

# The Dalles Dam Fishway Status Report

6/2/24

Inspection Period 5/26 - 6/1, 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

<b>The Dalles Dam</b>	<b>Inspections OOC</b>	<b>Criteria Limit</b>	<b>Total Number of Inspections:</b> 14		<b>Temperature:</b> 58.9
			<b>Comments:</b> Fishways in full operation		<b>Weekly Ave. Secchi:</b> 4.9

### 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	10.7	
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.3	
N2		Closed			
PUD Intake differential	7	≤ 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	11.4	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	5.2	
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.4	
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.4	
Collection channel velocity	0	1.5 - 4 fps	2.53 fps 5/31		
Transportation channel velocity	0	1.5 - 4 fps	3.27 fps 5/31		
North channel velocity	0	1.5 - 4 fps	2.39 fps 5/31		
South entrance velocity	0	1.5 - 4 fps	3.75 fps 5/31		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir W1	0	depth (≥ 8')	Weekly average	10.5	
Entrance weir W2	0	depth (≥ 8')	Weekly average	10.5	
Entrance weir W3	0	No criteria	Weekly average	-1.9	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.3	
Entrance weir S1	0	depth (≥ 8')	Weekly average	10.8	
Entrance weir S2	0	depth (≥ 8')	Weekly average	10.7	

### JUVENILE BYPASS

Sluiceway operation	0	Units 1,9,22	22 sluiceway to remain open through the 2024 fish passage season		
Turbine trashrack drawdown	0	<1.5', biweekly	5/21/24 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 5/21/2024		

### Current Outages

MU11 OOS 3/25/24 0630 – 6/27/24 1700 – Annual and Thrust Bearing Oil Cooler  
MU19 & MU20 Forced-OOS 10/07/2018 1205 – 10/31/2025 1700 T10 ACETYLENE  
-T4 OOS 5/20/24 0630 – 6/6/24 1230 Transformer Maintenance  
-MU7 OOS 5/20/24 0630 – 6/6/24 1700 Annual and NPDES  
-MU8 OOS 5/20/24 0630 – 6/6/24 1700 Annual and NPDES

### Maintenance

Calibrations performed on 5/27, all within limits  
Spillway assessment; Spillgates 1- 9 rehab 2034. Spillway crane replace first priority. Investigating gate operation frequency reduction.  
Fish SCADA ~20hrs to completion

### Predators

No recent otter sign or sea lion sightings. Pelicans increasing in numbers along with increasing shad numbers, foraging in SW4, SW3 and PH1.  
Large sturgeon busy in east channel feeding. SEE PHOTO  
Tori lines installed at east, west and south. Mobile Bird Gard operating in PH1. Gull effigies covered due to falconry.  
Falconry completed contract. 5/28/2024

