

# The Dalles Dam Fishway Status Report

5/12/24

Inspection Period 5/5 - 5/11, 2024

## THE DALLES DAM



US Army Corps  
of Engineers  
Portland District

The Dalles Project-Fisheries  
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<b>The Dalles Dam</b>	<b>Inspections OOC</b>	<b>Criteria Limit</b>	<b>Total Number of Inspections:</b> 14		<b>Temperature:</b> 53.7
			<b>Comments:</b> Fishways in full operation		<b>Weekly Ave. Secchi:</b> 4.4

### 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	10.5	
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.3	
N2		Closed			
PUD Intake differential	6	≤ 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	10.0	
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	11.0	
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.0	
East channel velocity	0	1.5 - 4 fps	3.49 fps 5/1/24		
Transportation channel velocity	0	1.5 - 4 fps	4.41 fps 5/1/24		
North channel velocity	0	1.5 - 4 fps	2.52 fps 4/13/24		
South entrance velocity	0	1.5 - 4 fps	4.16 fps 5/11/24		
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	10.4	
Entrance weir W3	0	No criteria	Weekly average	-3.5	
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	10.3	

### 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	5/2/24 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 5/11/2024		

## Current Outages

MU11 OOS 3/25/24 0630 – 5/30/24 1700 – Annual and Thrust Bearing Oil Cooler  
MU19 & MU20 Forced-OOS 10/07/2018 1205 – 10/31/2025 1700 T10 ACETYLENE

## Maintenance

Calibrations performed on 5/02, 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. Planning operation start mid May pending OM manual.  
DC lower guide bearing pump replaced on FU1

## Predators

No recent otter sign or sea lion sightings. Pelicans showed up in small numbers, feeding in SW4.  
Bird Gard sound system installed on BPA towers 3/14. Sound system turned off to encourage raven raids on nest areas.  
Tori lines installed at east, west and south. Mobile Bird Gard operating at peninsula in SW4. Gull effigies covered due to falconry.  
DCCO on BPA towers greatly reduced and easily flushed from nests (37). Gulls predominately juvenile plumage in am. Adult plumage in afternoon.  
Falconry started 27 April focused on DCCO on BPA towers. RC boat lost to the river.  
Osprey spending significant time feeding in spill water and nesting.

## Researchers

USGS temperature link- [May](#)  
4 Peaks fish count Resumed 4/1  
Many new stomachs from gulls taken. Most were juvenile plumage and males. Begin take fish GI/Stomach contents.  
USDA continue lethal gull take in SW4, mostly morning and mid day. DCCO do not present opportunities for take.  
WDFW Dam Angling begin 30 April 2024

