

The Dalles Dam Fishway Status Report

8/4/24

Inspection Period 7/28 - 8/3, 2024

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: 70.9
			Comments: Fishways in full operation		Weekly Ave. Secchi: 5.4

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	1.3	
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'	1.2' per FPP.		
Junction pool weir JP6	0	> 7.0'	Weekly average	10.8	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir E1	0	No criteria	Weekly average	4.9	
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.5	
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.5	
Collection channel velocity	0	1.5 - 4 fps	2.59 fps 7/30		
Transportation channel velocity	0	1.5 - 4 fps	3.62 fps 7/30		
North channel velocity	0	1.5 - 4 fps	2.76 fps 7/24		
South entrance velocity	0	1.5 - 4 fps	4.35 fps 8/3		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir W1	0	depth (≥ 8')	Weekly average	10.2	
Entrance weir W2	0	depth (≥ 8')	Weekly average	10.3	
Entrance weir W3	0	No criteria	Weekly average	-2.5	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.3	
Entrance weir S1	0	depth (≥ 8')	Weekly average	10.4	
Entrance weir S2	0	depth (≥ 8')	Weekly average	10.4	

JUVENILE BYPASS

Sluiceway operation	0	Units 1,8,22	22 sluiceway to remain open through the 2024 fish passage season		
Turbine trashrack drawdown	0	<1.5', biwkly	8/3/24 all in criteria		
Spill volume/pattern	0	1 to 22	ITS open, spilling gates 1-8		
Turbine Unit Priority	0	per FPP	MU1 and MU22 in criteria		
Gatewells	0	Weekly	Juvenile salmonids observed in small numbers as of 8/3		

Current Outages

- MU19 & MU20 FOOS 10/07/2018 1205 – 10/31/2025 1700 T10 ACETYLENE
- MU11 OOS 3/25/24 0630 – 8/22/24 1700 – Annual and Thrust Bearing Oil Cooler
- MU12 OOS 6/24/24 0630 – 8/15/24 1700 6 YR O/H
- MU2 OOS 7/15/24 0630 – 8/29/24 1700 Annual/Blade seal replacement

Maintenance

Calibrations performed on 8/2/24, all within limits
Spillway assessment; Spillgates 1- 9 rehab 2034. Spillway crane replace first priority. Investigating gate operation frequency reduction.
Lamprey LPS contractor installed flumes and holding tank complete and tested.
DC lower guide bearing pump replaced on FU1

Predators

No recent sea lion sightings. Pelicans decreasing in numbers along with decreasing shad fallback, foraging in SW4.
Nocturnal pelicans feeding coinciding with high spill times and bridge lights, many loafing outside of count zones. Daily feeding roughly 300.
Tori lines installed at east, west and south. Mobile Bird Gard turned off.
Approx. 40-50 DCCO on BPA towers. Feeding in SW4 ~ 40 DCCO now on Murdock island tower.
600 gulls present daily west of count zones but foraging in SW4 increasing as USDA deterrents and lethal take stopped 7/30/24.
Gull take (CAGU)(RBGU) ended 7/30/24 in all areas. 380 CAGU taken of 400 permitted. 18 DCCO taken on permit, and 9 RBGU.

