/11			PH1	0	0	0	3	0	0
7/11			PH2	0	0	0	0	0	0
7/11			SW1	0	0	0	0	0	0
7/11			SW2	0	0	0	0	0	0
7/11			SW3	14	25	0	0	0	0
7/11			SW4	30	20	0	0	0	0
7/12	JWR	PM	FB						
7/12			PH1						
7/12			PH2						
7/12			SW1						
7/12			SW2						
7/12			SW3						
7/12			SW4						
7/13	JED	AM	FB	0	4	5	36	0	0
7/13			PH1	0	2	0	3	0	0
7/13			PH2	0	0	0	0	0	0
7/13			SW1	0	0	0	0	0	0
7/13			SW2	0	0	0	0	0	0
7/13			SW3	26	0	3	28	0	0
7/13			SW4	0	0	0	0	0	0
7/14	JWR	PM	FB	0	12	8	65	0	0
7/14			PH1	0	0	2	0	0	0
7/14			PH2	2	0	1	0	0	0
7/14			SW1	0	0	0	0	0	0
7/14			SW2	0	0	1	0	0	0
7/14			SW3	0	0	0	0	0	0
7/14			SW4	0	0	0	0	0	0
7/9	M M	AM	FB	0	0	0	50	0	0
7/9			PH1	0	0	0	0	0	0
7/9			PH2	0	0	0	0	0	0
7/9			SW1	0	0	0	0	0	0
7/9			SW2	0	0	0	0	0	0
7/9			SW3	0	16	0	11	0	0
7/9			SW4	0	20	0	0	0	0

