

The Dalles Dam Fishway Status Report

5/29/22

Inspection Period 5/22-5/28 2022

THE DALLES DAM



US Army Corps
of Engineers
Portland District

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

The Dalles Dam	Inspections OOC	Criteria Limit	Total Number of Inspections: 14		Temperature: 55.0 °F
			Comments: W155 failure RCC restricted FB		Weekly Ave. Secchi: 4.0

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')		1.4	
Entrance Differential	0	1.0' - 2.0'		10.8	
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 applied.		
Weir 158-159 differential	0	1.1' ± 0.1'	Automation problems. Maintenance troubleshooting		
Count station differential	0	≤ 0.3'			
153 Weir crest depth	0	1.0' ± 0.1'	Automation problems. Maintenance troubleshooting		
Junction pool weir JP6	0	> 7.0'	Weekly average	14.8	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	6.8	
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.9	
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.9	
Collection channel velocity	0	1.5 - 4 fps	west 1.66-east 2.27 fps, AVE 2fps 5/28		
Transportation channel velocity	0	1.5 - 4 fps	3.33 fps 5/22		
North channel velocity	0	1.5 - 4 fps	2.28 fps 5/28		
South channel velocity	0	1.5 - 4 fps	3.89 fps 5/14		
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	9.8	
Entrance weir W3	0	No criteria	Weekly average	1.1	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	0	depth (≥ 8')	Weekly average	10.6	
Entrance weir S2	0	depth (≥ 8')	Weekly average	9.8	

JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18			
Turbine trashrack drawdown	0	<1.5', biwkly	5/16/22 0k		
Spill volume/pattern	0	1 to 8	Per FPP		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	5/28/22, small numbers of juv. salmonid fish observed. One 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
MU2 OOS 5/16/2022 0630-5/19/2022 1700 ANNUAL
MU20 OOS 5/16/2022 0630-6/23/2022 1700 ANNUAL FALL PROTECTION

Maintenance

East fishladder wier 155 hoist failed. Weir in down position. Repair planned for December. Forebay restriction changed to 157. Exit conditions to be monitored.
Permanent oil boom reinstall planned for Apr28 was postponed until this winter.
Fishway automation at east exit experiencing problems affecting weir crest depth and 158/159 differential. TDE working on software.
Calibrations on east fishway entrances, engineering success in calibration. 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.
AWS intake trashrack debris management - potoential funding FY22.
East ladder window rear crowder brush drive not working. Maintenance notified.
TDE made software upgrade to east exit PLC to accommodate rapid changes in FB elevation. Working well so far.

Predators

Increasing #s of Gulls and cormorants feeding. Many gulls feeding under bridge hotspot. Feeding gull numbers climbing after boat shift at 2PM.
USDA shore and boat hazing continues daily. Sky Guardian falconers begin daily operations focused on weekends when no boat hazing in place.
FPOM members site visit 5/24 to view falconry contractor.
Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Working on permit. Fish Passage Plan 2022 approved.

Research/Construction/Contractors

USGS river temperatures link [April°F](#)
4 peaks visual counting resumed April 1

Project engineering exploring ergonomic improvements to tribal lamprey trapping equipment.
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. Sluiceways open per FPP. Modifications to gate openings made due to forced unit outages.
East and North fishways in full service

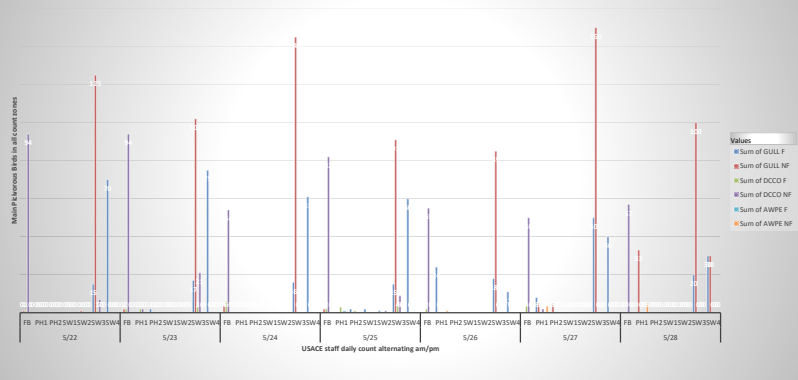
Approved by: Ron Twiner, Operation Project Manager, The Dalles Dam