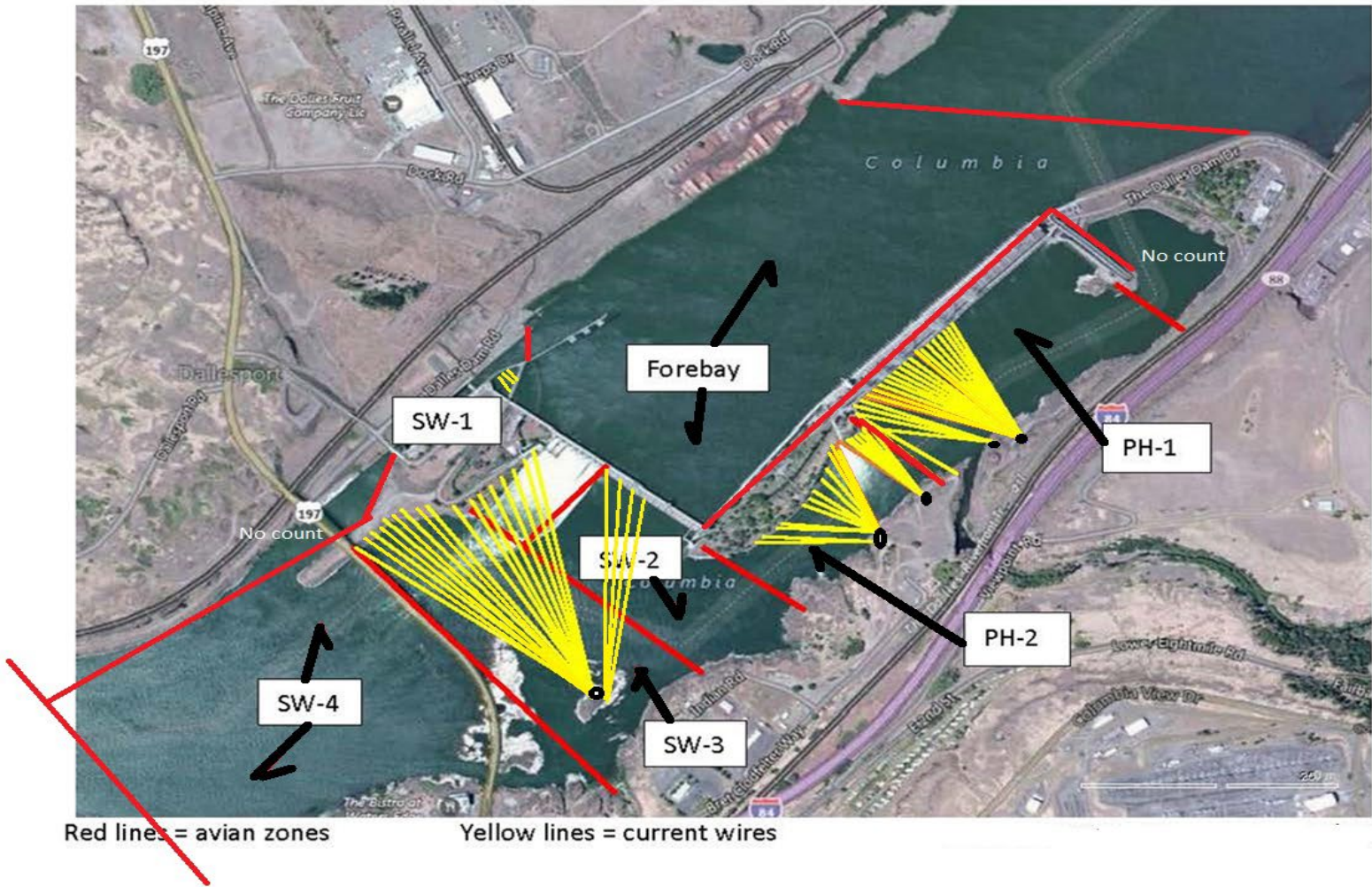
## Operations

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