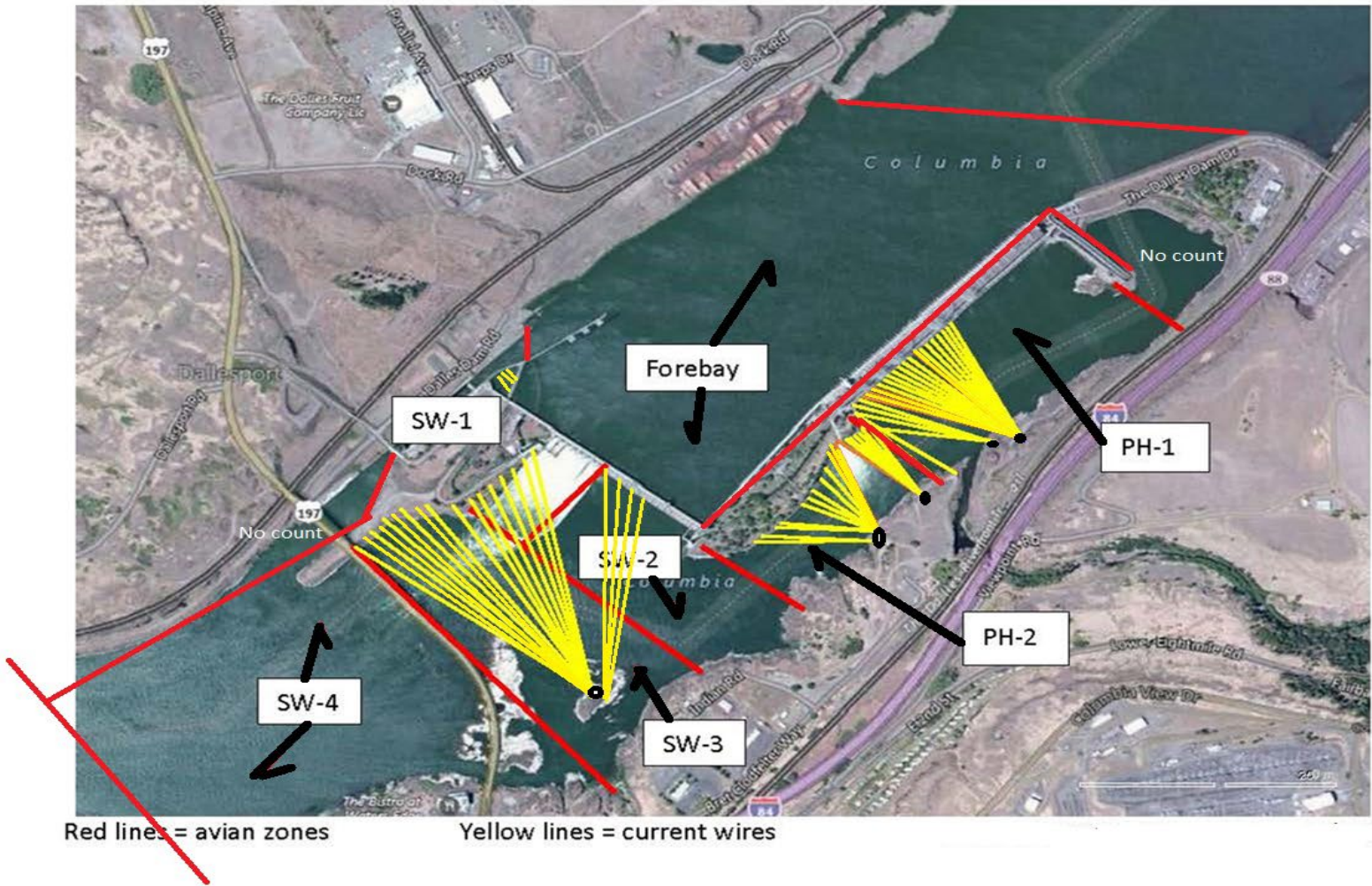
Researchers

USGS temperature link- [August](#)
4 Peaks fish count Resumed 4/1
200 stomachs from gulls taken by Cramer fish for eDNA work. Mix of recent fledged and adult RBGU/CAGU taken. 18 total DCCO stomachs taken.
USDA concluded the 2024 bird hazing season on 7/31/24
WDFW Dam Angling begin 30 April 2024 10 samples per week taken for predator study.

