

The Dalles Dam Fishway Status Report

8/27/23

Inspection Period 08/20-08/26, 2023

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: 72.0 °F
			Comments:		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')	Average for the week	9.8	
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.3	
N2		Closed			
PUD Intake differential	0	≤ 0.5'			

EAST FISHWAY

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'	1.0' per FPP.		
Junction pool weir JP6	0	> 7.0'	Weekly average	10.8	
East entrance differential	2	1.0' - 2.0'	Weekly average	1.6	grating dive repair
Entrance weir E1	0	No criteria	Weekly average	4.4	
Entrance weir E2	4	depth (≥ 8')	Weekly average	8.7	grating dive repair
Entrance weir E3	4	depth (≥ 8')	Weekly average	8.7	grating dive repair
Collection channel velocity	0	1.5 - 4 fps	3.21 east entrance 8/5/23		
Transportation channel velocity	0	1.5 - 4 fps	3.99 fps 8/4/23		
North channel velocity	0	1.5 - 4 fps	2.77 fps 7/15/23		
South entrance	0	1.5 - 4 fps	5.02 fps 8/5/23		
West entrance differential	2	1.0' - 2.0'	Weekly average	1.5	grating dive repair
Entrance weir W1	1	depth (≥ 8')	Weekly average	8.7	grating dive repair and modified operation due to damage
Entrance weir W2	5	depth (≥ 8')	Weekly average	5.9	grating dive repair and modified operation due to damage
Entrance weir W3	0	No criteria	Weekly average	-2.1	
South entrance differential	2	1.0' - 2.0'	Weekly average	1.4	grating dive repair
Entrance weir S1	0	depth (≥ 8')	Weekly average	8.9	grating dive repair
Entrance weir S2	4	depth (≥ 8')	Weekly average	6.6	grating dive repair

JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18	1-8-18 gates open.		
Turbine trashrack drawdown	0	<1.5', biwklly	8/27/2023 All MUs and FUs in criteria.		
Spill volume/pattern	0	1 to 22	1-8 bays in operation daily		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	8/27/2023 .		

Current Outages

F2 OOS 8/16-23, diffuser grating damaged
F1 and F2 OOS 8/22 dive grating repair
MU4 OOS 04/17/2023 – 9/28/2023, ANNUAL
MU19 &20 OOS 10/7/18 - 10/31/25, T10 acetylene
MU12 OOS 04/12/2021 – 9/22/2023 ANNUAL

Maintenance

Working on contract for north ladder vegetation removal
Planning spill gates 9 and 10 cable and gearbox swap. Resealing bulkheads.
Spillway assessment; Spillgates 1- 9 rehab 2034. Spillway crane replace first priority. Reviewing gate operation frequency.
Diffuser grating damage discovered at east entrance. Dive repair completed 8/22. Reduced flow 5kcfs to 4 kcfs rest of season.
8/27/23 Calibrations for the east and north fishways are all in criteria.

Predators

USDA hazing ended 7/31
Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Working on permit.
Falconry abatement completed and RC boat trial completed on July 21.
Planning construction of custom tori lines for other ladder entrance locations.
Northern Pikeminnow Management Program 28 for the week, 2290 YTD. Also removing bass and walleye, 114 YTD.