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



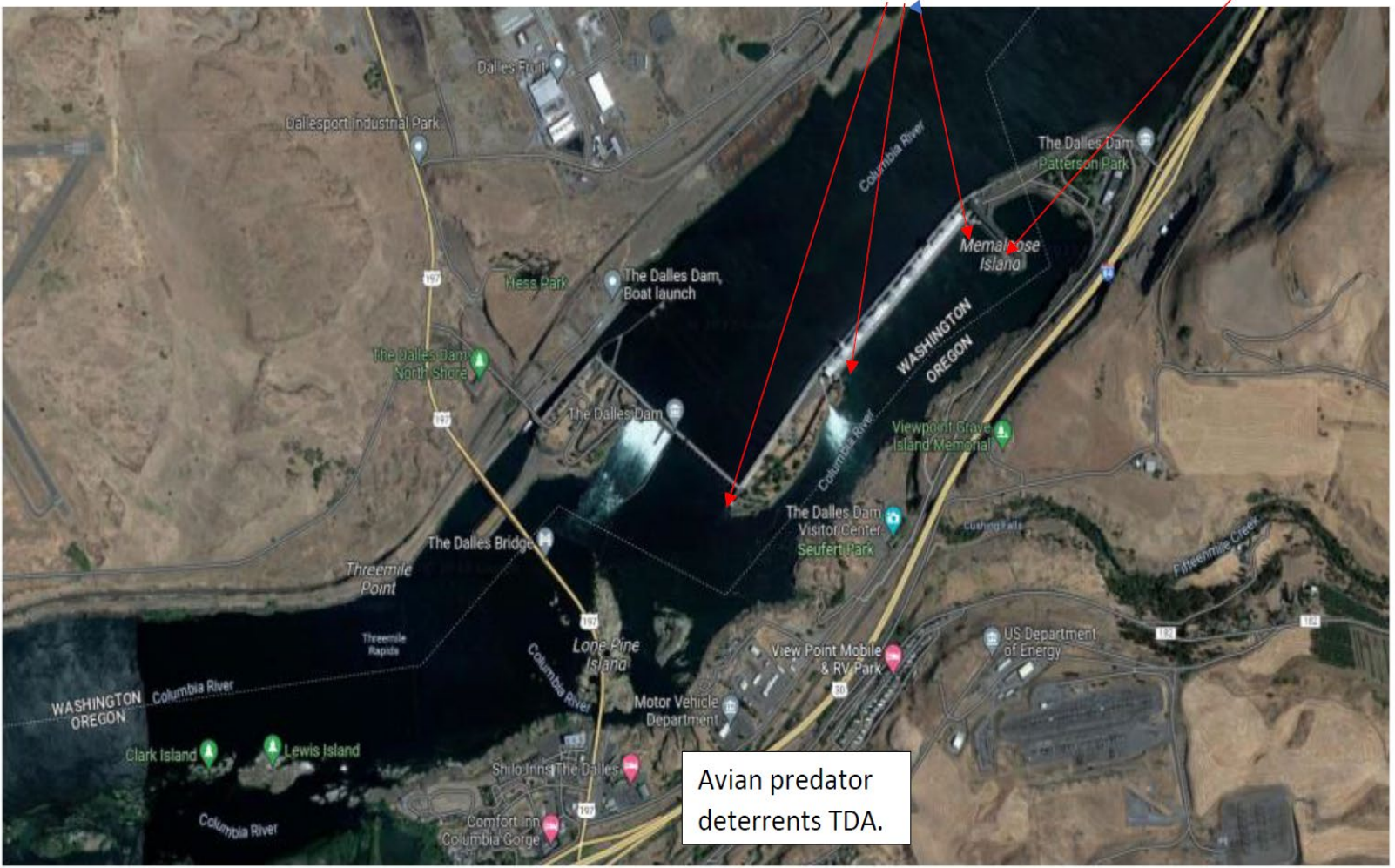
# Bird Count Zones, Avian Lines and Deterrent Sites