### Researchers

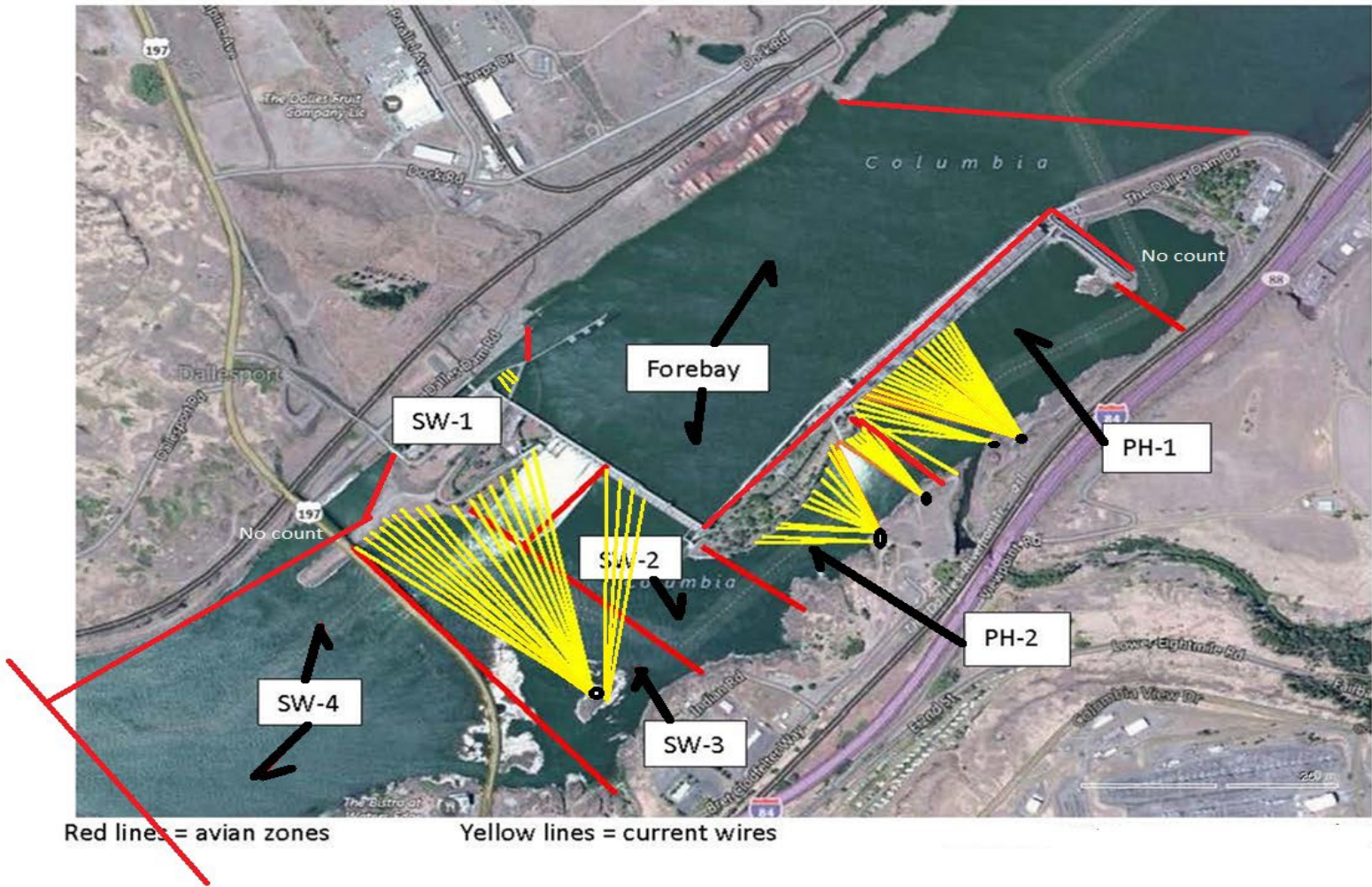
USGS temperature link- [June](#)  
4 Peaks fish count Resumed 4/1  
USDA continue lethal gull take in SW4, mostly morning and mid day up to 15 samples per week. 3 DCCO taken this past week.  
WDFW Dam Angling begin 30 April 2024 8 samples per week goal for predator study.