Research/Construction/Contractors

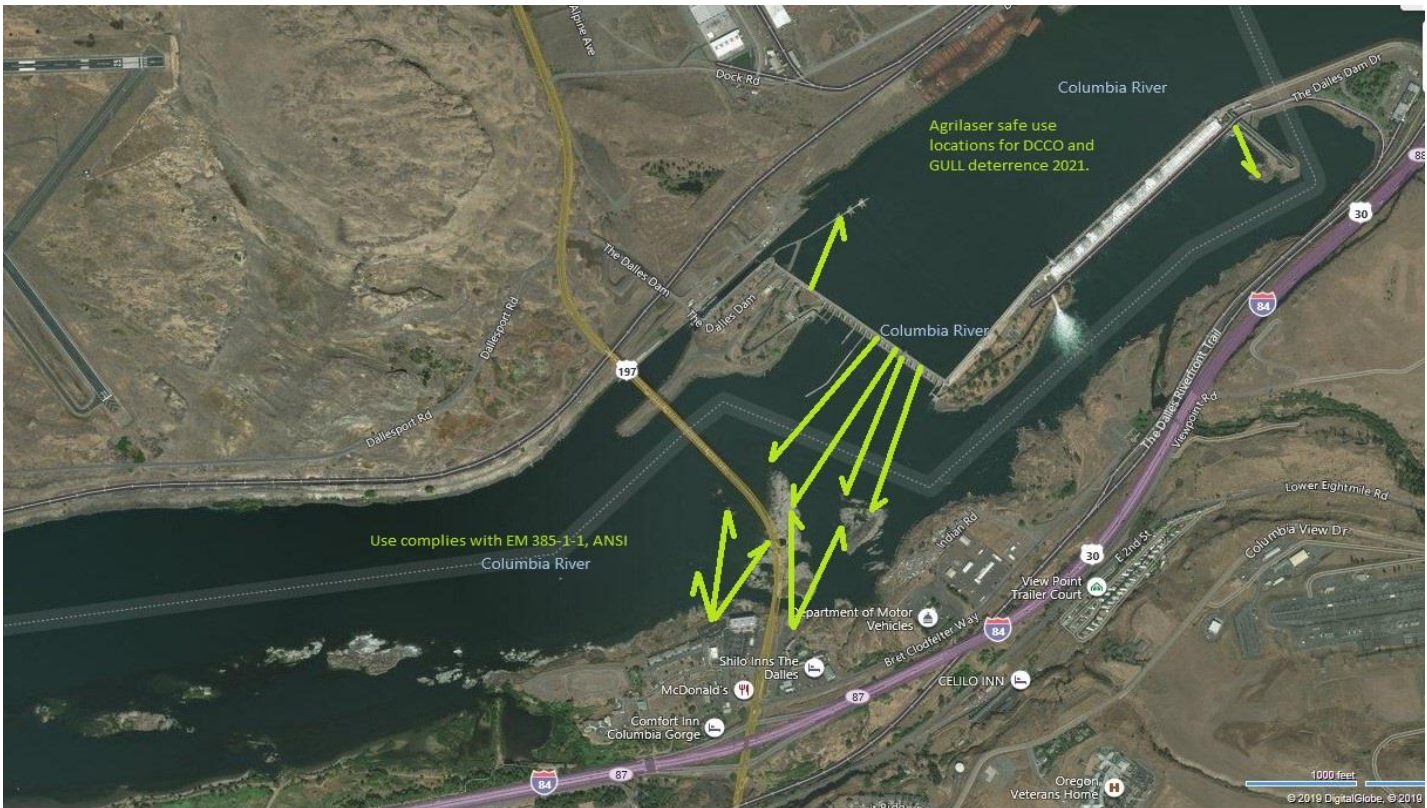
USGS temperature link-
4 Peaks conduction fish c [August °F](#)
Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, other 2 next winter.
Planning for install of junction pool lamprey trap and entrance weir modifications via contractor this winter.
ODFW conducting monthly fishway inspections.
PTAGIS fishladder data collection at count stations continues
lamprey translocation #'s as of 8/27-at 1447 YTD
zebra/quagga mussel samples collected on 8/26/2023