F=foraging, NF=non-foraging																	
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	comments
5/22			FB	0	1	1	94	0	0	0	0	0	0	0	0	96	
5/22	JED	AM	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/22			PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/22			SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/22			SW2	0	1	0	0	0	0	0	0	0	0	0	0	1	
5/22			SW3	15	125	1	7	0	0	0	0	0	0	0	0	148	
5/22			SW4	70	0	0	0	0	0	0	0	0	0	0	0	70	
5/23			FB	0	2	2	84	0	0	0	0	0	0	0	0	88	
5/23	JED	PM	PH1	0	0	2	2	0	0	0	0	0	0	0	2	4	
5/23			PH2	2	0	0	0	0	0	0	0	0	0	0	0	2	
5/23			SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/23			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/23			SW3	17	102	3	21	0	0	0	0	0	0	0	0	143	
5/23			SW4	75	0	0	0	0	0	0	0	0	0	0	0	75	
5/24			FB	0	4	6	54	0	0	0	0	0	0	0	0	64	
5/24	JWR	AM	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/24			PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/24			SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/24			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/24			SW3	16	145	0	0	0	0	0	0	0	0	0	0	161	
5/24			SW4	61	0	0	0	0	0	0	0	0	0	0	0	61	
5/25			FB	0	2	2	82	0	0	0	0	0	0	0	0	86	
5/25	JED	PM	PH1	0	0	3	0	0	0	0	0	0	0	0	1	4	
5/25			PH2	2	0	1	0	0	0	0	0	0	0	0	0	3	
5/25			SW1	2	0	0	0	0	0	0	0	0	0	0	0	2	
5/25			SW2	1	0	0	1	0	0	0	0	0	0	0	0	2	
5/25			SW3	15	91	4	8	0	0	0	0	0	0	0	0	119	
5/25			SW4	60	0	0	0	0	0	0	0	0	0	0	0	60	
5/26			FB	0	0	2	55	0	0	0	0	0	0	0	0	57	
5/26	JWR	AM	PH1	24	0	0	0	0	0	0	0	1	0	0	0	25	
5/26			PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/26			SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/26			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/26			SW3	18	85	0	0	0	0	0	0	0	0	0	0	103	
5/26			SW4	14	0	0	0	0	0	0	0	0	0	0	0	14	
5/27			FB	0	4	4	50	0	0	0	0	0	0	0	0	58	
5/27	MM	PM	PH1	8	5	0	2	0	0	0	0	4	0	0	0	19	
5/27			PH2	0	5	0	0	0	0	0	0	0	0	0	0	5	
5/27			SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/27			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/27			SW3	50	150	0	0	0	0	0	0	0	0	0	0	200	
5/27			SW4	40	0	0	0	0	0	0	0	0	0	0	0	40	
5/28			FB	0	0	0	57	0	0	0	0	0	0	0	0	57	
5/28	MM	AM	PH1	0	33	0	0	0	0	0	0	5	0	0	0	38	
5/28			PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/28			SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/28			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
5/28			SW3	20	100	0	0	0	0	0	0	0	0	0	0	120	
5/28			SW4	30	30	0	0	0	0	0	0	0	0	0	0	60	