Operations

Both fishladders in full operation.
Spillway 30%

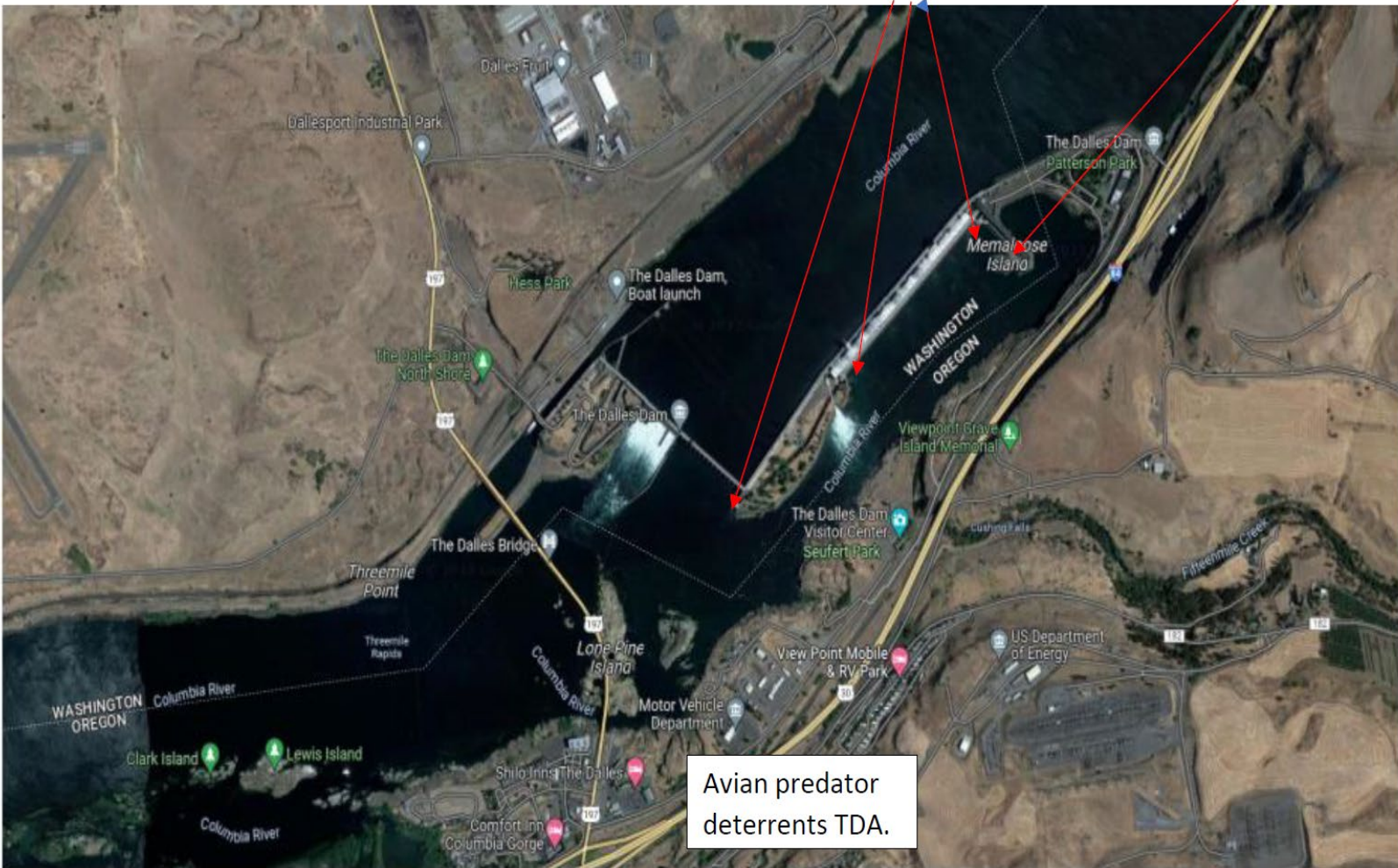
Bird Count Zones, Avian Lines and Deterrent Sites