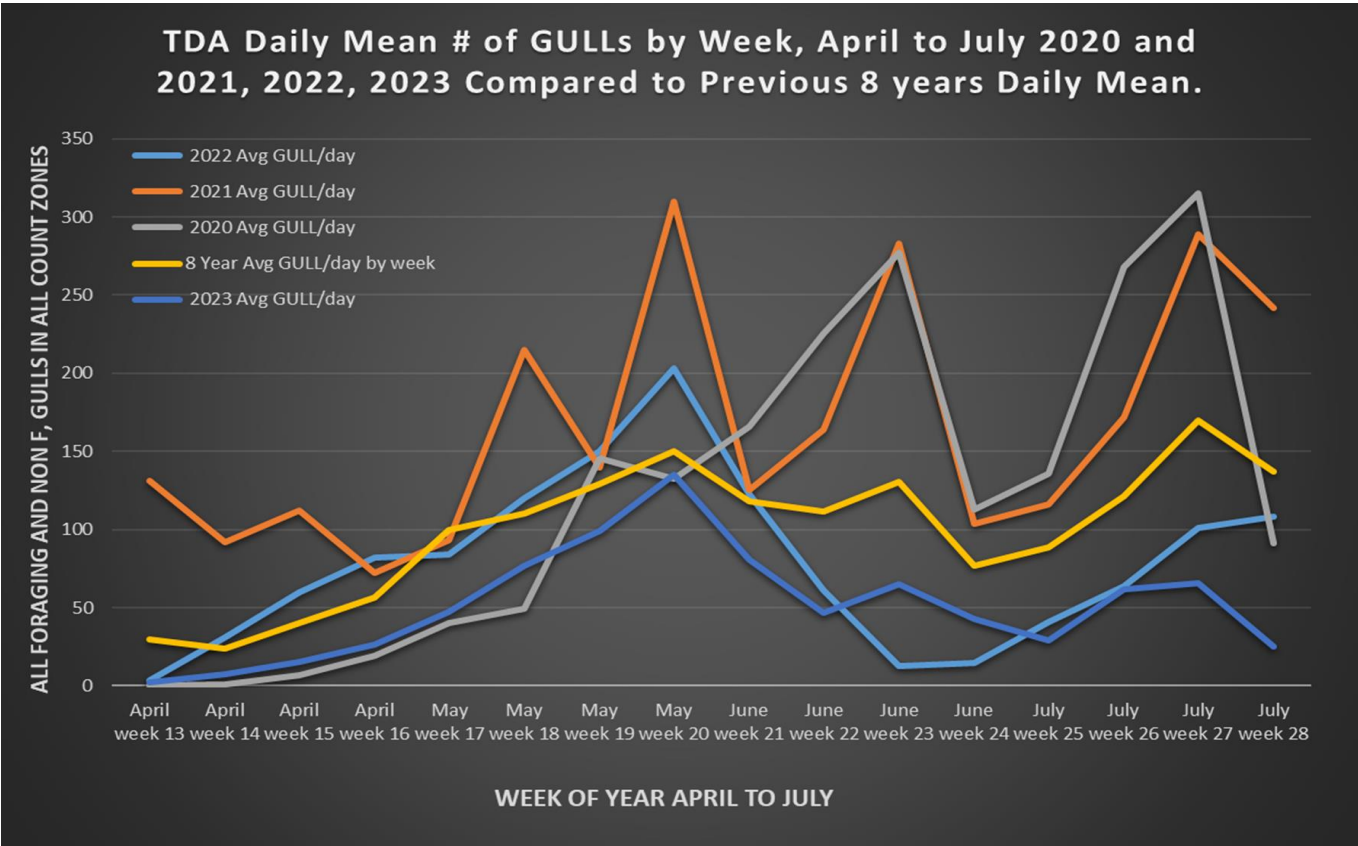