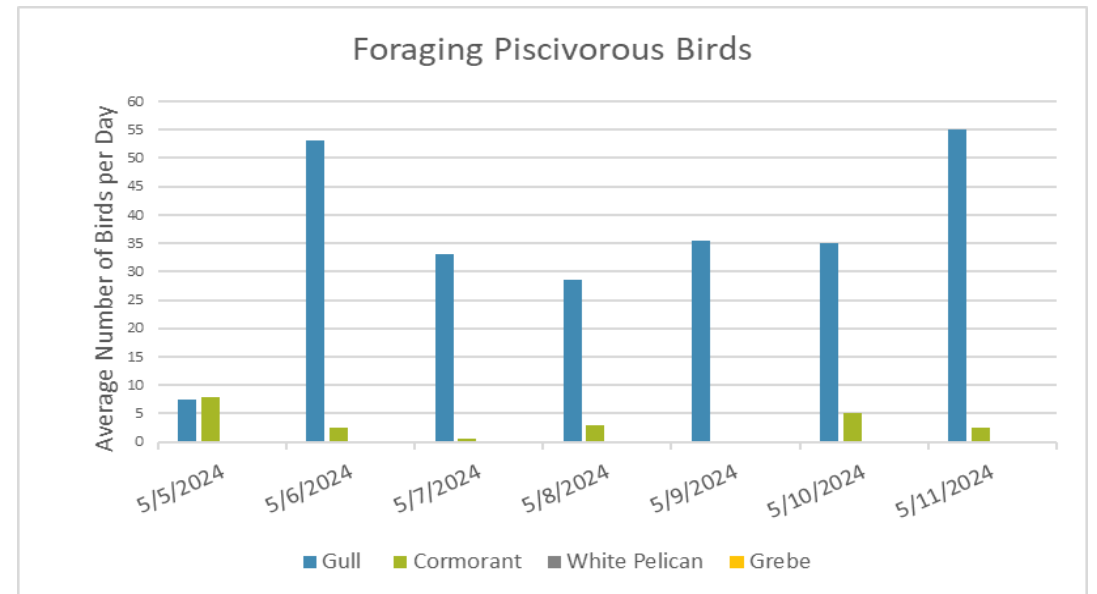
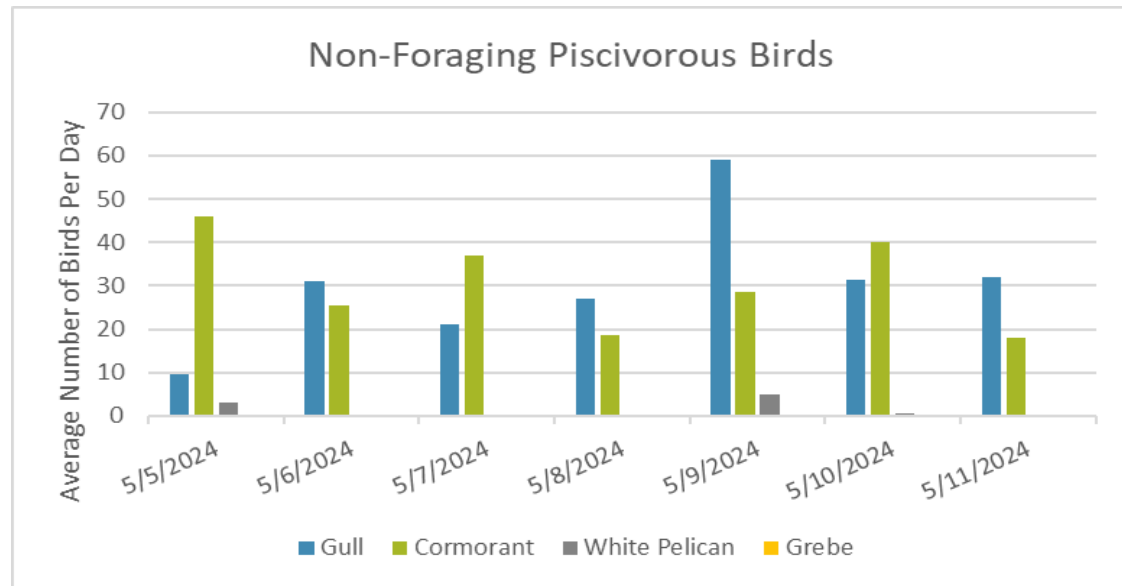
Avian predator tori lines and audio distress Bird Gard. 10/2023

Tori lines at East Ladder entrances.

Bird Gard audio deterrent.

