

The Dalles Dam Fishway Status Report

7/21/24

Inspection Period 7/14 - 7/20, 2024

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: 70.5
			Comments: Fishways in full operation		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	10.4	
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.2	
N2		Closed			
PUD Intake differential	7	≤ 0.5'	Lots of aquatic weed accumulating at North.		

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	1.5	
Entrance weir E1	0	No criteria	Weekly average	5.0	
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.1	
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.1	
Collection channel velocity	0	1.5 - 4 fps	2.68 fps 7/11		
Transportation channel velocity	0	1.5 - 4 fps	3.68 fps 7/12		
North channel velocity	0	1.5 - 4 fps	2.78 fps 7/12		
South entrance velocity	0	1.5 - 4 fps	4.27 fps 7/12		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir W1	0	depth (≥ 8')	Weekly average	10.4	
Entrance weir W2	0	depth (≥ 8')	Weekly average	10.5	
Entrance weir W3	0	No criteria	Weekly average	-2.6	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.3	
Entrance weir S1	0	depth (≥ 8')	Weekly average	10.5	
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', biweekly	7/13/24 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	Out-migrating juvenile salmonids in gatewells as of 7/13/2024		

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

Maintenance

Calibrations performed on 7/12, 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 increasing in numbers along with increasing shad fallback, foraging in SW4.
Nocturnal pelicans feeding coinciding with high spill times, many loafing in daytime outside of count zones. Maximum roughly 500.
Tori lines installed at east, west and south. Mobile Bird Gard turned off.
Approx. 15-20 nesting DCCO on BPA towers. ~ 40 DCCO now on Murdock island tower.
Gulls still present west of count zones but foraging in smaller numbers as pelicans take best areas to feed.
Gull take (CAGU) occurring in SW4, displaced by pelicans. ~320 CAGU taken of 400 permitted. 19 DCCO taken on permit, limit 30.