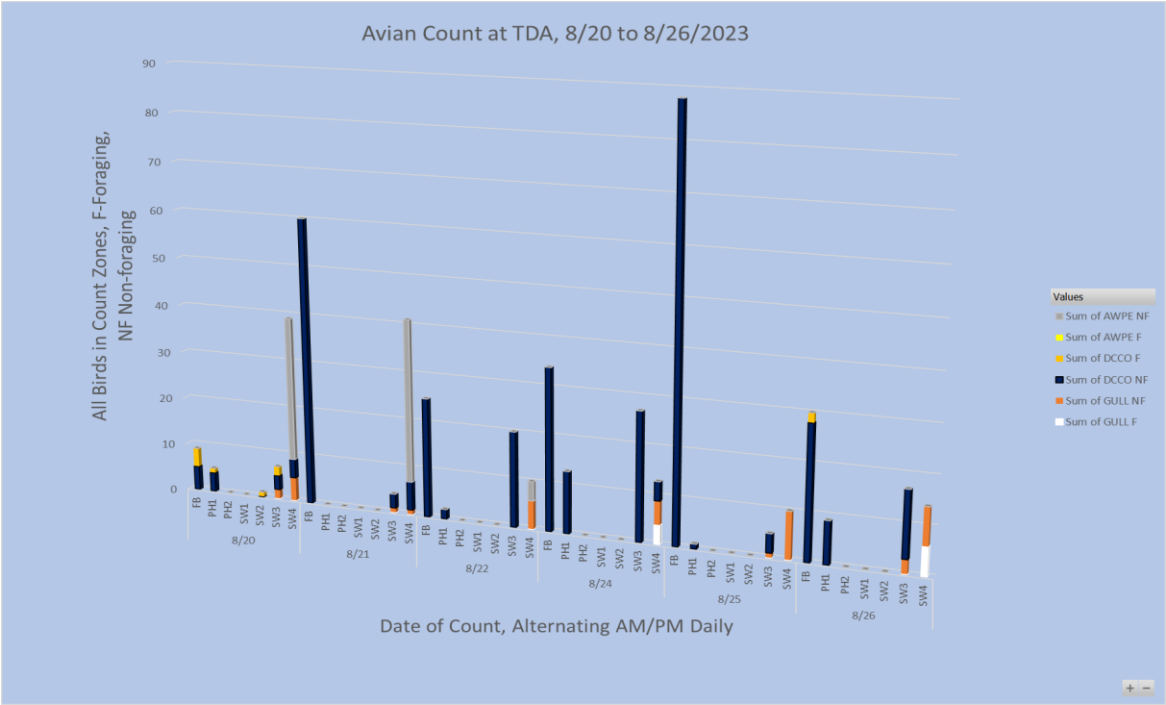
Operations