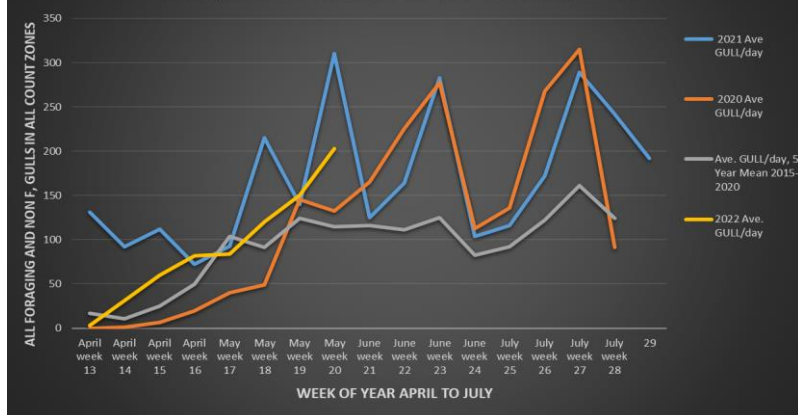
Row Labels	Sum of GULL F	Sum of GULL NF	Sum of DCCO F	Sum of DCCO NF	Sum of AWPE F	Sum of AWPE NF	Row Labels	Sum of GULL F	Sum of GULL NF	Sum of DCCO F	Sum of DCCO NF	Sum of AWPE F	Sum of AWPE NF
5/22	85	127	2	101	0	0	Grand Total	537	891	31	528	1	16
FB	0	1	1	94	0	0	FB	0	2	2	82	0	0
PH1	0	0	0	0	0	0	PH1	0	0	3	0	0	1
PH2	0	0	0	0	0	0	PH2	2	0	1	0	0	0
SW1	0	0	0	0	0	0	SW1	2	0	0	0	0	0
SW2	0	1	0	0	0	0	SW2	1	0	0	1	0	0
SW3	15	125	1	7	0	0	SW3	15	91	4	8	0	0
SW4	70	0	0	0	0	0	SW4	60	0	0	0	0	0
5/23	94	104	7	117	0	0	5/26	53	85	2	55	0	1
FB	0	2	2	94	0	0	FB	0	0	2	57	0	0
PH1	0	0	2	2	0	0	PH1	24	0	0	0	0	1
PH2	0	0	2	2	0	0	PH2	0	0	0	0	0	0
SW1	0	0	0	0	0	0	SW1	0	0	0	0	0	0
SW2	0	0	0	0	0	0	SW2	0	0	0	0	0	0
SW3	15	102	3	21	0	0	SW3	18	85	0	0	0	0
SW4	75	0	0	0	0	0	SW4	11	0	0	0	0	0
5/24	77	149	6	54	0	0	5/27	98	160	4	52	0	4
FB	0	4	6	54	0	0	FB	0	5	0	2	0	4
PH1	0	0	0	0	0	0	PH1	8	5	0	2	0	0
PH2	0	0	0	0	0	0	PH2	0	5	0	0	0	0
SW1	0	0	0	0	0	0	SW1	0	0	0	0	0	0
SW2	0	0	0	0	0	0	SW2	0	0	0	0	0	0
SW3	15	91	4	8	0	0	SW3	50	150	0	0	0	0
SW4	60	0	0	0	0	0	SW4	40	0	0	0	0	0
5/25	80	93	10	92	1	0	5/28	50	163	0	57	0	5
FB	0	2	2	82	0	0	FB	0	0	0	57	0	0
PH1	0	0	0	0	0	0	PH1	0	33	0	0	0	5
PH2	0	0	0	0	0	0	PH2	0	0	0	0	0	0
SW1	0	0	0	0	0	0	SW1	0	0	0	0	0	0
SW2	0	0	0	0	0	0	SW2	0	0	0	0	0	0
SW3	15	91	4	8	0	0	SW3	20	100	0	0	0	0
SW4	60	0	0	0	0	0	SW4	30	30	0	0	0	0
5/26	80	93	10	92	1	0	Grand Total	537	891	31	528	1	16
FB	0	2	2	82	0	0							
PH1	0	0	0	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	15	91	4	8	0	0							
SW4	60	0	0	0	0	0							