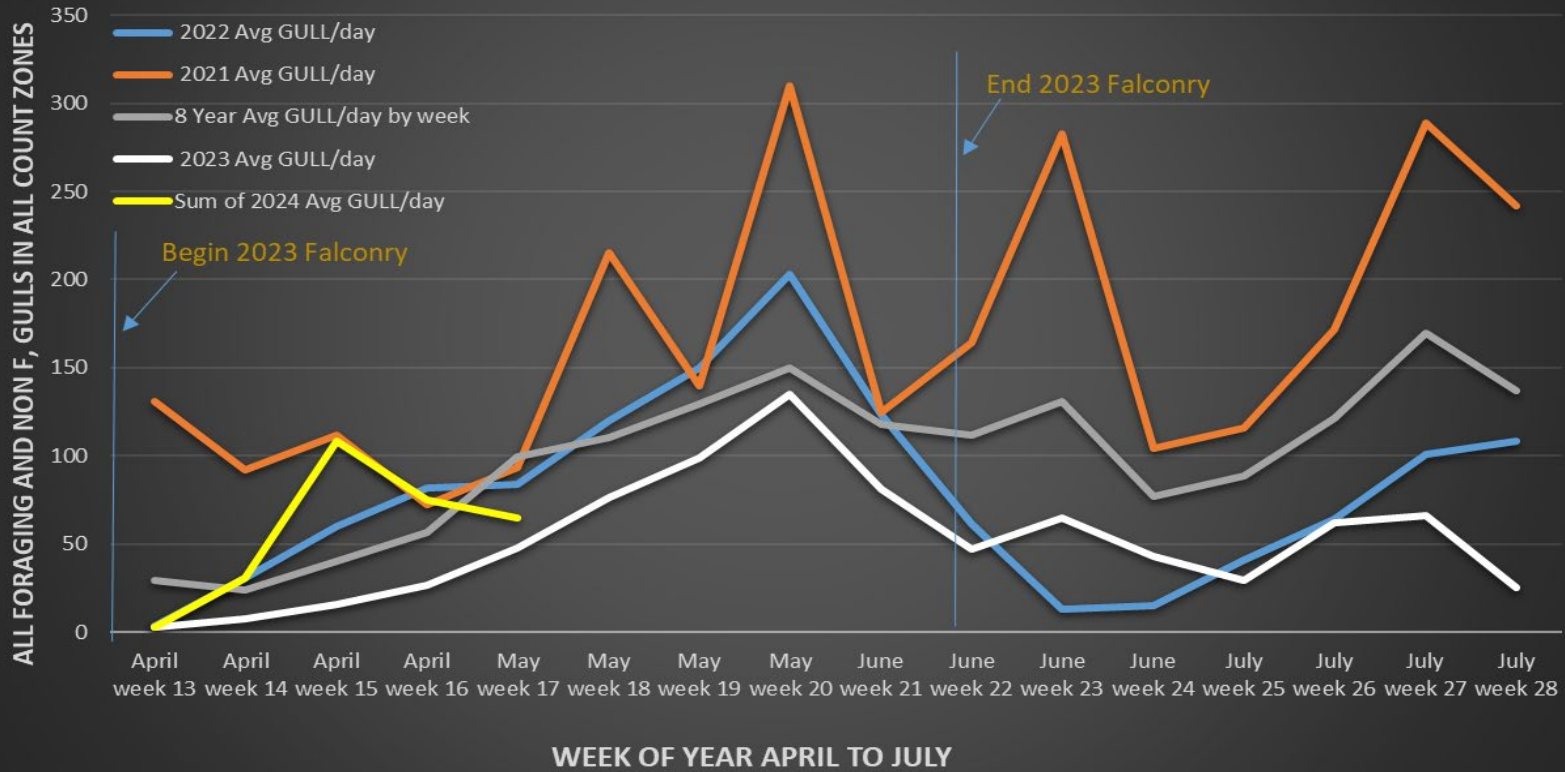






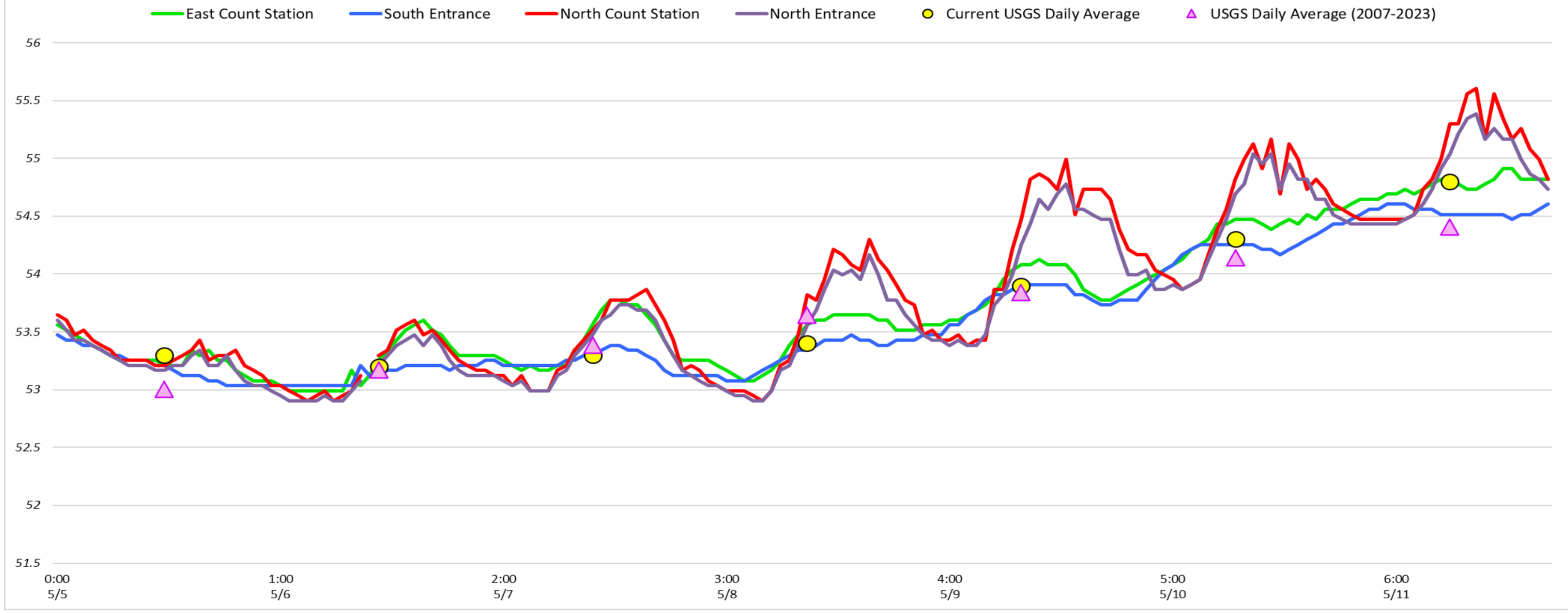
Bird numbers are generally recorded prior to first boat pyro and after last boat pyro to reflect numbers of predators outside of pyro. Pyro boat work is very effective at reducing gull numbers while deployed but gulls return rapidly after boat work ends about 1330 hrs. Cormorant foraging is greatly reduced while efforts to deter nesting have succeeded.