Sluice gates 1-1, 1-2, 1-3, 8-1, 8-3, 18-2 in accordance with fish passage criteria

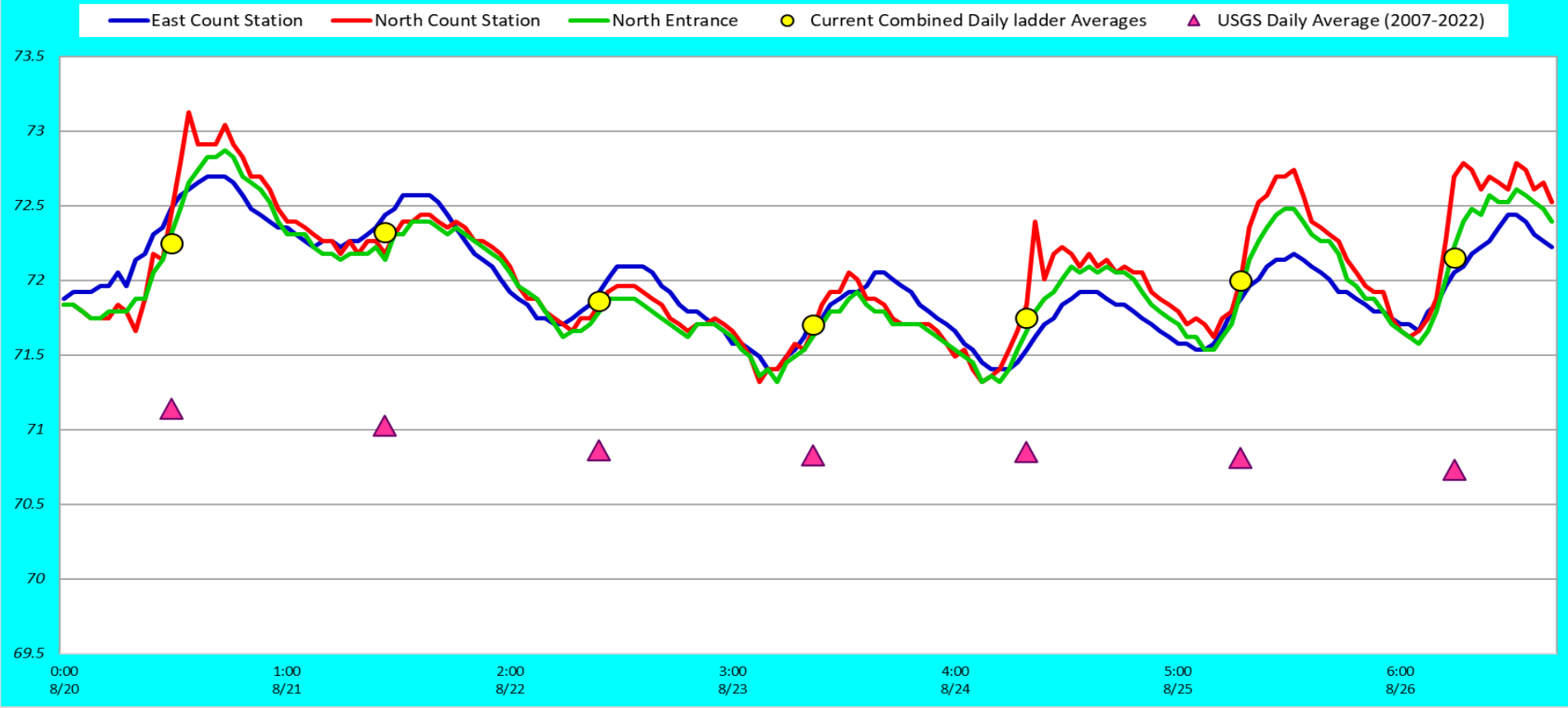
Approved by: Ron Twiner, Operation Project Manager, The Dalles Dam

