

The Dalles Dam Fishway Status Report

7/23/23

Inspection Period 07/16-07/22, 2023

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: 71.6 °F
			Comments: flows decrease.		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	10.0	
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.2	
N2		Closed			
PUD Intake differential	0	≤ 0.5'			

EAST FISHWAY

Exit differential	0	≤ 0.5'	Not measured per FPP		
Removable weirs 154-157	0	Per forebay	Weir 157 in water ~1"		
Weir 158-159 differential	0	1.1' ± 0.1'	W158 weir top flow low at times due to FB transition in elevation.		
Count station differential	0	≤ 0.3'			
153 Weir crest depth	0	1' ± 0.1'	154' per FPP.		
Junction pool weir JP6	0	> 7.0'	Weekly average	11.2	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.6	
Entrance weir E1	0	No criteria	Weekly average	7.3	
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.5	
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.5	
Collection channel velocity	1	1.5 - 4 fps	1.26 east entrance, 2.36 fps west end 7/24/23		Low tailwater 76.2'
Transportation channel velocity	0	1.5 - 4 fps	4.11 fps 7/14/23		
North channel velocity	0	1.5 - 4 fps	2.77 fps 7/15/23		
South entrance	1	1.5 - 4 fps	4.76 fps 7/24/23		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.6	
Entrance weir W1	0	depth (≥ 8')	Weekly average	9.5	
Entrance weir W2	0	depth (≥ 8')	Weekly average	9.8	
Entrance weir W3	0	No criteria	Weekly average	-2.1	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	0	depth (≥ 8')	Weekly average	10.0	
Entrance weir S2	0	depth (≥ 8')	Weekly average	9.7	

JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18	1-8-18 gates open.		
Turbine trashrack drawdown	0	<1.5', biwkly	7/23/2023 1,8,18 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	Differential check only 1,8, 18 and FU in criteria		

Current Outages

MU13 OOS 07/10/2023 0630 – 08/10/2023 1700, 6 YEAR OVERHAUL
MU4 OOS 04/17/2023 0630 – 9/28/2023 1700, ANNUAL
MU12 OOS 04/12/2021 0001 – 9/22/2023 ANNUAL
MU16 OOS 05/22/2023 0630 – 07/20/2023 1700, 6 YR O/H
MU19 & MU20 FOOS 10/07/2018 1205 – 10/31/2025 1700 T10 ACETYLENE

Maintenance

Contractor to be used 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.
Plan in place for fish unit intake trashrack rake in preparation for potential debris issues. Monitoring fish unit differential.
Relocated Tori line to east. 7/17 Fouled on itself due to its length. Need to shorten it.

Predators

Due to active hazing reduced pelicans foraging spillway tailrace.
20 foraging gulls in SW3/4 now with lower flows. NF gulls increasing as pelicans leave. DCCO's remain on BPA towers.
Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Working on permit.
Falconry abatement finished for year. Finished RC boat trial July 21.
Planning construction of custom tori lines for other ladder entrance locations.