Total Gulls 537 + 881=203

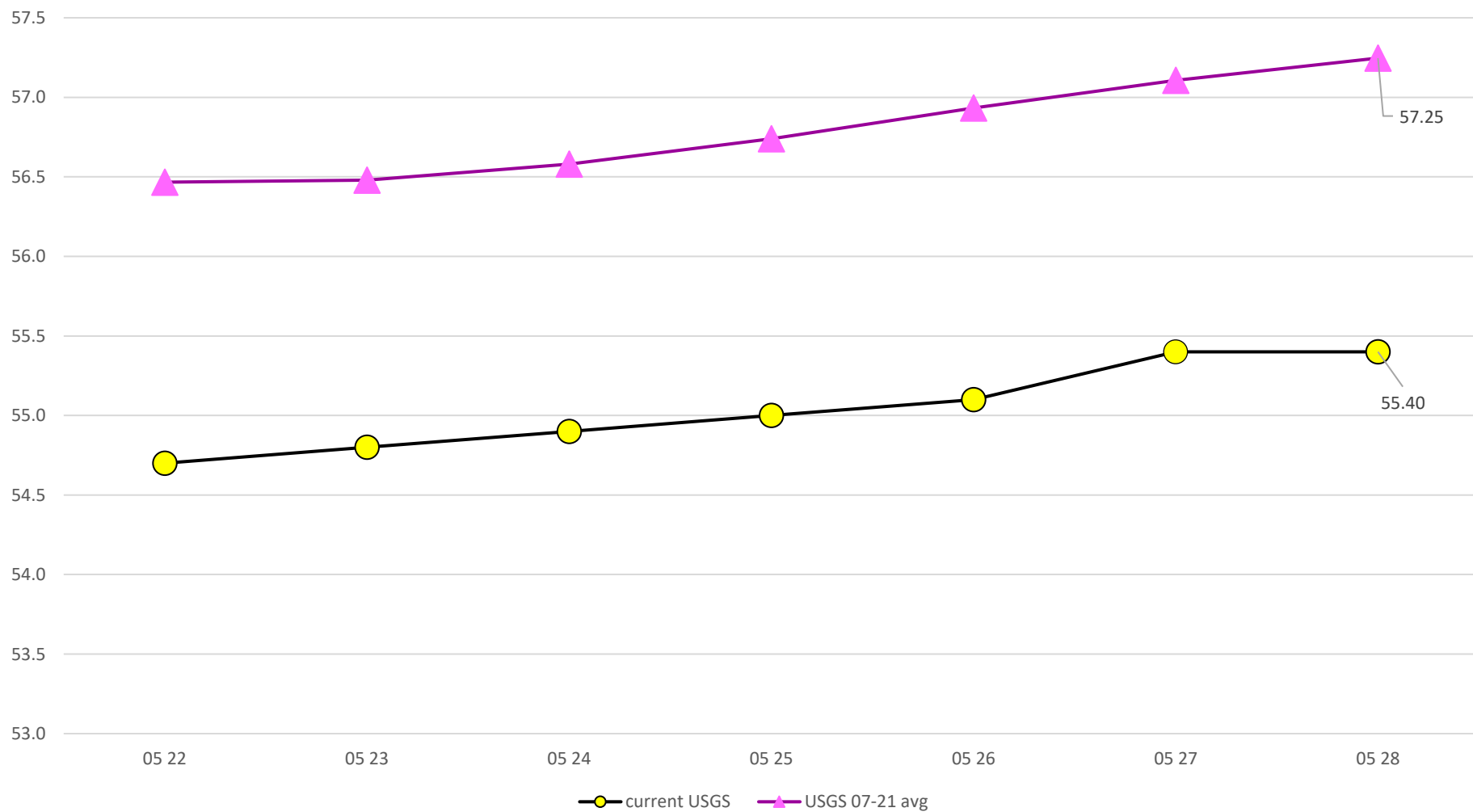
Picivorous Birds by Count Zone at The Dalles Dam 5/22 to 5/28/2022



TDA Daily Mean # of GULLS by Week, April to July 2020 and 2021, 2022 Compared to 6 year Mean by Week.



River-Ladder Temps



date current USGS USGS 07-21 avg

05 22	54.70	56.47
05 23	54.80	56.48
05 24	54.90	56.58
05 25	55.00	56.74
05 26	55.10	56.93
05 27	55.40	57.11
05 28	55.40	57.25

