

The Dalles Dam Fishway Status Report

7/31/22

Inspection Period 7/24-7/30 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: 69.8 °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')		10.6	
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	12.2	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	11.4	
Entrance weir E2	0	depth (≥ 8')	Weekly average	10.3	
Entrance weir E3	0	depth (≥ 8')	Weekly average	10.3	
Collection channel velocity	0	1.5 - 4 fps	1.77 fps 7/23		
Transportation channel velocity	0	1.5 - 4 fps	4.6 fps 7/23		
North channel velocity	0	1.5 - 4 fps	2.31 fps 7/23		
South channel velocity	0	1.5 - 4 fps	2.81 fps 7/23		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir W1	0	depth (≥ 8')	Weekly average	9.4	
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	10.5	
Entrance weir S2	1	depth (≥ 8')	Weekly average	9.1	Problem with gate S2 TR to TDE, unresolved.

JUVENILE BYPASS

Sluicelgate operation	0	Units 1, 8, 18	Pattern per FPP.		
Turbine trashrack drawdown	0	<1.5', biwklly	7/19/22 All MUs in criteria FUs being monitored for differential.		
Spill volume/pattern	0	1 to 22	Pattern per FPP according to volume.		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	7/19/22, significant numbers of subyearlings and adult shad 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 for Annual & Cooler Upgrades
MU17 OOS 03/28/2022 0752 – 08/11/2022 6 year overhaul
MU16 OOS 06/27/2022 0630 - 08/11/2022 annual and cooler upgrade
MU14 fished for 6 year overhaul. Juvenile sturgeon and catfish returned to tailwater
Spillgate 14 forced out of service due to operational issues. RTS after spill season. Nine of 15 gates south of spillwall now OOS.
MU22 OOS 07/25/2022 0630 – 08/11/2022 annual cooler upgrades

Maintenance

East fishladder weir 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, South weirs drifting, maintenance troubleshooting. All 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 - restarted July 27th.
Fish unit Intake to be ROV inspection Aug16

Predators

Falconry completed on 7/14/2022. Continuing to track gull/cormorant numbers.
USDA hazing by shore and daily counts completed. Final week of boat hazing 7/22.
Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Permit pending.
Large numbers of pelicans departed project and Three Mile Creek area.
Northern Pikeminnow Management Program Columbia River Dam Angling & Site-Specific Fishery. 109 fish removed 7/11-7/22 w/ 348 YTD