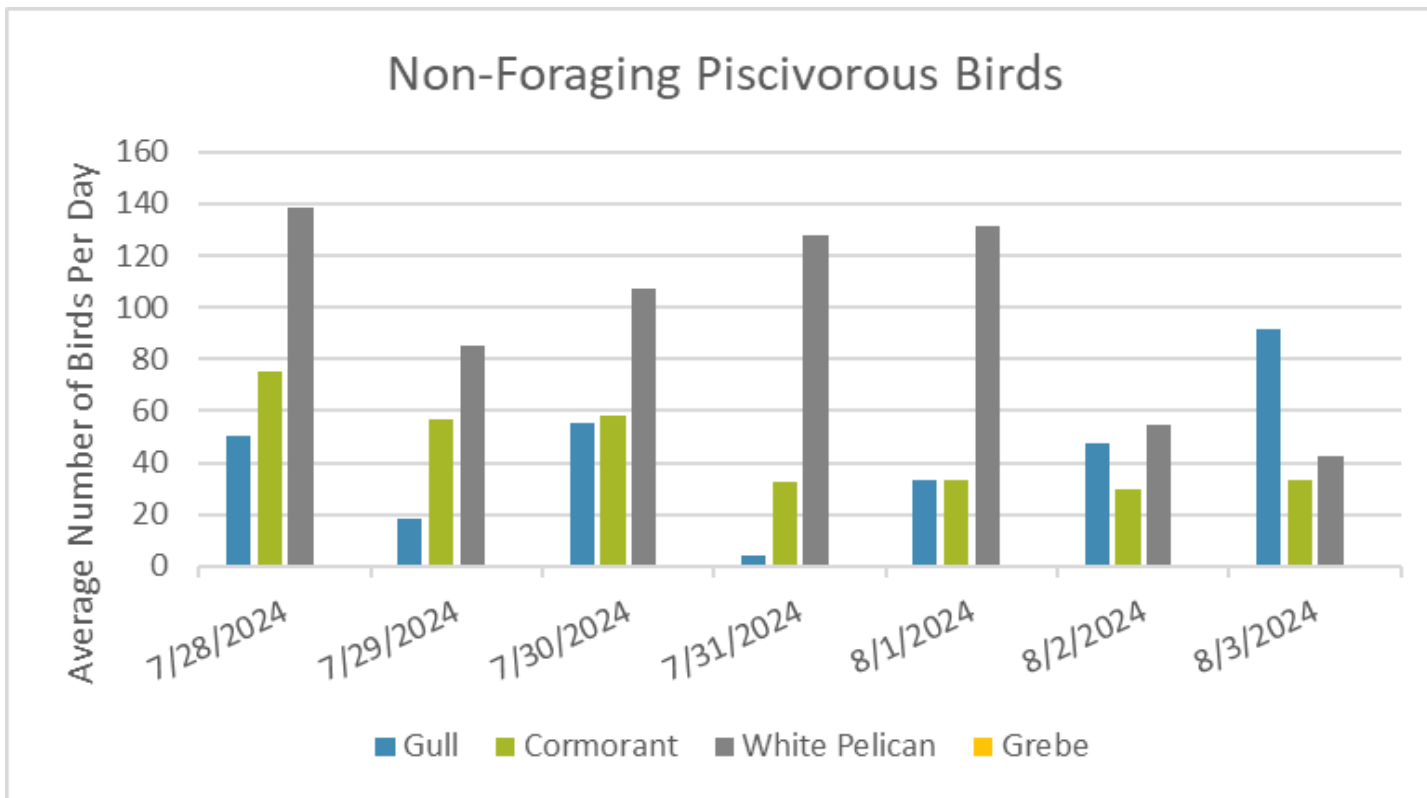


Avian predator tori lines and audio distress Bird Gard. 10/2023

Tori lines at East Ladder entrances.