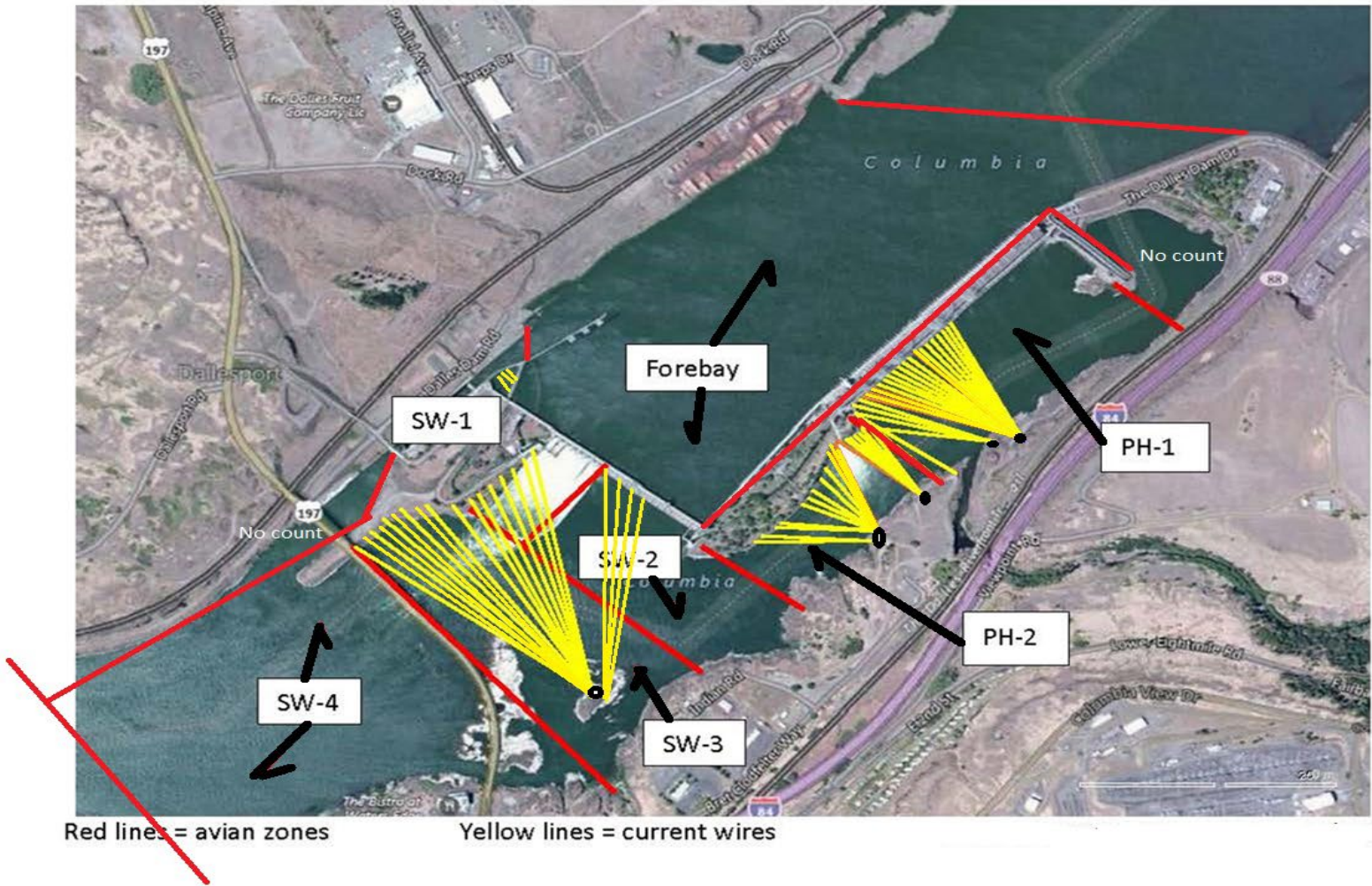
Researchers

USGS temperature link- [July](#)
4 Peaks fish count Resumed 4/1
18 new stomachs from gulls taken. Mix of juvenile and adult plumage CAGU. 2 new DCCO stomachs taken. YN did take of fish GI/Stomachs.
USDA continue lethal gull take in SW4, mostly morning and mid day up to 40 taken this week. 2 DCCO taken this past week.
WDFW Dam Angling begin 30 April 2024 10 samples per week taken for predator study.

Operations

Both fishladders in full operation.
Spillway opened 4/10 40%
LPS out of service due to inability to intake more in holding areas.

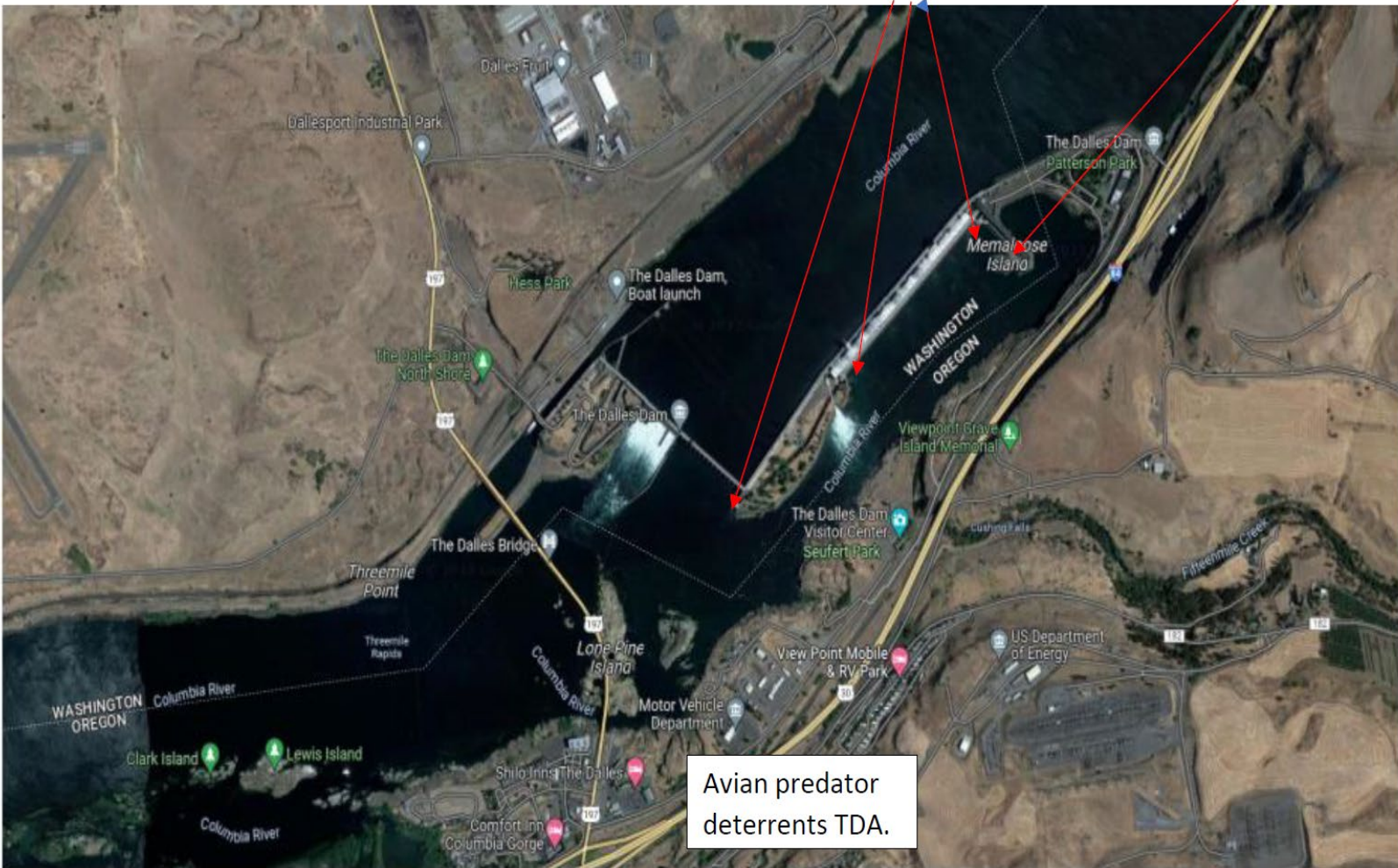
Bird Count Zones, Avian Lines and Deterrent Sites

