

The Dalles Dam Fishway Status Report

7/7/24

Inspection Period 6/30 - 7/6, 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: 66.9 |
| | | | Comments: Fishways in full operation | | Weekly Ave. Secchi: 4.3 |

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 | 1.2 | |
| N2 | | Closed | | | |
| PUD Intake differential | 4 | ≤ 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 | 11.1 | |
| East entrance differential | 0 | 1.0' - 2.0' | Weekly average | 1.5 | |
| Entrance weir E1 | 0 | No criteria | Weekly average | 5.1 | |
| 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 | 2.60 fps 6/21 | | |
| Transportation channel velocity | 0 | 1.5 - 4 fps | 3.70 fps 6/22 | | |
| North channel velocity | 0 | 1.5 - 4 fps | 2.95 fps 6/22 | | |
| South entrance velocity | 0 | 1.5 - 4 fps | 3.94 fps 6/21 | | |
| 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 | -2.4 | |
| South entrance differential | 0 | 1.0' - 2.0' | Weekly average | 1.4 | |
| Entrance weir S1 | 0 | depth (≥ 8') | Weekly average | 10.3 | |
| 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 | 6/12/24 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 6/22/2024 | | |

Current Outages

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

MU13 OOS 7/8/24 0630 – 7/11/24 1700 Annual

MU19 & MU20 FOOS 10/07/2018 1205 – 10/31/2025 1700 T10 ACETYLENE

Maintenance

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. Operation began 5/16.

DC lower guide bearing pump replaced on FU1

Predators

Tori lines installed at east, west and south. Mobile Bird Gard operating in PH1.

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. ~250 CAGU taken of 400 permitted. 16 DCCO taken on permit, limit 30.

Researchers

USGS temperature link-

15 new stomachs from gulls taken. Most were adult plumage CAGU and males. 9 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. 3 DCCO taken this past week.