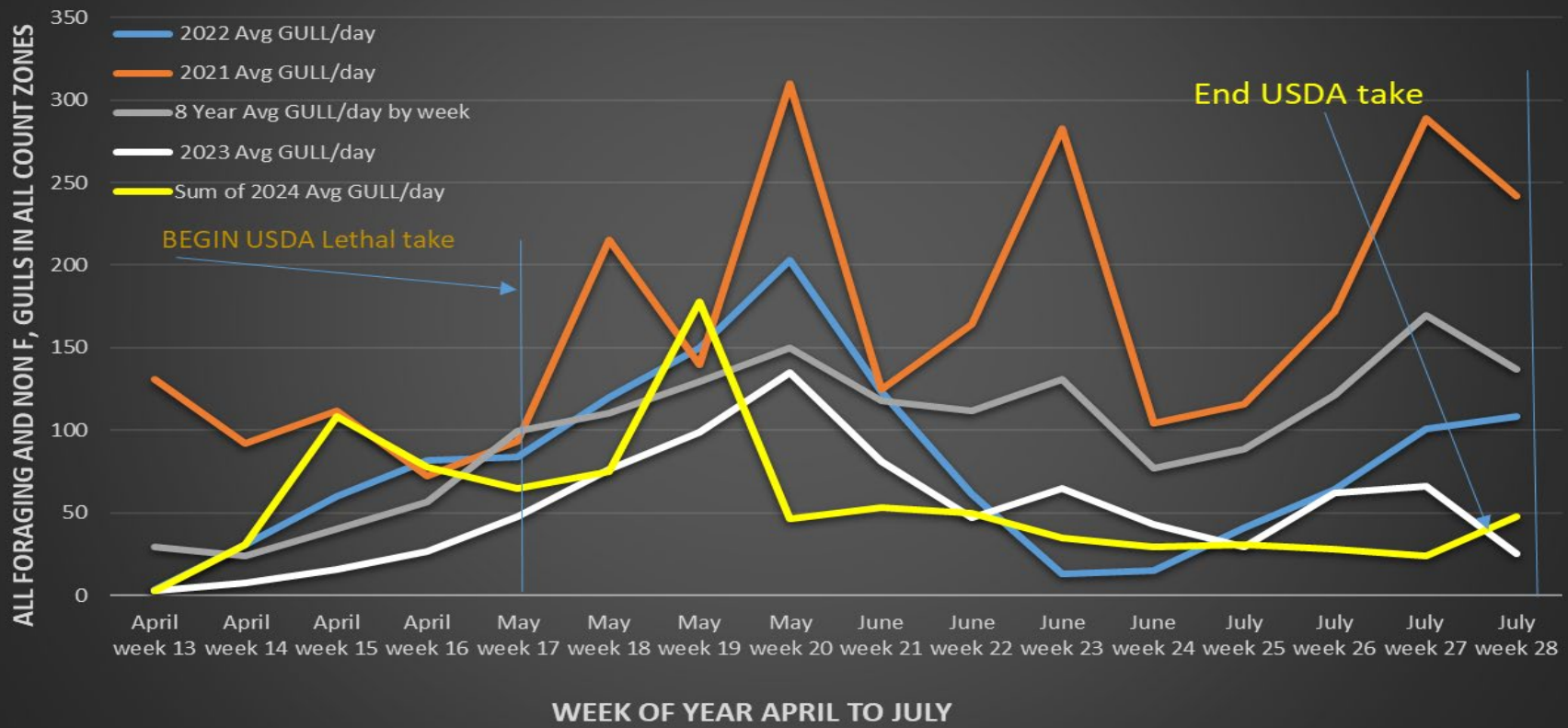
Bird Gard audio deterrent.