### Operations

Both fishladders in full operation.  
Spillway opened 4/10 40%

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

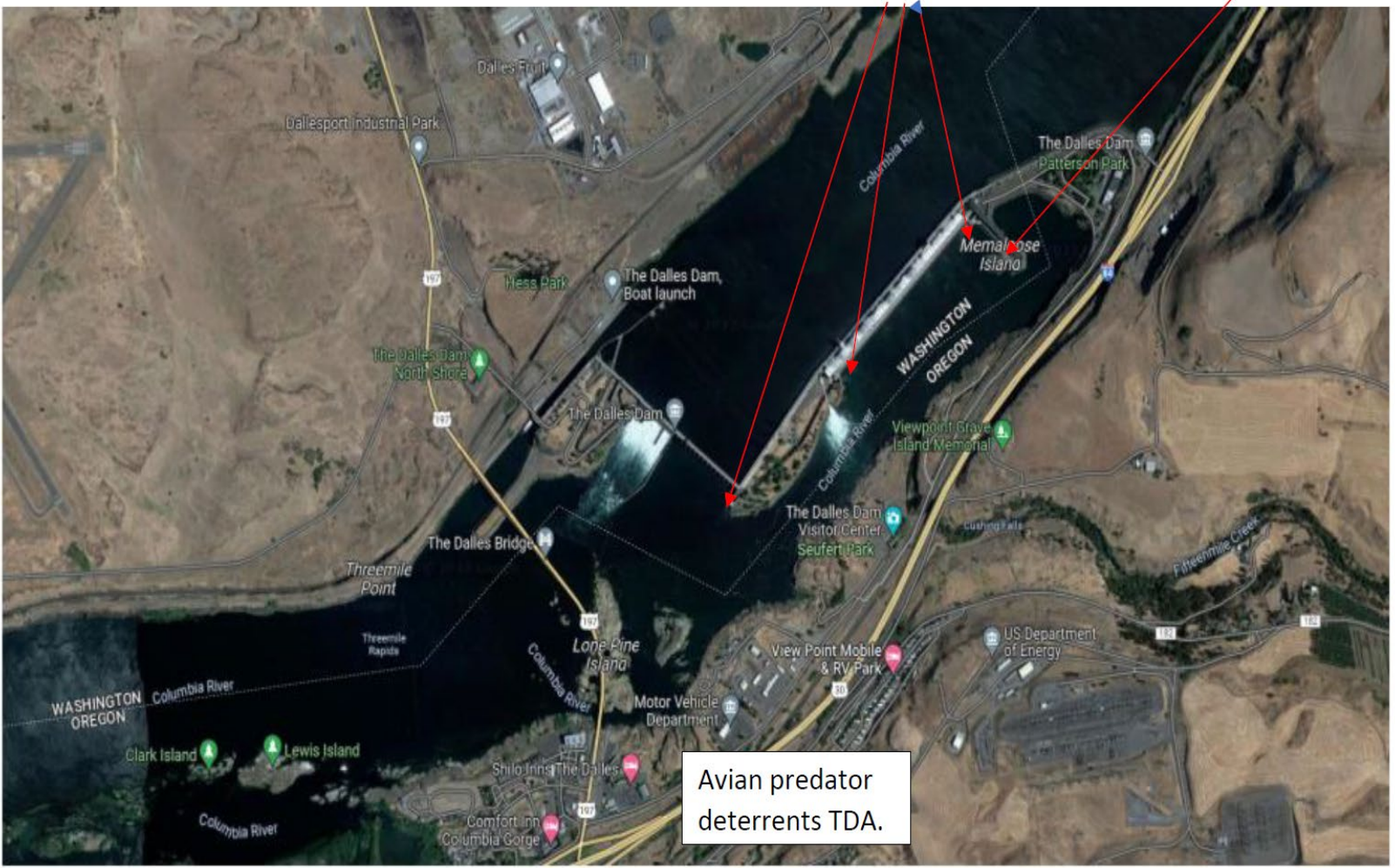
# Bird Count Zones, Avian Lines and Deterrent Sites