WDFW-BPA funded pikeminnow removal program commenced 30 April 2024

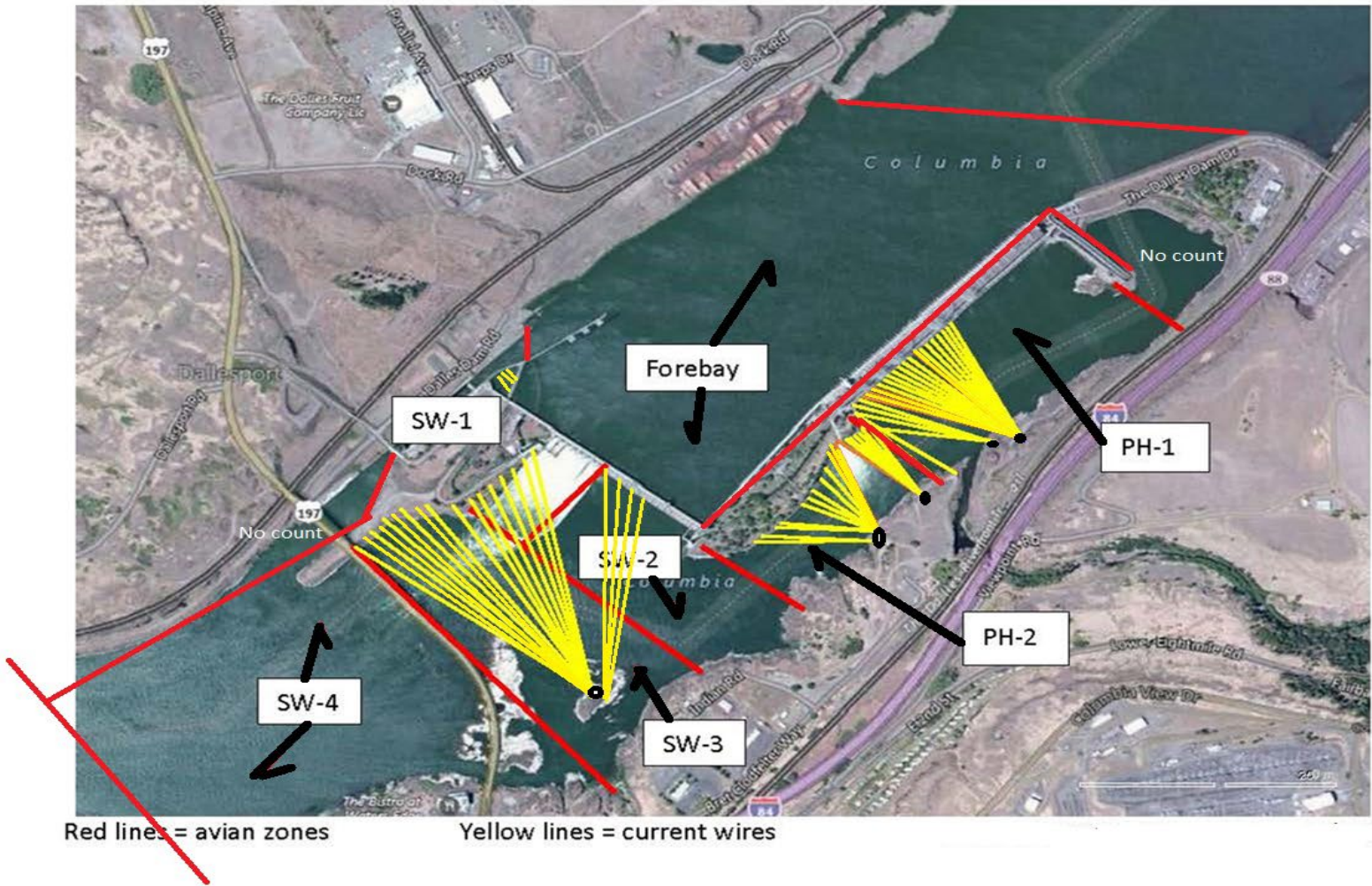
Operations

fish ladders in full operation.