Research/Construction/Contractors

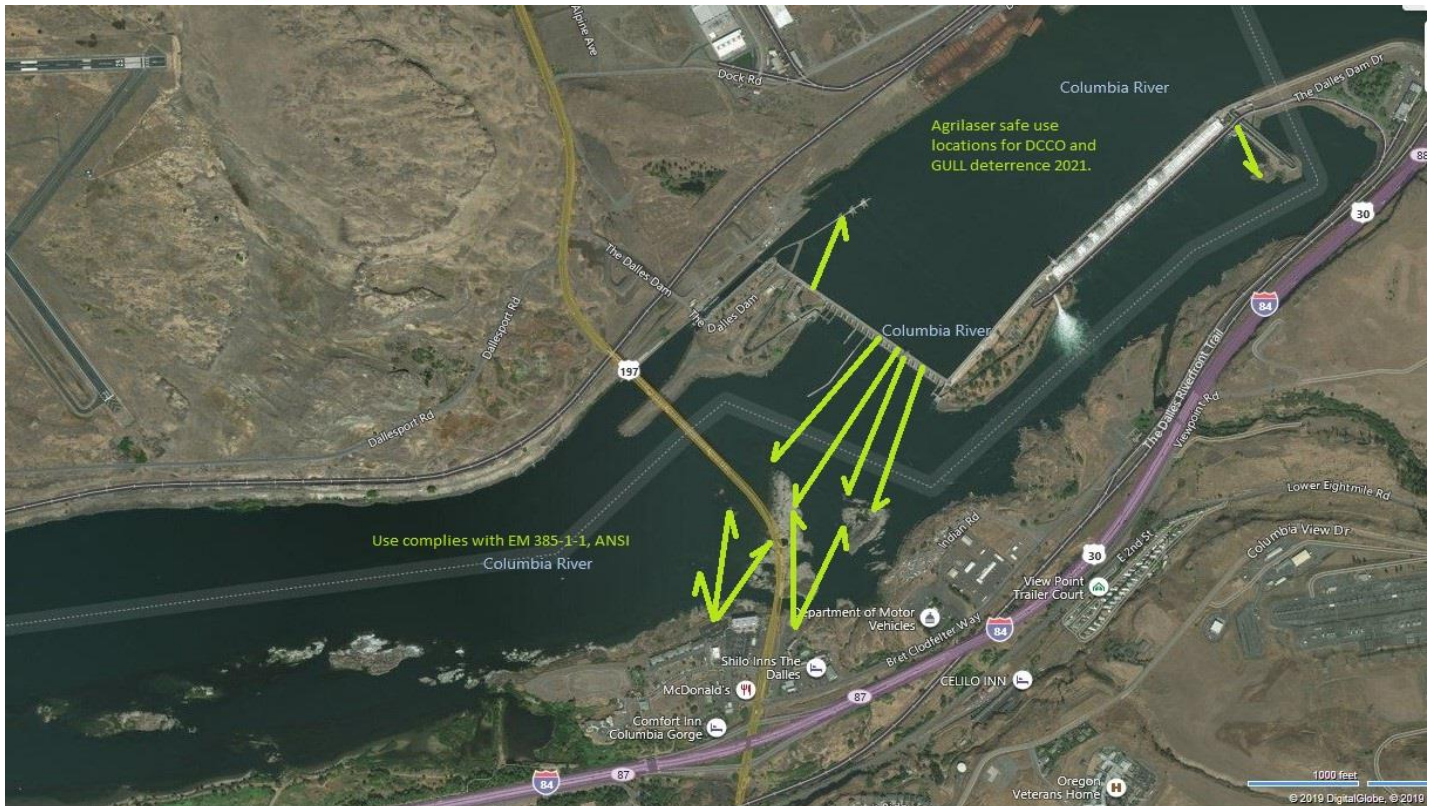
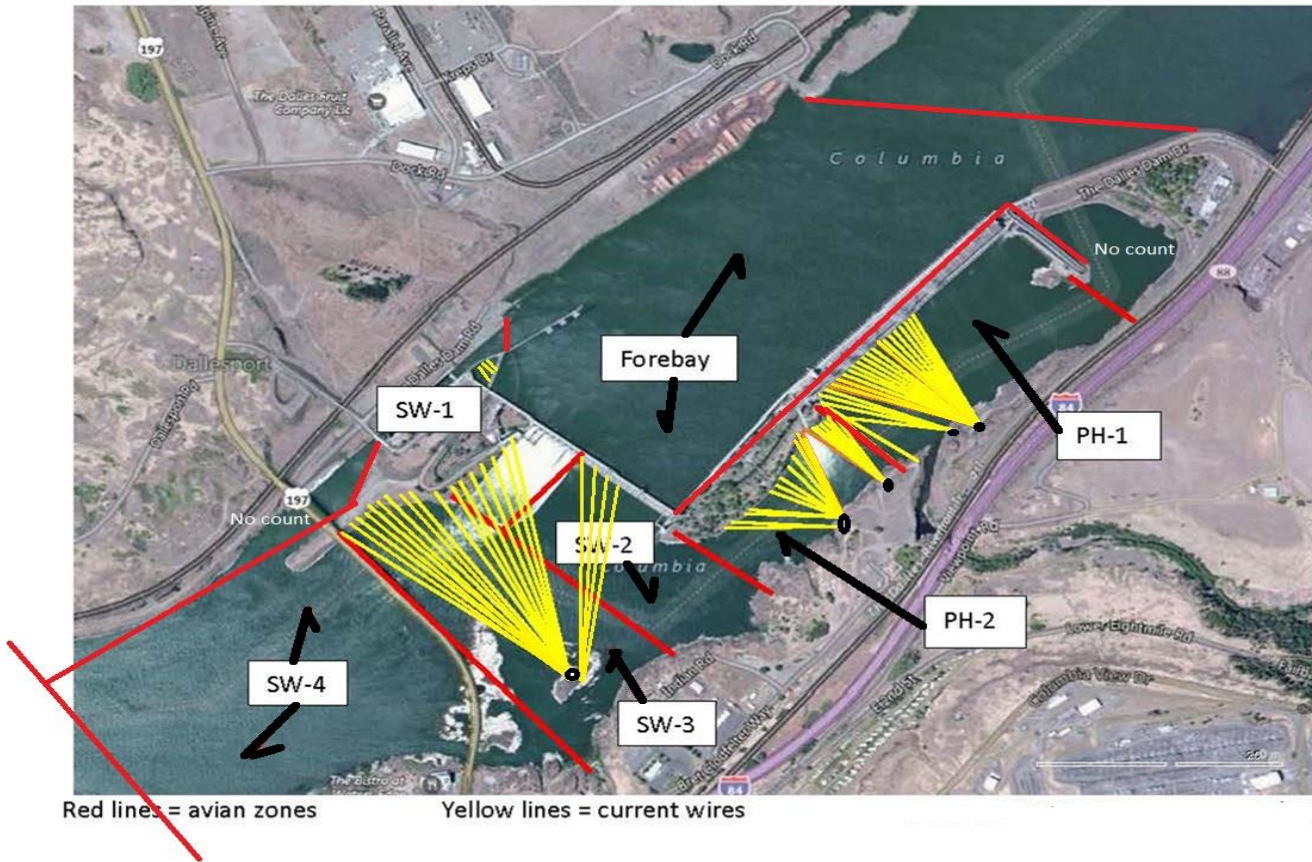
USGS river temperatures link [JULY](#)
4 peaks counting 4/1-10/31
Planned improvements to tribal lamprey trapping equipment. Reduced to bare minimum due to funding constraints
Pikeminnow removal program
Fish Accords Lamprey Passage plan ongoing at 90% due 09/01 DDR junction pool LPS. Investigating mods for entrance and exit weirs.
PTAGIS fishladder data collection at count stations continues.
Ladder flow taken out of shad mode 1.3' and returned to salmon criteria 1.0'
Lamprey translocation project reporting 872 captures/YTD traps pulled-operation closed 7/23-8/2 due to 100° temperatures