Bird Counts

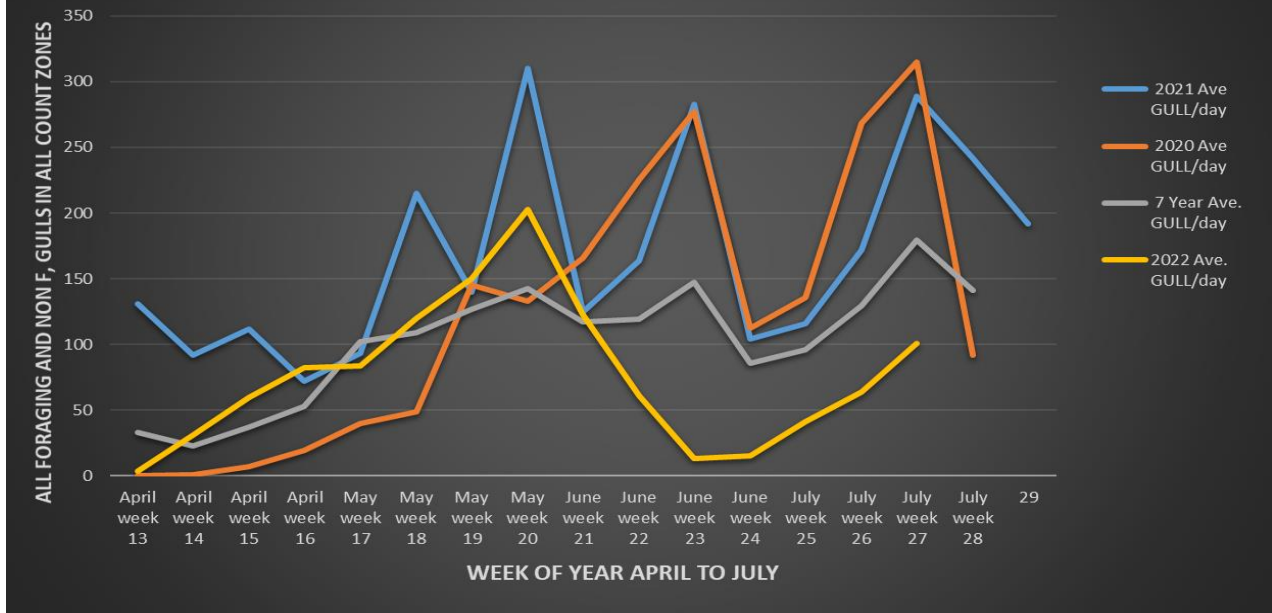
Foraging

Grebe F	Grebe NF	AWPE F	AWPE NF	OtherF	OtherNF	Total	
0	0	25	0	0	0	75	Falconry
0	0	10	7	0	0	17	Falconry
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	Falconry
0	0	0	0	0	0	0	sun, 85F, 15w
0	0	150	50	0	0	227	Falconry
0	0	200	50	0	0	270	Falconry
0	0	16	0	0	0	66	
0	0	3	8	0	0	11	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	150	50	0	0	252	
0	0	150	50	0	0	225	
0	0	30		0	0	133	Gulls Feeding at surface insects.
0	0	0	2	0	0	5	Falconry
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	100	75	0	0	214	
0	0	125	50	0	0	225	Falconry from boat

No Data

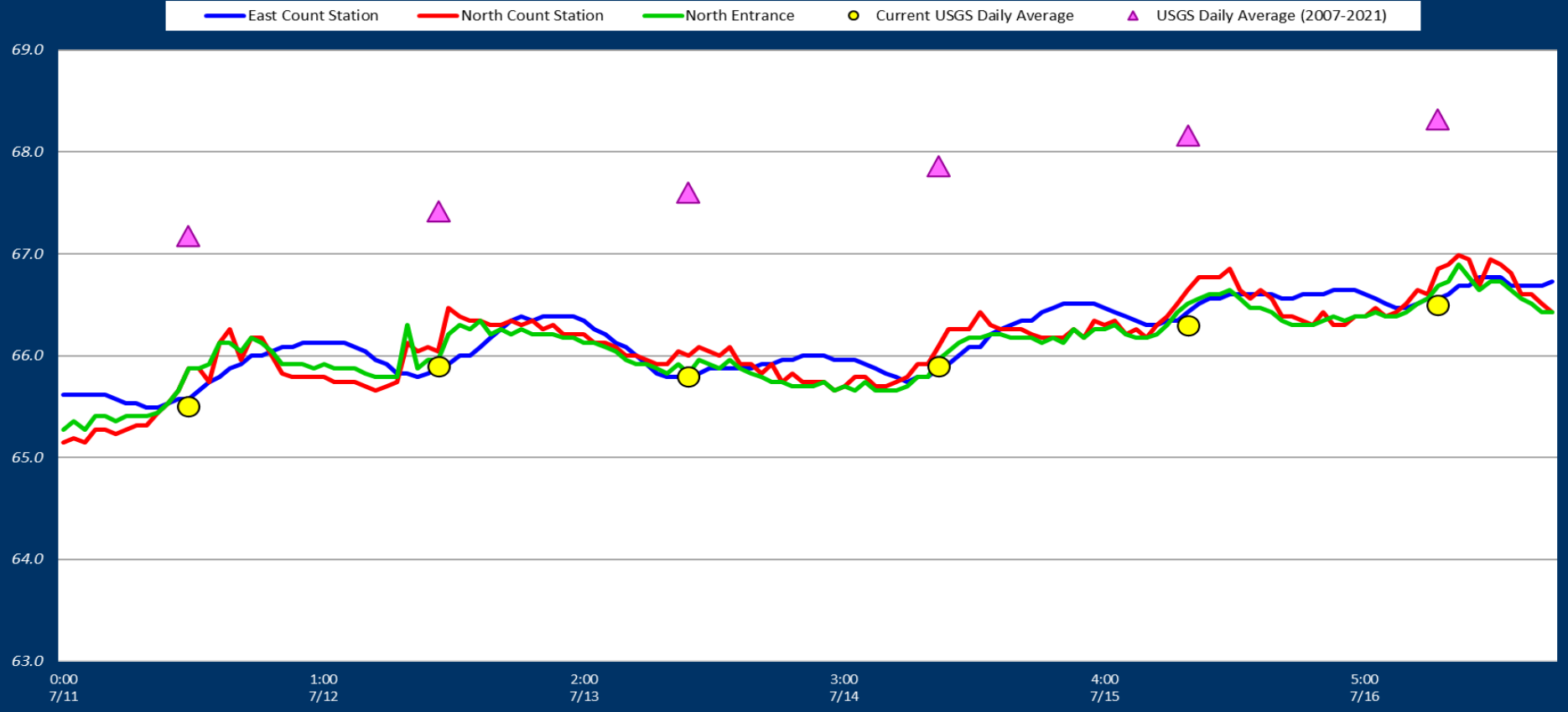
0	0	0	0	0	2	47	GBHE in ladder
0	0	1	2	3	0	11	falconry demonstration
0	0	0	0	0	0	0	falconry demonstration
0	0	0	0	0	0	0	falconry demonstration
0	0	1	0	0	0	1	falconry demonstration
0	0	0	0	0	0	57	falconry demonstration
0	0	210	0	0	0	210	falconry demonstration
0	0	4	0	0	0	89	falconry demonstration
0	0	2	0	0	0	4	falconry demonstration
0	0	0	0	0	0	3	
0	0	0	0	0	0	0	
0	0	8	0	0	0	9	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	25	0	0	0	75	
0	0	10	7	0	0	17	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	150	50	0	0	227	
0	0	200	50	0	0	270	