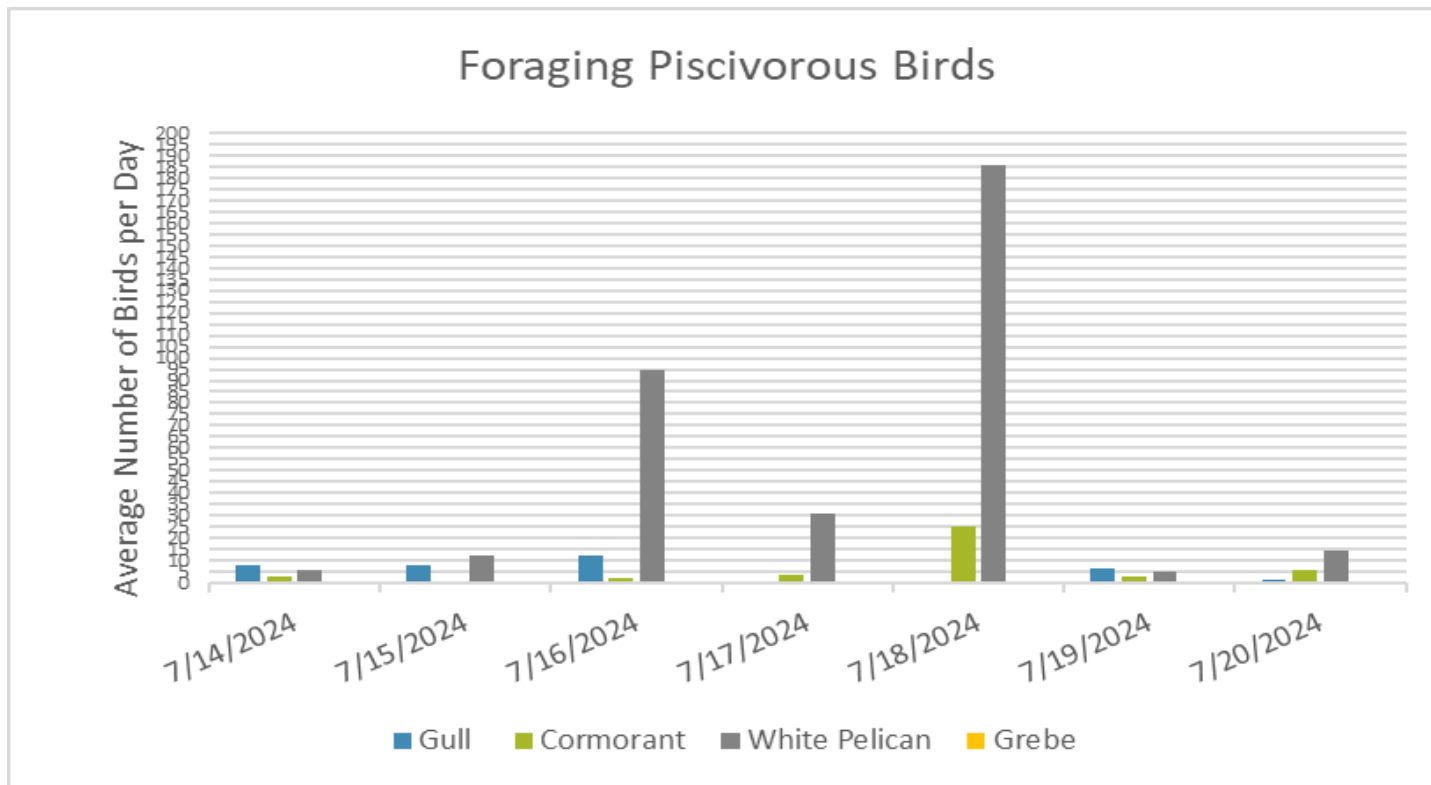


Avian predator tori lines and audio distress Bird Gard. 10/2023

Tori lines at East Ladder entrances.