Research/Construction/Contractors

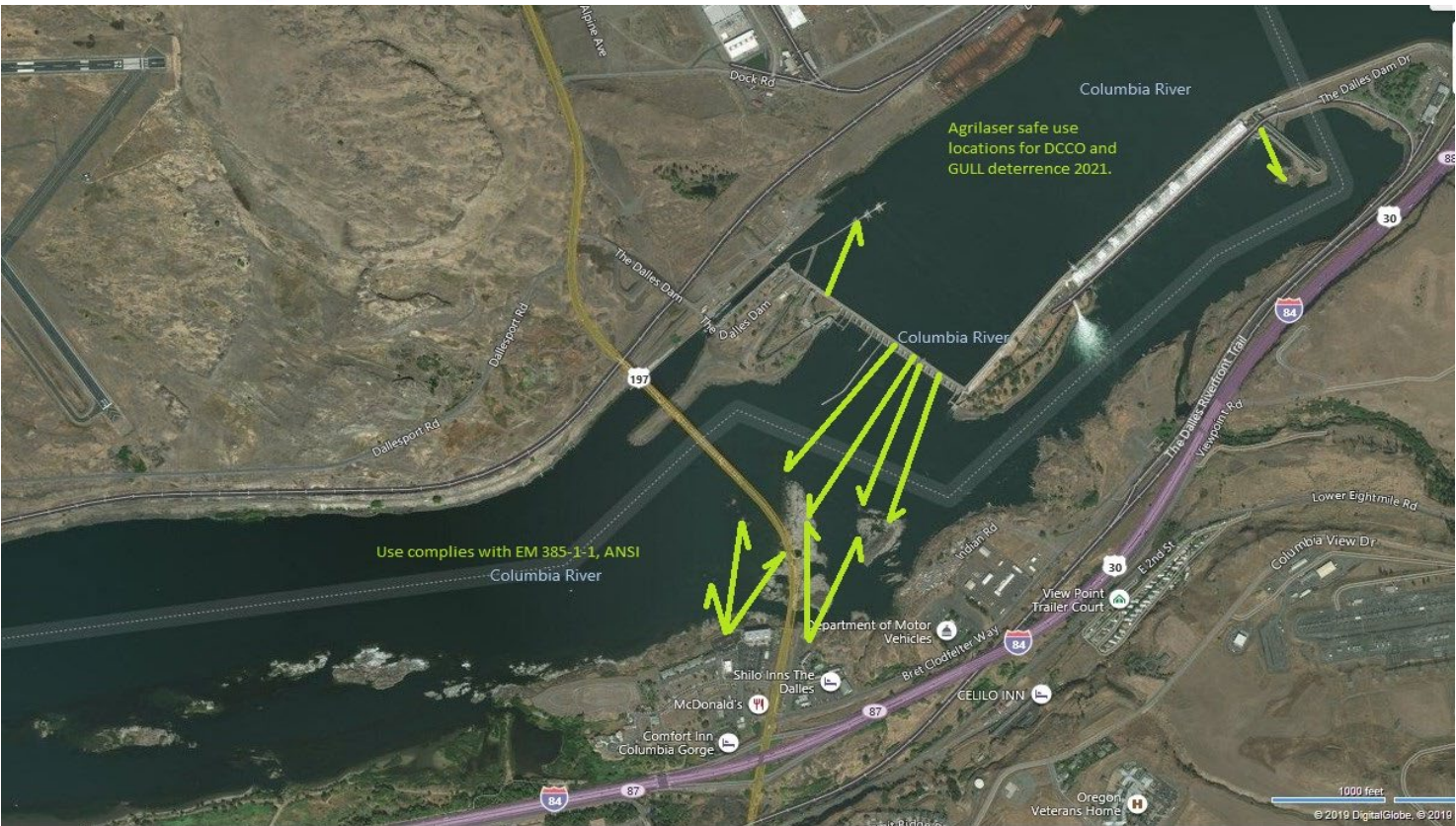
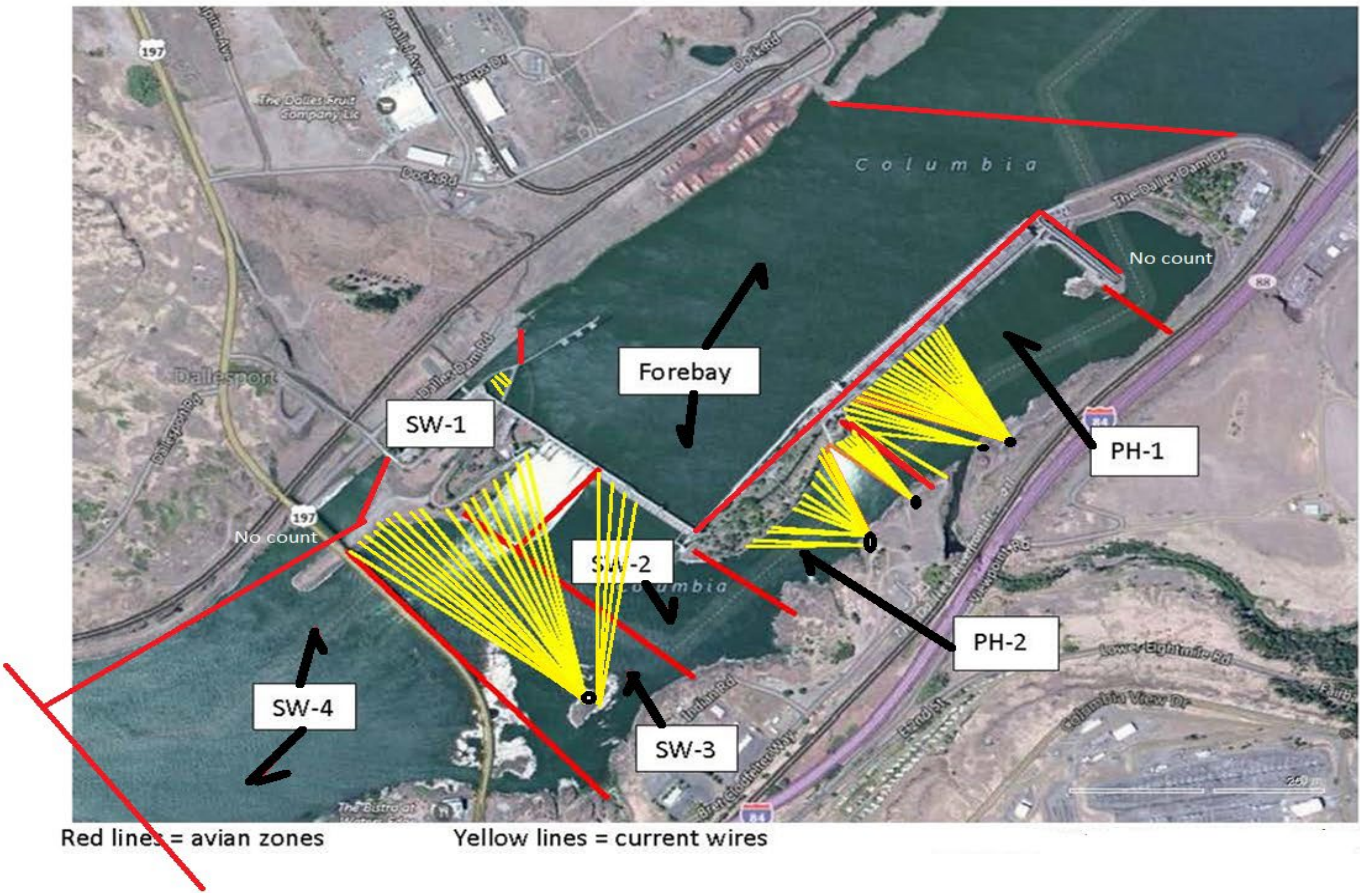
Northern Pikeminnow Management Program (NPM) >=230 231 198 for the week, 1977 YTD
USGS temperature link- °F
4 Peaks conduction fish counts, night video commenced
Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, other 2 next winter.
ODFW conducting monthly fishway inspections.
PTAGIS fishladder data collection at count stations continues
zebra mussel sample taken 7/14.