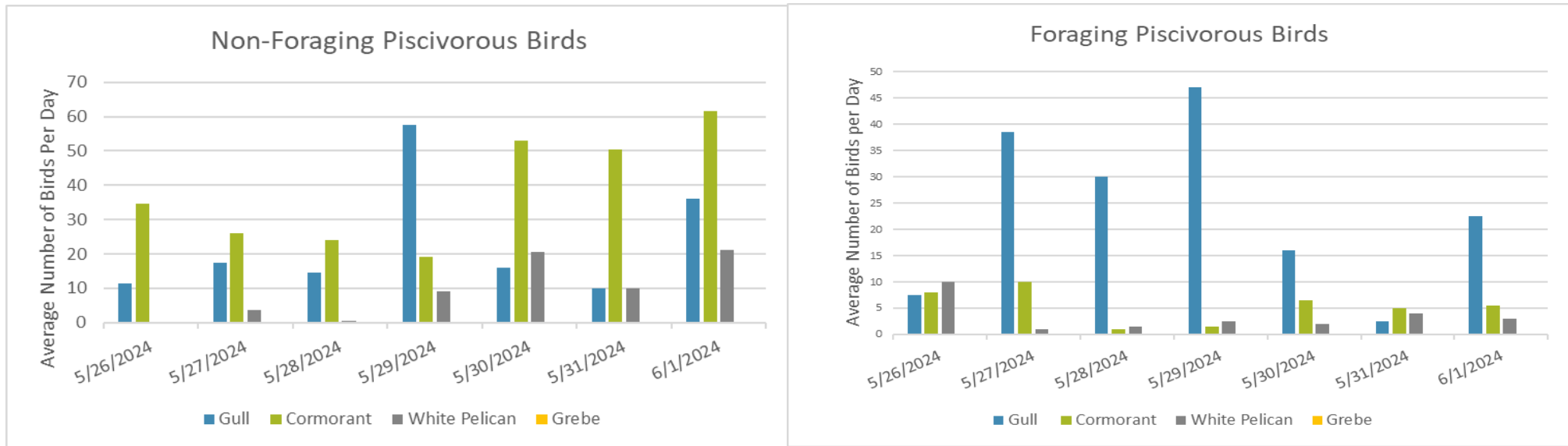


Avian predator tori lines and audio distress Bird Gard. 10/2023

Tori lines at East Ladder entrances.

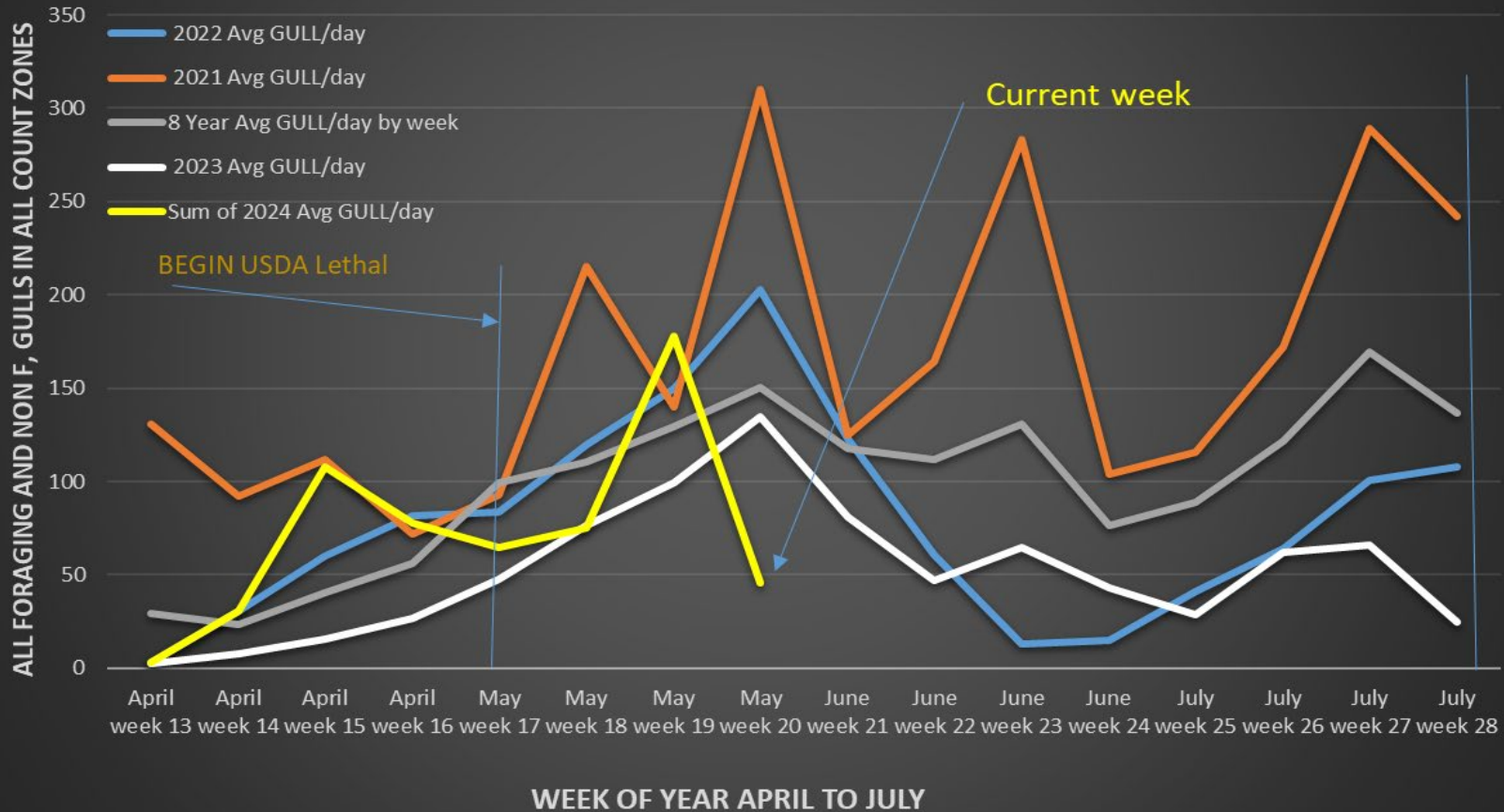
Bird Gard audio deterrent.