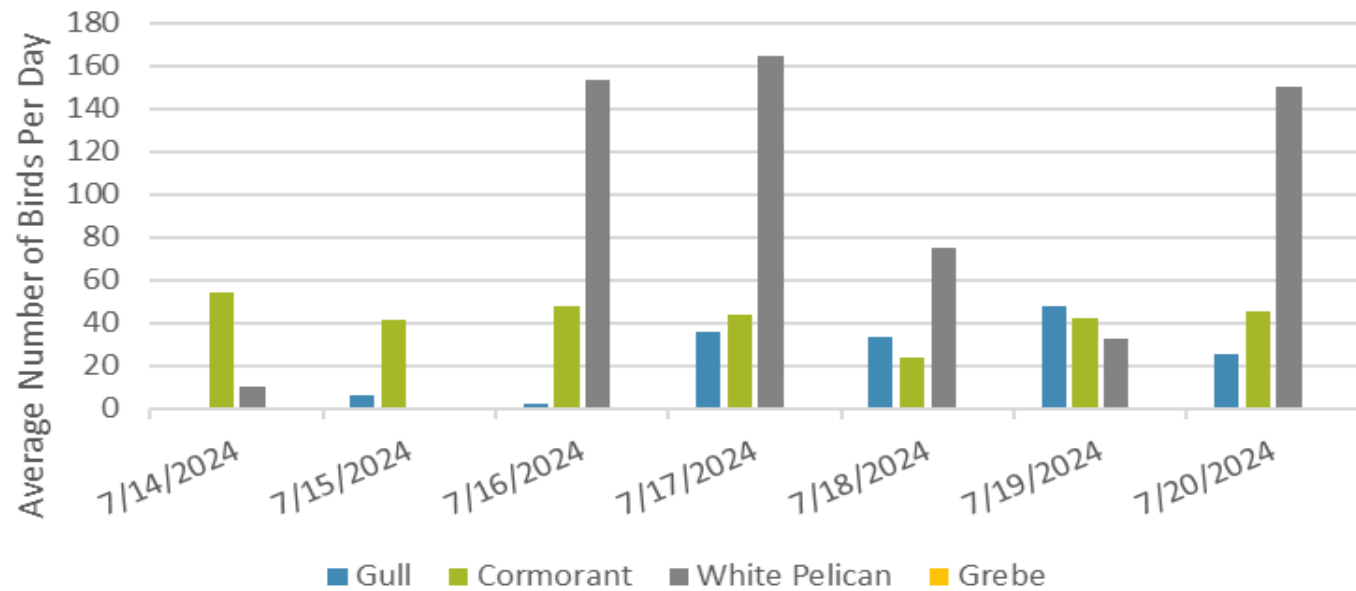
Bird Gard audio deterrent.