Operations

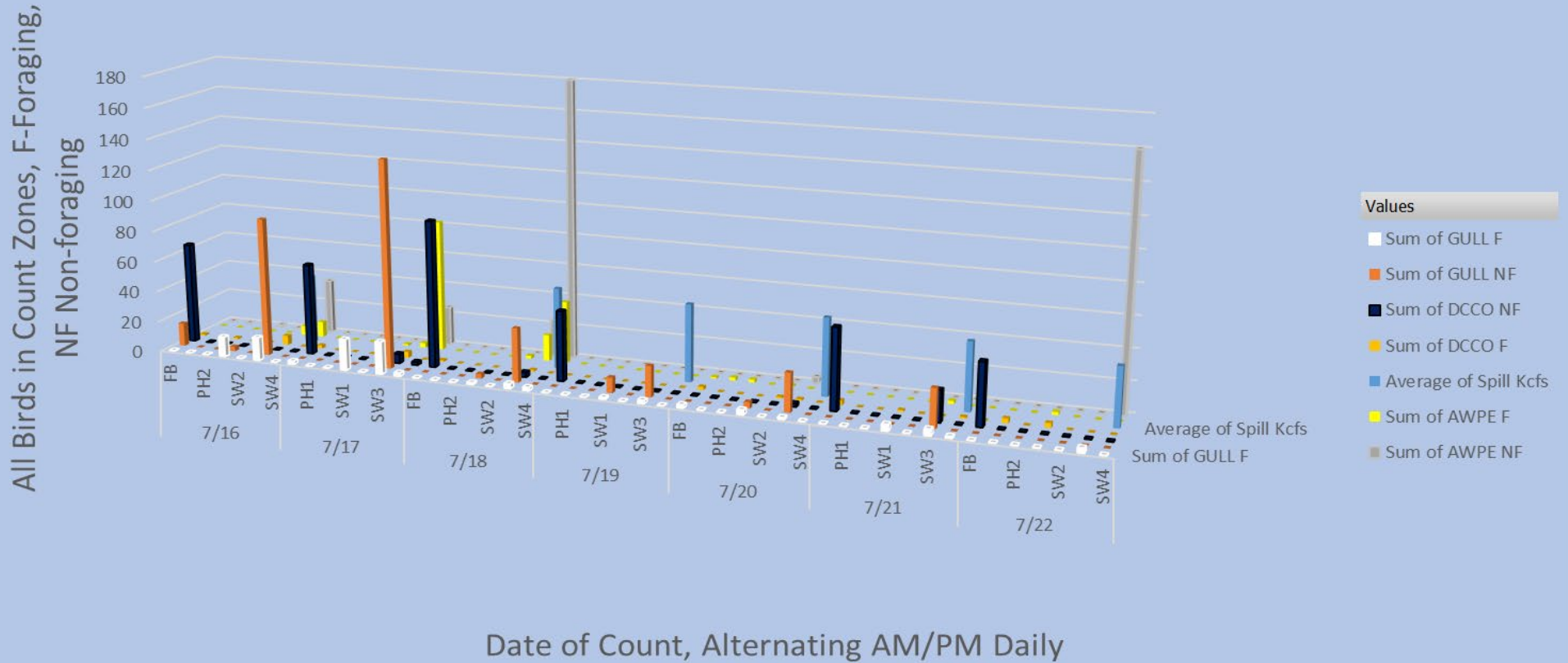
Sluice gates 1-1, 1-2, 1-3, 8-1, 8-3, 18-2 open