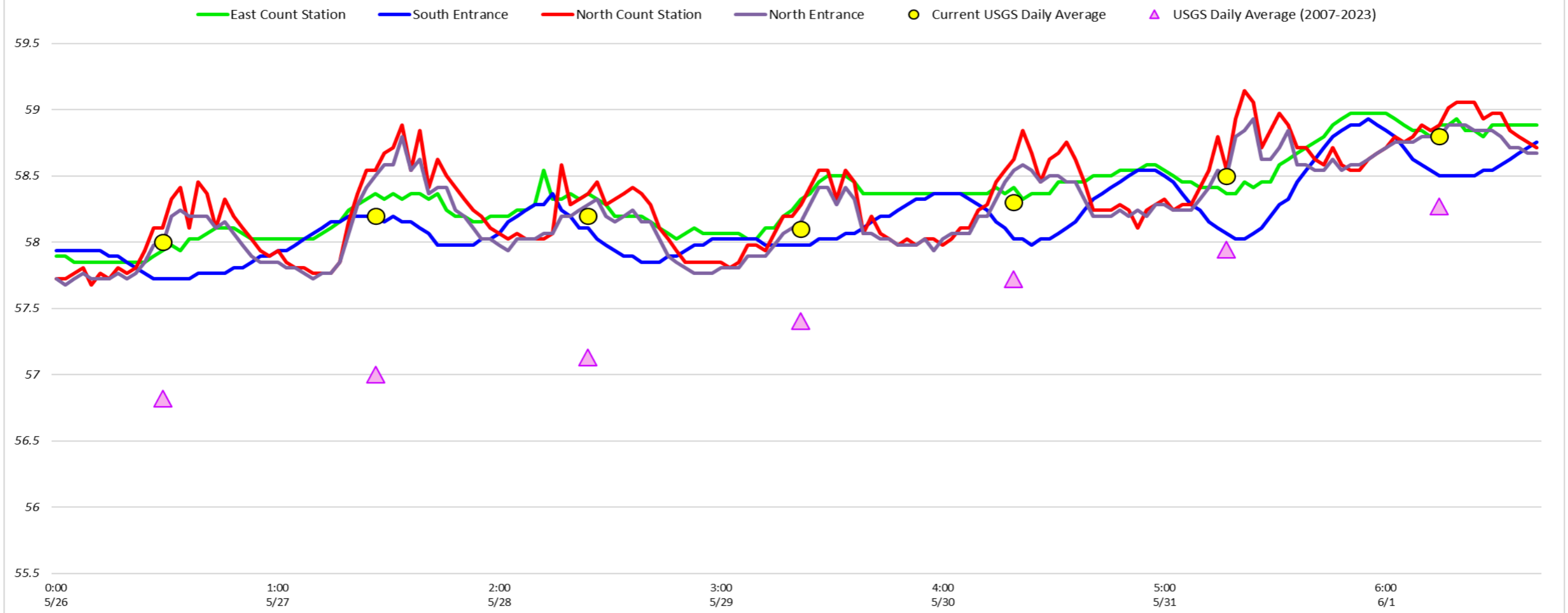
10 + lethal take of CAGU during late morning and early afternoon during this week.  
 Deterrents may reduce daytime feeding but may be increasing nighttime predation, which is presently unmonitored.  
 Nighttime monitoring under development, along with dialogue with ODOT to shield lights on 197 bridge.  
 4 cormorants were taken in SW4 in the last week. No visible impact on the numbers of DCCO in feeding areas or BPA towers.