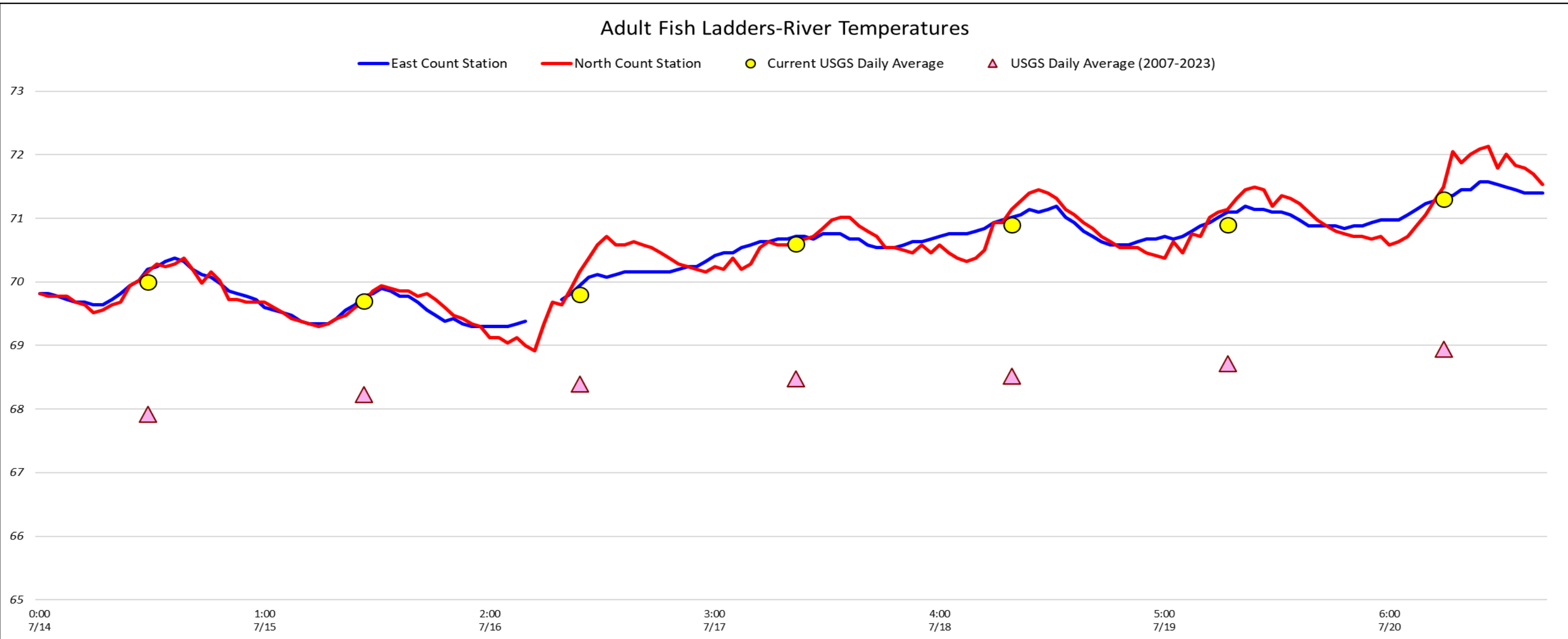
High numbers of pelicans result from evening counts.

Non-Foraging Piscivorous Birds



Adult Fish Ladders-River Temperatures

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



Secchi:		USGS
5.0	Sun	70.0
5.0	Mon	69.7
5.0	Tue	69.8
5.0	Wed	70.6
5.0	Thurs	70.9
5.0	Fri	70.9
5.0	Sat	71.3
5.0	AVG	70.5

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
7/14	1.2	10.2	1.3	3.7	11.2	12.2	9.8	1.5	9.8	9.9	-3.7	1.3	10.3	10.2
	1.2	10.2	1.3	4.0	11.6	12.5	10.0	1.4	10.3	10.3	-3.4	1.3	10.5	10.4
7/15	1.2	10.3	1.5	4.3	11.0	11.9	10.3	1.4	10.3	10.4	-3.0	1.3	10.3	10.2
	1.2	10.1	1.5	4.9	11.1	12.0	10.9	1.3	10.8	10.9	-2.5	1.3	10.6	10.5
7/16	1.3	10.2	1.5	4.7	11.0	12.0	10.7	1.4	10.5	10.6	-2.6	1.4	10.4	10.5
	1.3	10.2	1.4	5.0	11.3	12.2	11.0	1.3	10.6	10.7	-2.4	1.2	10.5	10.5
7/17	1.2	10.4	1.5	4.3	10.9	11.9	10.3	1.5	10.0	10.1	-3.0	1.3	10.4	10.4
	1.3	10.5	1.4	9.7	11.8	12.0	12.7	1.4	10.4	10.6	-1.7	1.4	10.1	9.9
7/18	1.1	11.4	1.6	4.3	10.7	11.8	10.3	1.5	10.0	10.2	-3.0	1.4	10.1	10.0
	0.9	10.4	1.3	7.4	11.2	12.0	13.4	1.3	11.5	11.5	-0.1	1.3	10.9	10.9
7/19	1.2	10.5	1.5	4.7	11.0	12.1	10.7	1.4	10.3	10.4	-2.6	1.3	10.3	10.3
	1.3	10.3	1.5	4.5	11.0	12.2	10.5	1.3	10.3	10.4	-2.5	1.2	11.1	11.0
7/20	1.2	10.3	1.6	4.4	10.7	11.9	10.4	1.4	10.3	10.4	-2.8	1.3	10.3	10.4
	1.1	10.5	1.5	4.3	10.8	12.0	10.3	1.4	10.1	10.2	-3.0	1.3	10.4	10.6
AVG:	1.2	10.4	1.5	5.0	11.1	12.0	10.8	1.4	10.4	10.5	-2.6	1.3	10.5	10.4

Fishways inspected twice daily



Pelicans foraging in SW4 at 940pm, well after dark on 7/19/2024