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

Bird Count Zones, Avian Lines and Laser Deterrent Sites

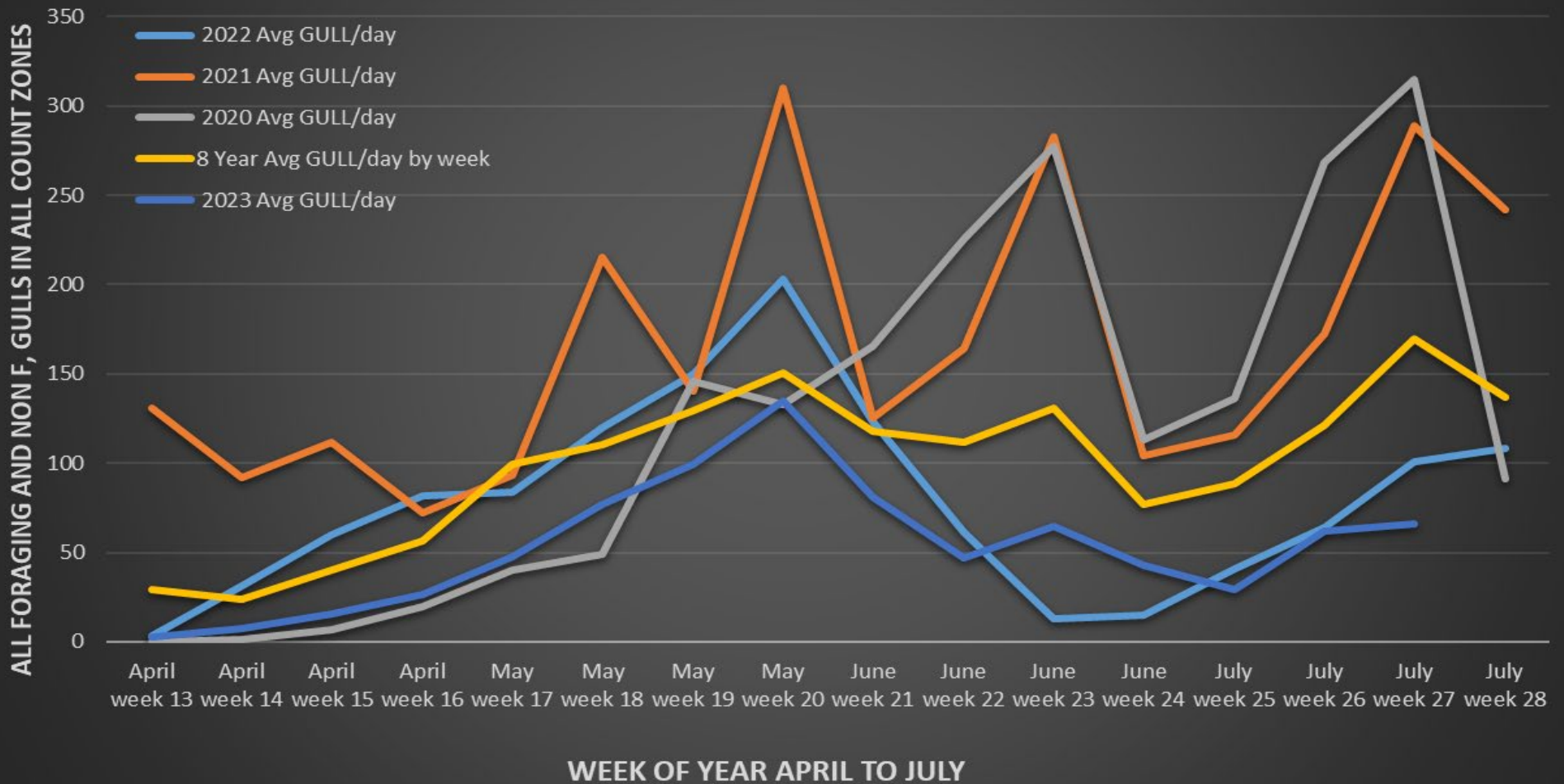


Avian Count at TDA, 7/16 to 7/22/2023



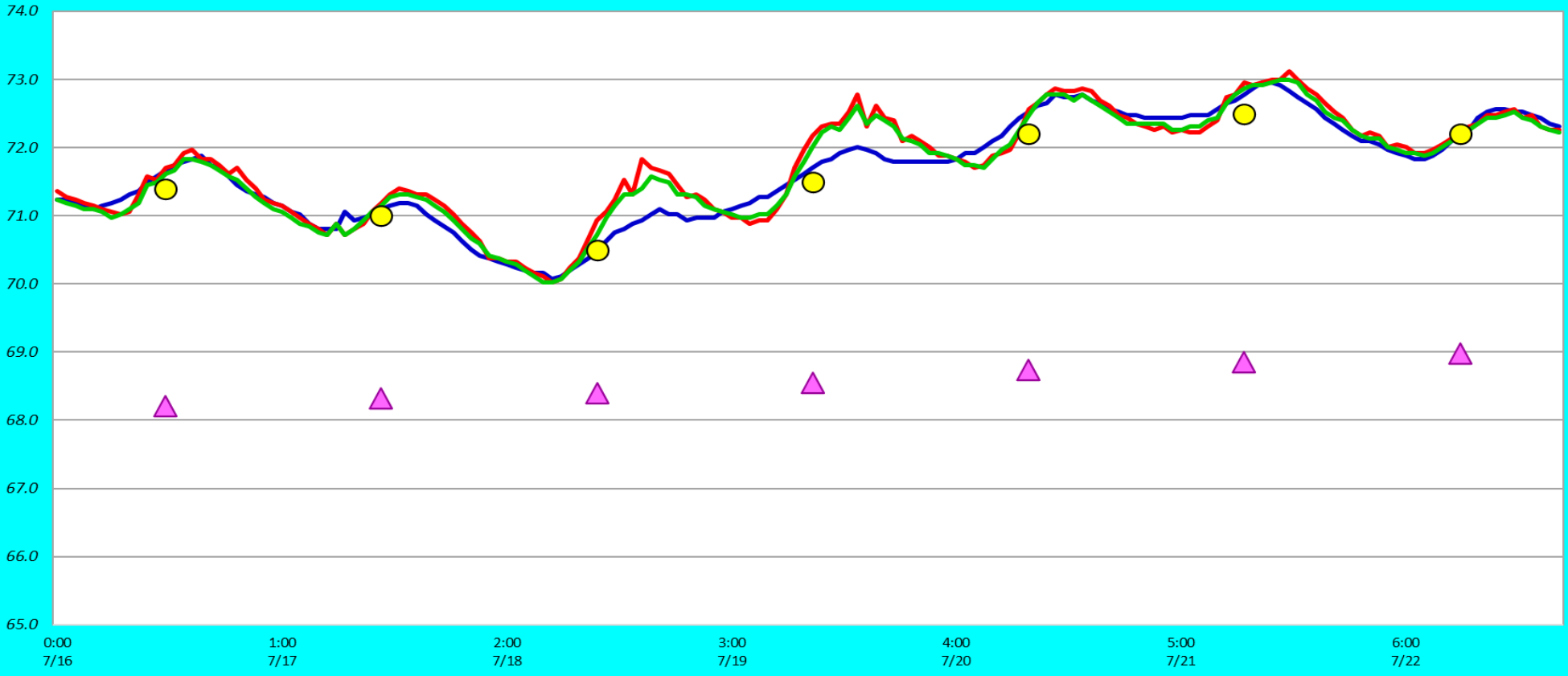
USDA began hazing pelicans on 7/14 in addition to Radio Control boat hazing 7/16 to 7/21