Operations

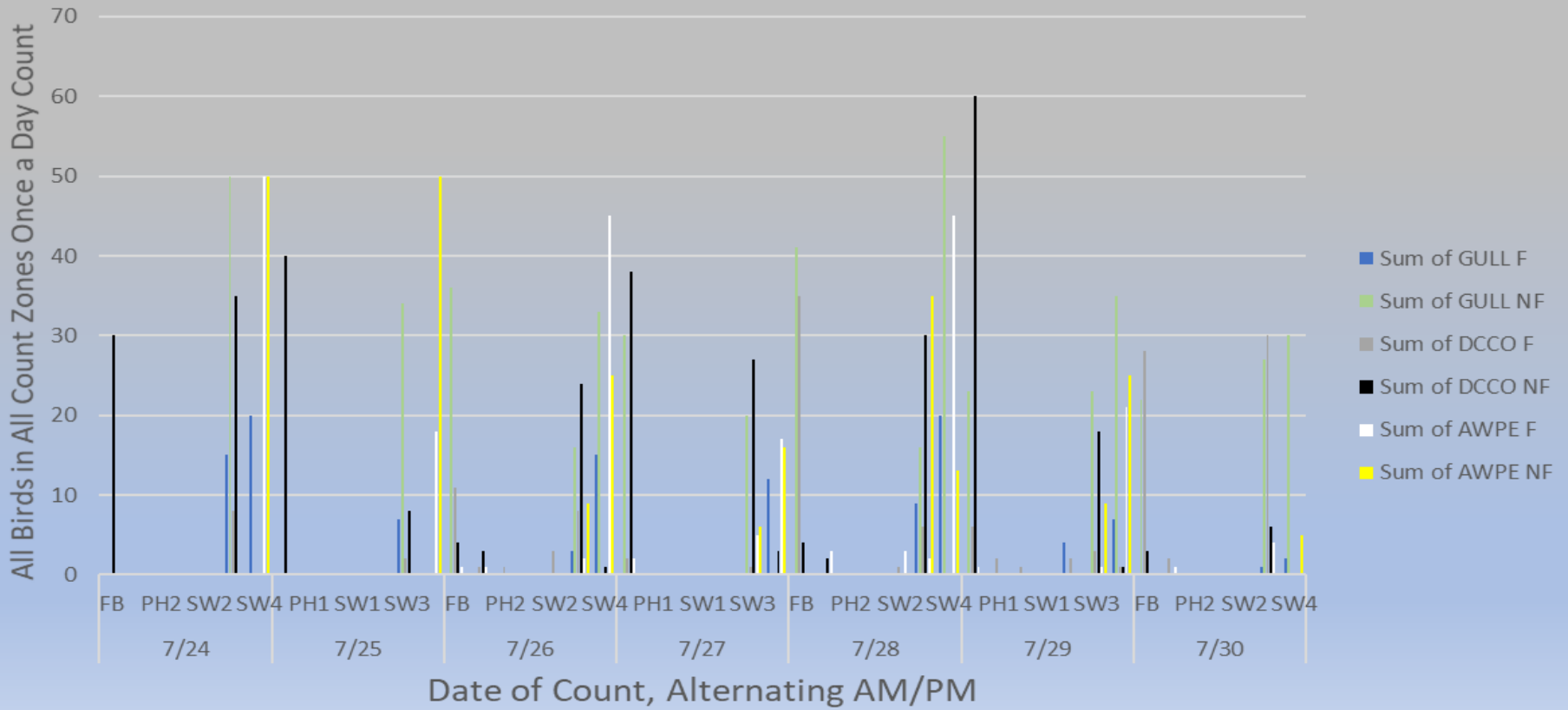
Ice Trash sluiceway endgate open. Sluiceways 1,8,18 open per FPP.
East and North fishways in full service

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

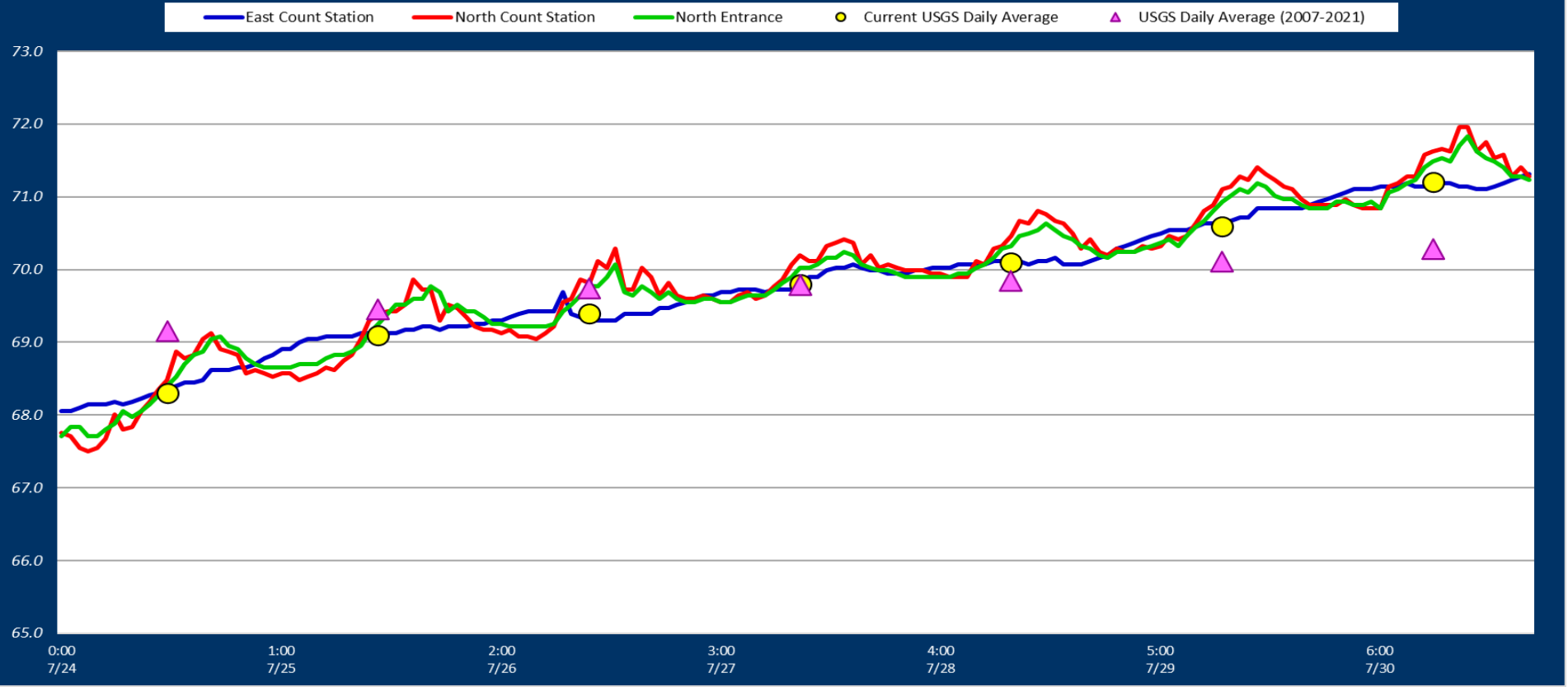
Bird Count Zones, Avian Lines and Laser Deterrent Sites