[0/24](#)
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23-Feb-00	24-Feb-00	24-Feb-00	<u>0/24</u>	23-Feb-00	24-Feb-00	24-Feb-00	<u>0/24</u>	---	---	---	<u>0/0</u>	19-Feb-00	20-Feb-00	21-Feb-00	<u>0/24</u>
24-Feb-00	24-Feb-00	24-Feb-00	<u>0/24</u>	24-Feb-00	24-Feb-00	24-Feb-00	<u>0/24</u>	---	---	---	<u>0/0</u>	20-Feb-00	21-Feb-00	21-Feb-00	<u>0/24</u>
24-Feb-00	24-Feb-00	24-Feb-00	<u>0/24</u>	24-Feb-00	24-Feb-00	24-Feb-00	<u>0/24</u>	---	---	---	<u>0/0</u>	20-Feb-00	21-Feb-00	21-Feb-00	<u>0/24</u>
24-Feb-00	24-Feb-00	24-Feb-00	<u>0/24</u>	24-Feb-00	24-Feb-00	24-Feb-00	<u>0/24</u>	---	---	---	<u>0/0</u>	20-Feb-00	21-Feb-00	21-Feb-00	<u>0/24</u>
24-Feb-00	24-Feb-00	24-Feb-00	<u>0/24</u>	24-Feb-00	24-Feb-00	24-Feb-00	<u>0/24</u>	---	---	---	<u>0/0</u>	21-Feb-00	21-Feb-00	21-Feb-00	<u>0/24</u>
24-Feb-00	24-Feb-00	24-Feb-00	<u>0/24</u>	24-Feb-00	24-Feb-00	24-Feb-00	<u>0/24</u>	---	---	---	<u>0/0</u>	21-Feb-00	21-Feb-00	21-Feb-00	<u>0/24</u>

Secchi:		USGS°F
4.0	Sun	54.7
4.0	Mon	54.8
4.0	Tue	54.9
4.0	Wed	55.0
4.0	Thurs	55.1
4.0	Fri	55.4
4.0	Sat	55.4
4.0	AVG	55.0

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
5/22	1.4	10.7	1.5	6.4	12.2	12.2	14.4	1.2	10.2	10.2	1.3	1.3	10.5	10.1
	1.4	10.7	1.7	6.8	11.1	10.9	14.9	1.5	9.3	9.4	0.0	1.4	10.5	10.2
5/23	1.4	10.8	1.5	6.6	12.3	12.3	14.6	1.4	10.1	10.1	1.0	1.4	10.5	9.8
	1.4	10.7	1.5	6.4	12.1	12.1	14.4	1.4	9.9	10.0	0.8	1.1	11.4	10.0
5/24	1.4	10.7	1.5	6.5	12.1	12.2	14.5	1.4	10.2	10.2	1.1	1.3	10.4	10.2
	1.4	10.8	1.5	6.6	12.3	12.3	14.6	1.4	10.2	10.2	1.1	1.4	9.9	9.9
5/25	1.4	10.8	1.4	6.6	12.7	12.8	14.6	1.4	10.0	9.9	1.0	1.5	10.1	9.7
	1.4	10.8	1.2	7.3	12.5	12.6	15.3	1.3	10.2	10.3	1.5	1.4	10.4	9.9
5/26	1.1	11.0	1.4	7.0	12.1	12.2	15.0	1.5	9.6	9.7	1.4	1.3	10.7	10.0
	1.4	10.7	1.5	6.6	11.7	11.8	14.6	1.6	9.3	9.3	1.0	1.4	10.8	9.5
5/27	1.4	10.8	1.4	7.2	11.9	12.1	15.2	1.5	9.6	9.7	1.6	1.3	11.1	9.9
	1.4	10.9	1.5	6.9	11.4	11.5	14.9	1.5	9.4	9.5	1.3	1.5	10.7	9.3
5/28	1.4	10.8	1.6	6.9	11.2	11.3	14.9	1.5	9.4	9.5	1.4	1.4	11.0	9.7
	1.4	10.8	1.7	6.8	11.1	11.2	14.8	1.6	9.4	9.5	1.4	1.4	11.1	9.7
AVG:	1.4	10.8	1.5	6.8	11.9	12.0	14.8	1.4	9.8	9.8	1.1	1.4	10.6	9.8

Fishways are inspected twice daily.

found out of criteria



Goose, the Prairie falcon at work in zone SW1
TDA, 5/29/2022 Chasing gulls away.

Thorn, the Harris's Hawk at work in SW3 TDA



Progress on PUD sample facility construction