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



Rising tailwater level, Lethal take-arrival of pelicans all pushing gulls out of foraging in count zones. Feeding aggressively under lines in SW3 .

### Adult Fish Ladders-River Temperatures



Secchi:		USGS
4.0	Sun	57.7
4.0	Mon	58.0
5.0	Tue	59.0
5.0	Wed	60.0
6.0	Thurs	58.3
5.0	Fri	59.0
5.0	Sat	60.0
4.9	AVG	58.9

## 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
5/19	1.4	11.2	1.6	3.8	11.5	11.6	10.8	1.4	10.7	10.7	-1.8	1.3	10.4	10.3
	1.2	10.9	1.6	3.8	11.5	11.6	10.8	1.5	10.2	10.2	-2.7	1.3	10.7	10.7
5/20	1.1	10.7	1.6	4.8	11.5	11.6	10.8	1.4	10.7	10.7	-1.8	1.3	10.4	10.3
	1.1	10.8	1.6	4.8	11.5	11.6	10.8	1.5	10.2	10.2	-2.7	1.3	10.7	10.7
5/21	1.3	10.6	1.5	5.5	11.4	11.5	11.5	1.4	10.6	10.6	-1.9	1.4	10.7	10.6
	1.3	10.5	1.5	5.3	11.4	11.5	11.3	1.5	10.5	10.5	-2.0	1.3	10.8	10.6
5/22	1.4	10.5	1.6	5.6	11.2	11.3	11.5	1.5	10.4	10.4	-2.0	1.4	10.6	10.5
	1.4	10.5	1.6	4.1	11.2	11.4	10.1	1.4	10.7	10.7	-1.9	1.2	10.9	10.7
5/23	1.4	10.5	1.4	5.2	11.5	11.7	11.1	1.3	10.6	10.7	-2.3	1.3	10.9	10.9
	1.2	10.3	1.5	5.5	11.4	11.5	11.4	1.3	10.8	10.7	-2.1	1.3	10.7	10.6
5/24	1.4	10.6	1.5	6.3	11.3	11.4	12.2	1.5	10.4	10.4	-1.3	1.2	11.1	11.2
	1.2	10.7	1.4	6.6	11.4	11.5	12.6	1.3	10.8	10.8	-0.9	1.4	10.8	10.5
5/25	1.3	10.9	1.5	6.3	11.1	11.2	12.2	1.5	10.2	10.2	-1.2	1.2	11.0	10.9
	1.1	10.7	1.6	6.0	11.1	11.2	12.0	1.5	10.2	10.2	-1.5	1.3	11.2	10.9
<b>AVG:</b>	<b>1.3</b>	<b>10.7</b>	<b>1.5</b>	<b>5.2</b>	<b>11.4</b>	<b>11.5</b>	<b>11.4</b>	<b>1.4</b>	<b>10.5</b>	<b>10.5</b>	<b>-1.9</b>	<b>1.3</b>	<b>10.8</b>	<b>10.7</b>

*Fishways inspected twice daily*



A White sturgeon in the Transportation Channel of the East Fish Ladder, near the Junction Pool. The left image includes some adult American Shad for size reference. These shad average 17-24 inches in length.