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



Weekly average number of total gulls driven below 8 year average by aggressive lethal take and falconry abatement.

Adult Fish Ladders-River Temperatures



Secchi:		USGS
4.0	Sun	53.3
4.0	Mon	53.2
4.5	Tue	53.3
5.0	Wed	53.4
5.0	Thurs	53.9
4.0	Fri	54.3
4.0	Sat	54.8
4.4	AVG	53.7

## 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
5/5	1.3	10.5	1.5	5.0	11.2	11.2	10.0	1.3	10.6	10.8	-3.4	1.4	10.4	10.5
	1.3	10.6	1.6	4.7	10.9	10.9	9.7	1.4	10.3	10.5	-3.7	1.4	10.1	9.3
5/6	1.3	10.4	1.5	4.7	10.9	11.0	9.7	1.4	10.4	10.5	-3.7	1.3	10.5	10.4
	1.1	10.7	1.5	4.1	11.0	11.1	9.1	1.5	9.8	10.0	-4.2	1.2	10.8	9.7
5/7	1.3	10.6	1.5	5.1	11.4	11.4	10.1	1.3	10.6	10.7	-3.3	1.3	10.6	10.7
	1.1	10.4	1.5	4.5	11.0	11.1	9.5	1.5	9.9	10.1	-3.9	1.3	10.3	10.3
5/8	1.4	10.4	1.5	5.3	11.1	11.1	10.3	1.3	10.8	10.9	-3.1	1.3	10.7	10.7
	1.2	10.4	1.6	4.7	10.9	11.0	9.8	1.5	9.9	10.0	-3.7	1.3	10.5	10.3
5/9	1.4	10.4	1.4	5.6	11.4	11.4	10.5	1.3	10.5	10.7	-2.9	1.3	10.4	10.5
	1.2	10.4	1.6	3.9	10.8	11.0	8.9	1.4	9.7	9.9	-4.4	1.3	10.3	9.9
5/10	1.3	10.6	1.5	5.8	11.0	11.1	10.8	1.4	10.4	10.6	-2.6	1.3	10.7	10.5
	1.4	10.6	1.5	5.3	11.0	11.1	10.4	1.4	10.1	10.2	-3.1	1.3	10.7	10.4
5/11	1.2	10.6	1.5	5.5	11.0	11.1	10.5	1.4	10.2	10.4	-3.1	1.3	10.7	10.2
	1.3	10.4	1.5	5.3	10.8	10.9	10.3	1.4	10.1	10.1	-3.2	1.2	11.0	10.6
<b>AVG:</b>	<b>1.3</b>	<b>10.5</b>	<b>1.5</b>	<b>5.0</b>	<b>11.0</b>	<b>11.1</b>	<b>10.0</b>	<b>1.4</b>	<b>10.2</b>	<b>10.4</b>	<b>-3.5</b>	<b>1.3</b>	<b>10.5</b>	<b>10.3</b>

*Fishways inspected twice daily*



5/11 Out-migrating juvenile Salmonids in a gatewell