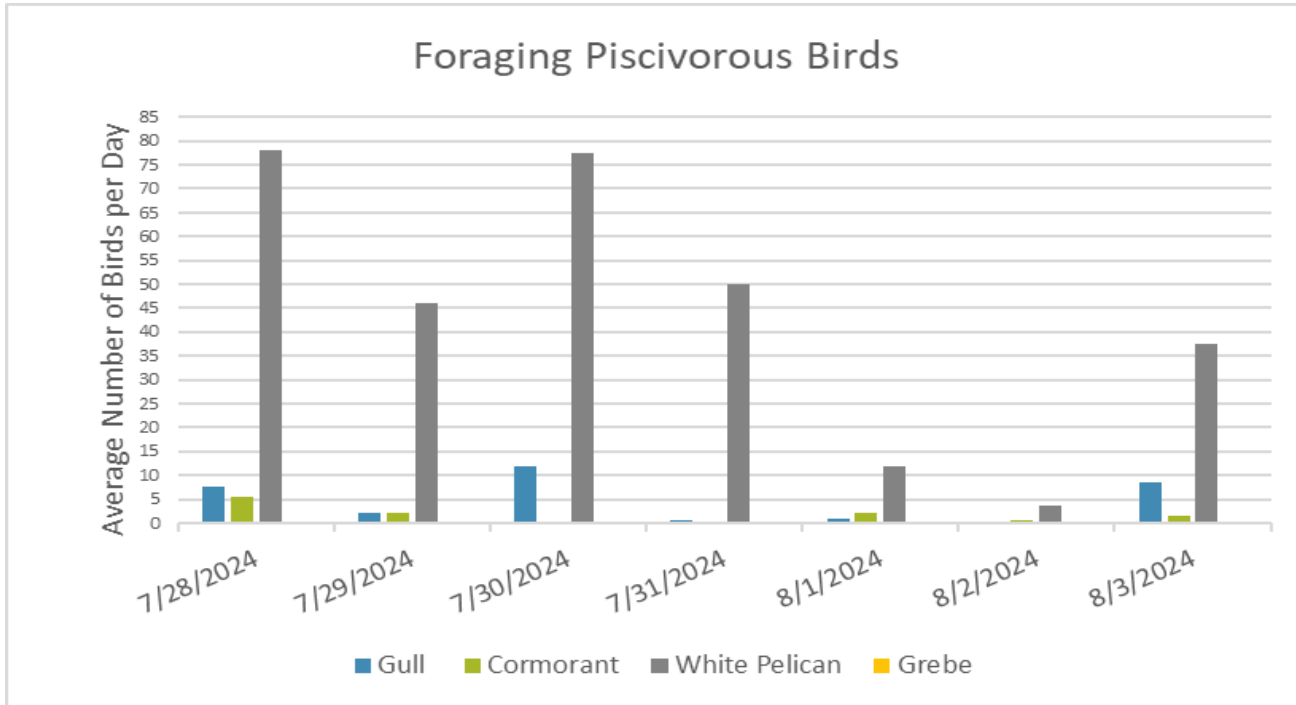


High numbers of pelicans in SW\$ result from evening counts after 1800hr.

TDA Daily Avg # of GULLs by Week, April to July 2021, 2022, 2023 and 2024 Compared to Previous 8 years Daily Mean.



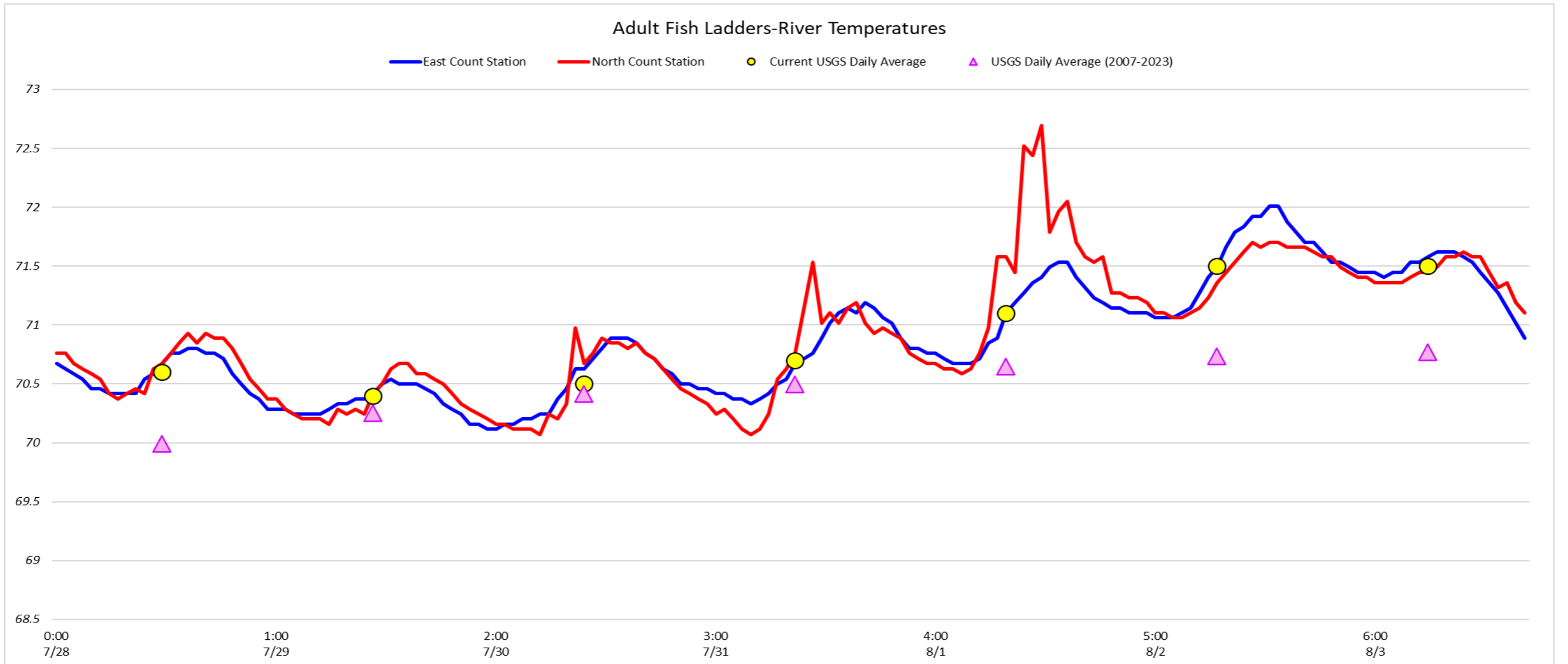
Number of feeding gulls increasing rapidly with end of lethal take on 7/30