Bird Count Zones, Avian Lines and Laser Deterrent Sites





Adult Fish Ladders-River Temperatures

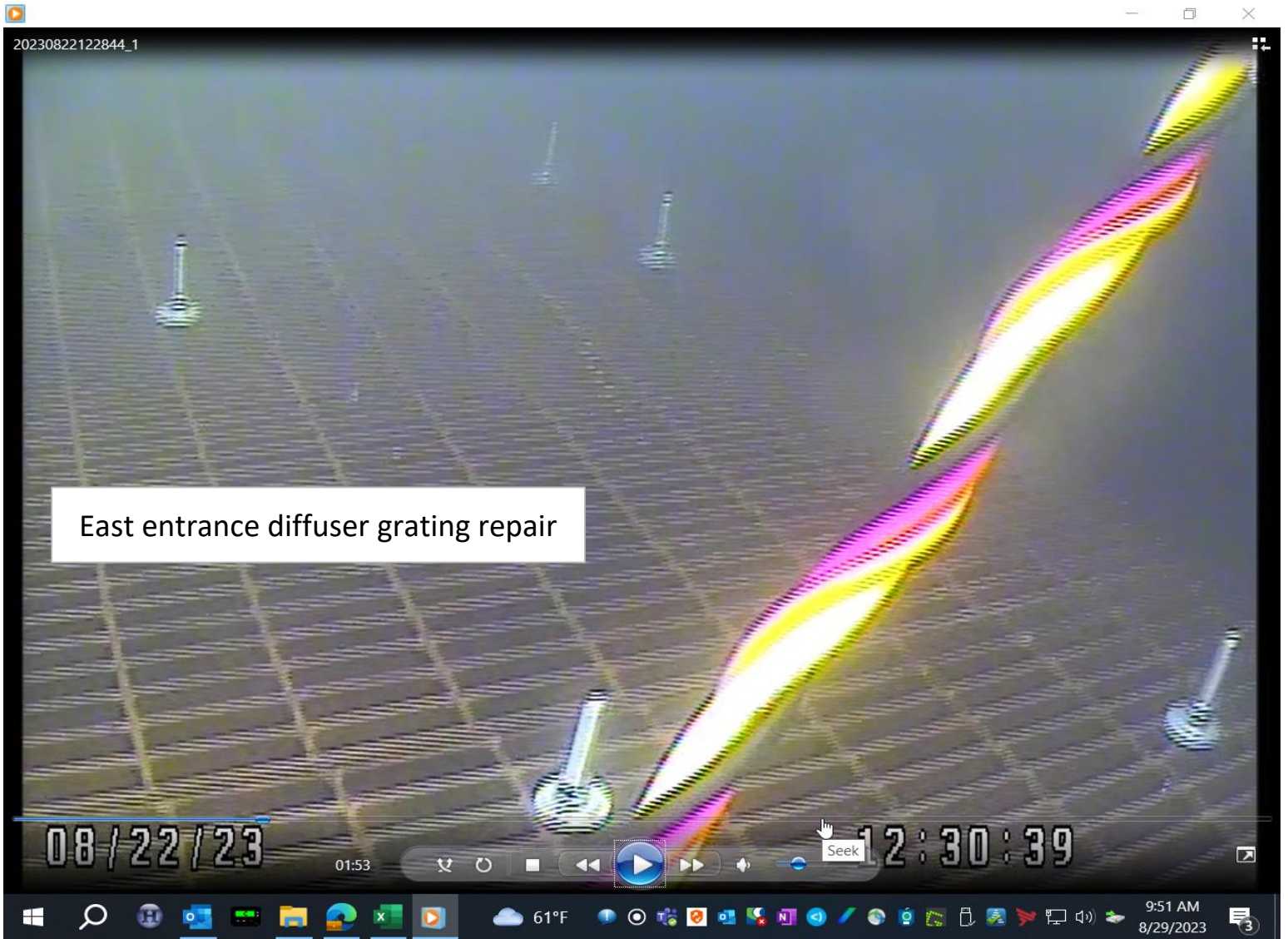


Secchi:		E & N ladders
5.0	Sun	72.3
5.0	Mon	72.3
5.0	Tue	71.9
5.0	Wed	71.7
5.0	Thurs	71.8
5.0	Fri	72.0
5.0	Sat	72.2
5.0	AVG	72.0

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
8/20	1.3	9.6	1.6	-0.6	5.8	5.8	11.2	1.4	10.0	1.4	-2.0	1.4	9.6	2.9
	1.3	9.8	1.7	-0.8	5.6	5.6	11.1	1.5	9.8	1.1	-2.2	1.4	9.5	2.8
8/21	1.2	9.7	1.9	-1.2	5.1	5.2	10.6	1.7	8.7	0.8	-2.5	1.4	9.8	2.3
	1.3	9.8	1.3	8.4	7.7		11.5	1.3	9.7	1.7	-1.7	1.3	8.6	3.3
8/22	1.2	9.8												
	1.4	9.7	1.5	5.0	10.5	10.5	11.2	1.6	9.2	8.1	-1.6	1.6	8.6	8.1
8/23														
	1.3	9.9	1.3	6.4	10.9	10.9	11.1	1.4	8.4	8.4	-1.8	1.3	8.9	8.6
8/24	1.2	9.8	1.5	6.2	10.0	10.0	10.6	1.4	8.3	8.4	-2.0	1.4	8.8	8.4
	1.3	9.8	1.4	6.5	10.3	10.3	10.9	1.4	8.5	8.6	-1.9	1.4	8.7	8.3
8/25	1.2	9.8	1.7	6.1	9.5	9.5	10.5	1.5	8.0	8.1	-1.8	1.5	8.5	8.5
	1.3	9.7	1.5	6.1	9.7	9.7	10.6	1.5	8.4	8.4	-2.3	1.5	8.3	8.3
8/26	1.1	9.8	1.7	5.3	9.4	9.5	9.8	1.6	7.7	7.7	-2.8	1.4	8.4	8.4
	1.4	9.7	1.4	5.8	10.1	10.2	10.3	1.3	8.5	8.5	-2.4	1.3	8.8	8.9
AVG:	1.3	9.8	1.6	4.4	8.7	8.8	10.8	1.5	8.7	8.7	-2.1	1.4	8.9	8.6

Fishways inspected twice daily



Grating overlay to cover missing sections.