Spillway in operation bays 1-8

LPS out of service

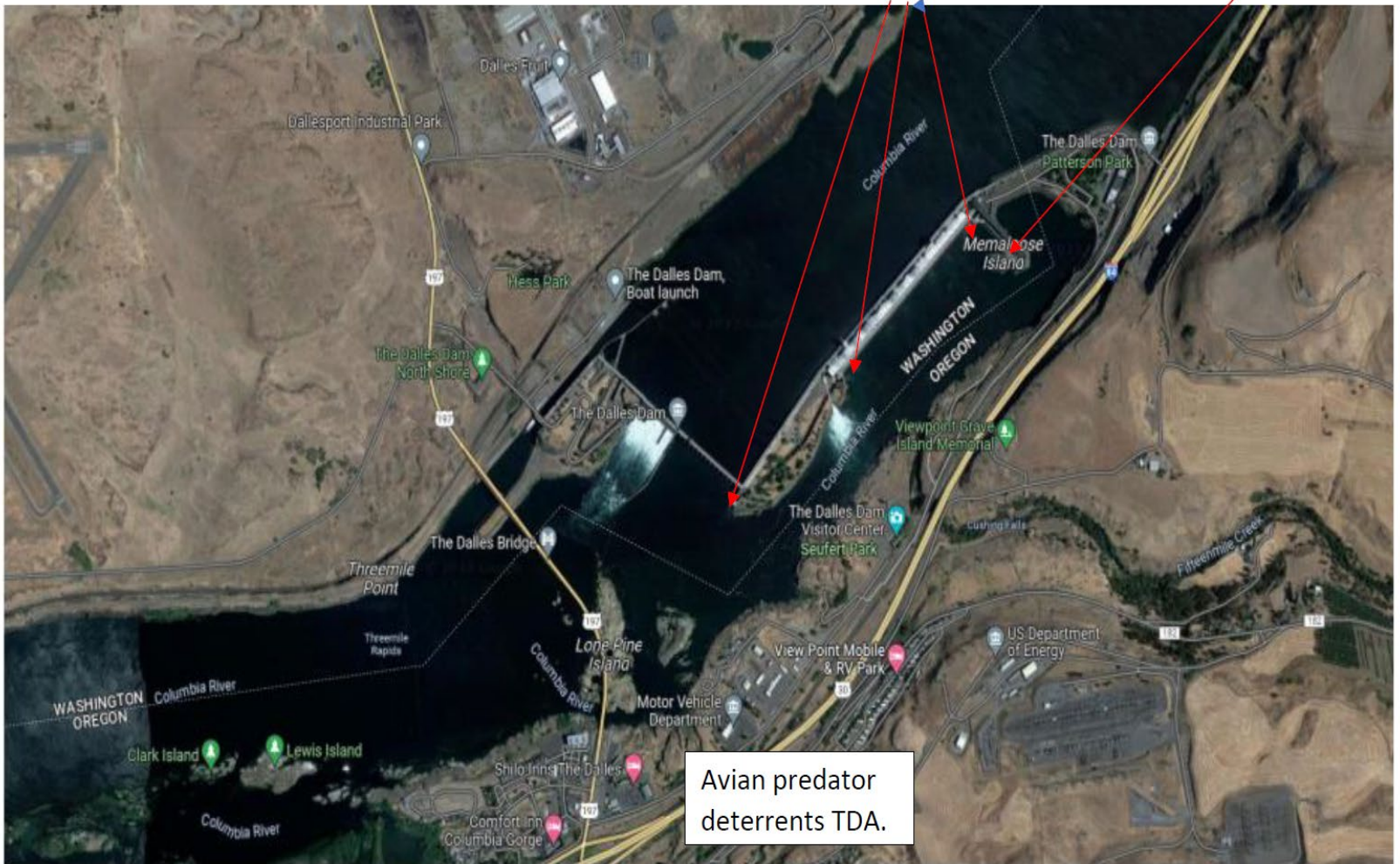
Bird Count Zones, Avian Lines and Deterrent Sites