TDA Daily Mean # of GULLS by Week, April to July 2020 and 2021, 2022, 2023 Compared to Previous 8 years Daily Mean.



Adult Fish Ladders-River Temperature

— East Count Station — North Count Station — North Entrance ● Current USGS Daily Average ▲ USGS Daily Average (2007-2022)



Secchi:		USGS F°
5.0	Sun	71.4
5.0	Mon	71.0
5.0	Tue	70.5
5.0	Wed	71.5
5.0	Thurs	72.2
5.0	Fri	72.5
5.0	Sat	72.2
5.0	AVG	71.6

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
7/16	1.3	9.8	1.7	7.2	11.1	11.2	11.2	1.7	9.1	9.3	-2.0	1.5	9.9	9.6
	1.3	9.9	1.6	7.4	11.6	11.7	11.4	1.7	9.3	9.5	-1.9	1.5	10.2	9.8
7/17	1.3	9.9	1.4	8.3	12.0	12.2	12.2	1.3	10.1	10.4	-0.9	1.2	10.6	10.5
	1.2	9.8	1.5	8.1	11.8	12.1	12.1	1.5	9.9	10.2	-1.1	1.5	9.9	9.8
7/18	1.2	10.0	1.5	7.3	11.7	11.3	11.3	1.7	9.3	9.6	-2.0	1.4	10.1	9.8
	1.3	9.9	1.5	7.4	11.8	11.4	11.4	1.5	9.8	10.1	-1.7	1.5	8.7	9.8
7/19	1.3	9.9	1.7	7.1	11.3	11.0	11.0	1.6	9.2	9.5	-2.1	1.5	10.0	9.6
	1.3	10.5	1.4	9.7	11.8	12.7	12.7	1.4	10.4	10.6	-1.7	1.4	10.1	9.9
7/20	1.3	10.0	1.5	7.2	11.5	11.2	11.2	1.5	9.9	10.2	-2.0	1.4	10.3	9.8
	1.2	10.0	1.6	7.2	11.4	11.2	11.2	1.4	10.0	10.2	-2.0	1.4	10.4	9.8
7/21	1.2	10.0	1.7	6.5	11.0	10.5	10.5	1.7	9.0	9.3	-2.6	1.5	10.0	9.3
	1.3	9.8	1.6	6.4	11.1	10.4	10.4	1.6	9.3	9.6	-3.0	1.4	10.5	9.5
7/22	1.1	10.0	1.4	6.5	11.5	10.5	10.5	1.6	9.3	9.6	-3.0	1.5	9.2	9.0
	1.2	9.9	1.7	5.9	10.9	9.9	9.9	1.7	9.0	9.2	-3.3	1.4	10.3	9.1
AVG:	1.2	10.0	1.6	7.3	11.5	11.2	11.2	1.6	9.5	9.8	-2.1	1.4	10.0	9.7

Fishways inspected twice daily



1700 on 7/21 No birds in view -USDA hazing/pyro and RC work to be discussed