Total number of ~300 pelicans feeding in high numbers from 1800 hr to 2300

Adult Fish Ladders-River Temperatures

— East Count Station — North Count Station ● Current USGS Daily Average ▲ USGS Daily Average (2007-2023)



Secchi:		USGS
6.0	Sun	70.6
5.0	Mon	70.4
5.0	Tue	70.5
5.0	Wed	70.7
5.0	Thurs	71.1
6.0	Fri	71.5
6.0	Sat	71.5
5.4	AVG	70.9

Reporting week data

Date:	North Ladder		East Ladder											
	Differential	N1 Depth	East Entrance					West Entrance				South Entrance		
			Differential	E1 Depth	E2 Depth	E3 Depth	JP 6	Differential	W1	W2	W3	Differential	S1	S2
7/21	1.3	10.2	1.7	6.5	11.1	11.3	10.6	1.6	9.7	9.8	-2.6	1.5	10.0	10.3
	1.3	9.9	1.4	5.2	11.9	11.7	11.2	1.4	10.5	10.7	-2.2	1.2	10.5	10.5
7/22	1.3	10.1	1.5	4.5	11.7	11.6	10.5	1.5	10.0	10.1	-2.8	1.4	10.2	10.3
	1.3	10.3	0.4	5.6	11.9	11.8	11.6	1.3	10.8	11.0	-1.8	1.3	10.6	10.6
7/23	1.3	10.1	1.5	5.1	11.6	11.5	11.1	1.4	10.3	10.4	-2.3	1.3	10.4	10.5
	1.4	10.2	1.5	4.8	11.6	11.5	10.8	1.4	10.2	10.3	-2.4	1.3	10.4	10.3
7/24	1.3	10.2	1.6	4.6	11.4	11.3	10.6	1.5	9.9	10.1	-2.6	1.3	10.2	10.3
	1.3	8.3	1.6	4.3	11.3	11.2	10.3	1.4	10.1	10.2	-2.9	1.3	10.3	10.3
7/25	1.2	10.2	1.6	4.9	11.5	11.4	10.9	1.4	10.3	10.4	-2.3	1.3	10.3	10.4
	1.4	10.1	1.5	6.0	11.5	11.3	12.0	1.3	10.7	10.8	-1.4	1.2	11.1	11.0
7/26	1.3	9.9	1.5	4.6	11.3	11.4	10.6	1.5	9.9	10.1	-2.6	1.3	10.4	10.5
	1.3	10.1	1.3	4.9	11.7	11.7	10.9	1.3	10.2	10.3	-2.6	1.3	10.7	10.7
7/27	1.1	10.0	1.4	3.7	11.3	11.5	9.7	1.5	10.0	10.1	-3.5	1.4	10.0	10.1
	1.2	10.0	1.5	4.3	11.2	11.4	10.3	1.3	10.2	10.3	-3.1	1.3	10.7	10.6
AVG:	1.3	10.0	1.4	4.9	11.5	11.5	10.8	1.4	10.2	10.3	-2.5	1.3	10.4	10.4

Fishways inspected twice daily



7/30 1008pm, pelicans standing on rocks and feeding aggressively in light from 197 bridge

Pelicans leave the area when lights go off at 11pm