Avian Predation at The Dalles from 7/24 to 7/30/2022



Adult Fish Ladders-River Temperatures



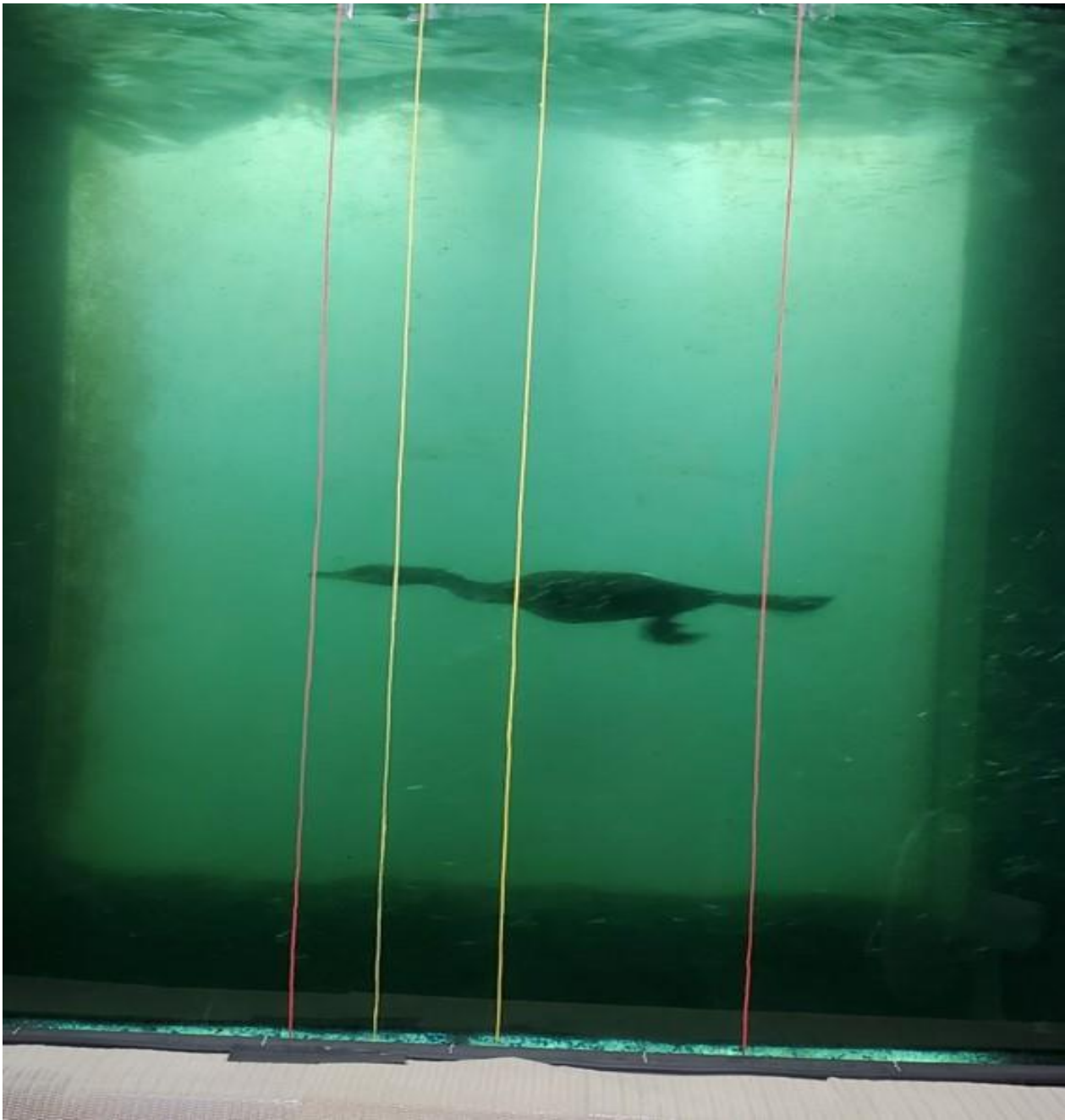
Secchi:		USGS°F
5.0	Sun	68.3
5.0	Mon	69.1
5.0	Tue	69.4
5.0	Wed	69.8
5.0	Thurs	70.1
5.0	Fri	70.6
5.0	Sat	71.2
5.0	AVG	69.8