TDA Daily Mean # of GULLS by Week, April to July 2020 and 2021, 2022 Compared to Previous 7 years Daily Mean.



End Falconry July 9th and increasing rock exposure with dropping tailwater. Noticeable gull increase.

Adult Fish Ladders-River Temperatures



Secchi:		USGS°F
5.0	Sun	65.1
5.0	Mon	65.5
5.0	Tue	65.9
5.0	Wed	65.8
5.0	Thurs	65.9
5.0	Fri	66.3
5.0	Sat	66.5
5.0	AVG	65.9

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
7/10	1.3	10.9	1.6	11.3	10.0	10.5	14.3	1.5	9.4	9.9	0.8	1.4	11.2	8.5
	1.3	10.9	1.5	9.1	11.0	11.0	15.4	1.3	10.5	11.0	1.9	1.5	11.3	8.6
7/11	1.3	11.9	1.7	7.8	11.2	11.4	14.1	1.5	9.4	10.0	0.7	1.4	11.6	8.5
	1.4	11.9	1.3	7.7	12.3	12.5	15.7	1.2	10.5	11.0	2.1	1.3	11.9	8.6
7/12	1.3	10.9	1.5	7.1	11.9	12.2	15.0	1.4	9.7	10.2	1.5	1.5	11.9	8.0
	1.4	10.8	1.3	7.5	12.4	12.6	15.5	1.3	10.1	10.6	1.9	1.4	12.0	8.1
7/13	1.3	10.9	1.5	6.8	12.1	12.2	15.7	1.4	10.0	10.6	2.1	1.5	11.9	7.9
	1.3	10.8	1.3	7.5	12.4	12.5	16.5	1.2	10.4	11.0	3.0	1.4	12.5	8.3
7/14	1.3	10.9	1.6	7.3	11.6	11.9	15.1	1.5	9.3	9.9	1.6	1.5	10.4	9.9
	1.3	10.8	1.5	7.3	11.7	11.9	15.2	1.5	9.3	9.9	1.6	1.3	10.6	10.0
7/15	1.3	10.7	1.6	7.5	12.3	12.8	13.3	1.6	8.3	9.0	0.2	1.4	10.7	9.4
	1.3	10.7	1.1	9.3	14.2	14.8	15.2	1.3	9.9	10.5	1.7	1.5	10.2	8.7
7/16	1.4	11.9	1.5	0.5	10.1	10.5	13.5	1.4	9.3	9.9	0.3	1.5	9.7	9.7
	1.4	10.6	1.3	1.7	10.9	11.7	14.7	1.3	10.3	10.9	1.7	1.5	8.8	8.8
AVG:	1.3	11.0	1.4	7.0	11.7	12.0	15.0	1.4	9.8	10.3	1.5	1.4	11.0	8.8

Fishways are inspected twice daily.

found out of criteria



Sky Guardian falconry: stages of safe feeding perimeter and potential gulls to relocate.