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
7/24	1.2	10.8	1.6	9.1	11.0	11.2	12.1	1.5	9.3	10.0	-1.2	1.4	11.0	9.1
	1.2	10.7	1.5	10.7	10.8	10.8	12.0	1.5	9.1	9.9	-1.3	1.5	9.1	9.9
7/25	1.3	10.6	1.6	11.4	9.8	9.9	12.0	1.6	9.2	10.0	-1.3	1.4	11.0	8.8
7/26	1.3	10.5	1.5	11.6	10.5	10.7	12.2	1.4	9.2	10.0	-1.1	1.4	11.0	8.5
	1.4	10.4	1.6	12.1	10.1	10.3	12.6	1.4	9.4	9.5	-0.6	1.5	10.9	7.8
7/27	1.3	10.5	1.7	12.0	9.5	9.7	12.5	1.6	9.3	9.4	-0.7	1.4	11.2	8.3
7/28	1.2	10.8	1.4	12.3	10.5	10.8	12.9	1.5	9.4	9.5	-0.6	1.3	10.4	10.1
	1.3	10.4	1.6	12.0	10.1	10.4	12.6	1.5	9.4	9.5	-0.6	1.4	10.3	9.8
7/29	1.3	10.5	1.5	11.8	10.3	10.7	12.3	1.4	10.0	10.2	-1.0	1.4	10.4	9.6
	1.3	10.5	1.3	12.7	11.2	11.5	13.2	1.3	10.2	10.3	-0.1	1.4	10.1	9.0
7/30	1.2	10.5	1.6	10.6	9.8	10.3	11.1	1.6	9.2	9.4	-2.2	1.4	10.8	9.3
	1.2	10.7	1.5	10.6	10.2	10.8	11.2	1.5	9.6	9.7	-2.3	1.4	10.6	9.0
AVG:	1.3	10.6	1.5	11.4	10.3	10.6	12.2	1.5	9.4	9.8	-1.1	1.4	10.5	9.1

Fishways are inspected twice daily.

found out of criteria



More cormorants entering fishladders. Predation on lamprey observed. Could use some lethal removal.