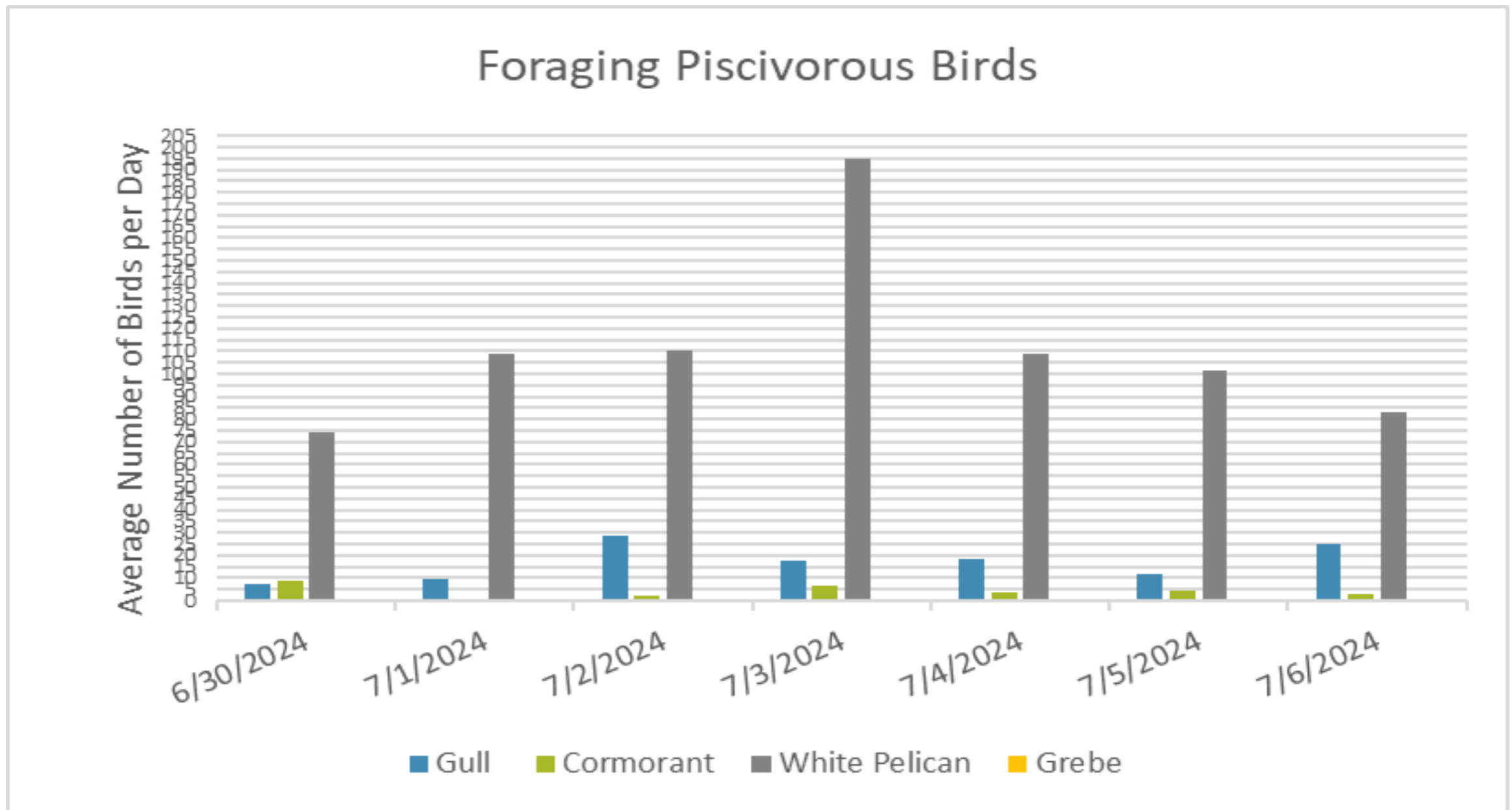


Avian predator tori lines and audio distress Bird Gard. 10/2023

Tori lines at East Ladder entrances.

Bird Gard audio deterrent.

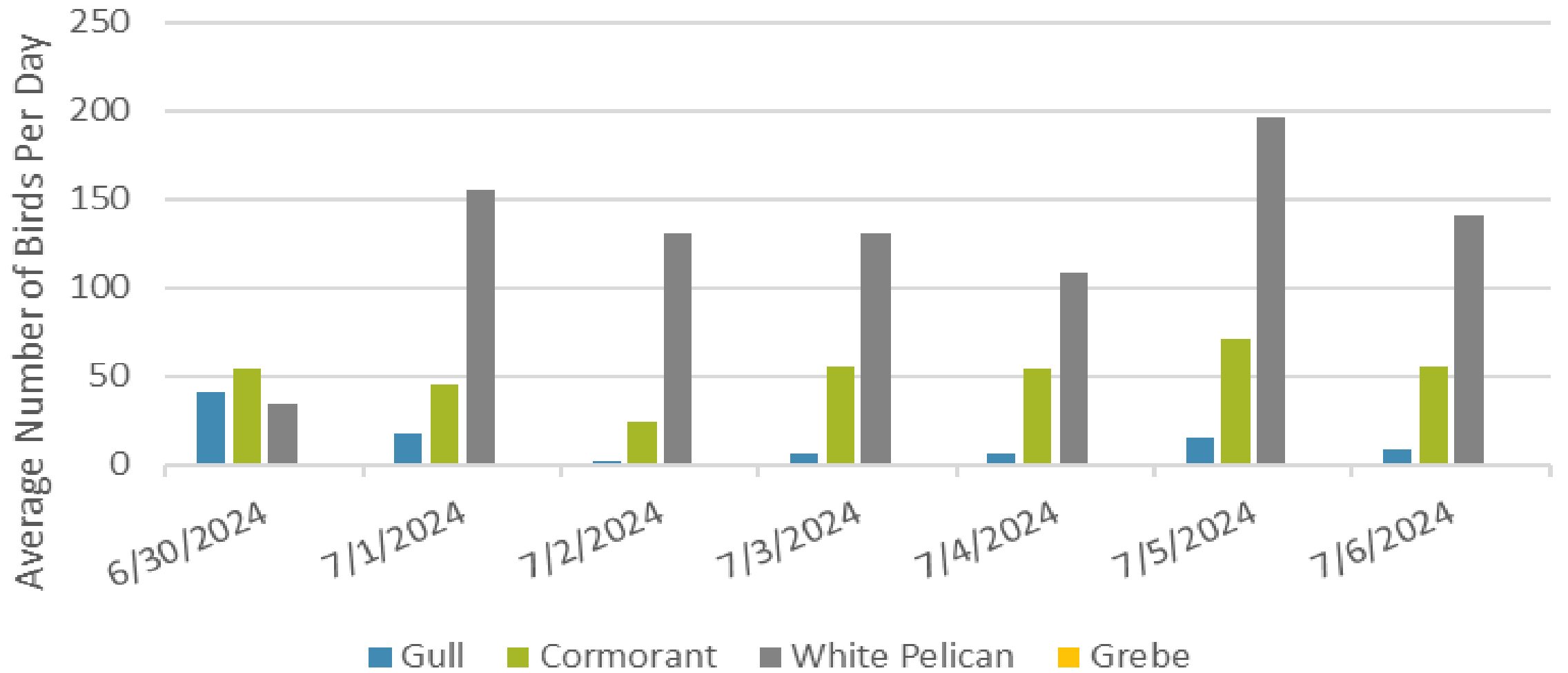




Pelicans displacing gulls in all ways in particular the prime zones 3 & 4

Some evening observations being performed to monitor night time foraging. Results inconclusive.

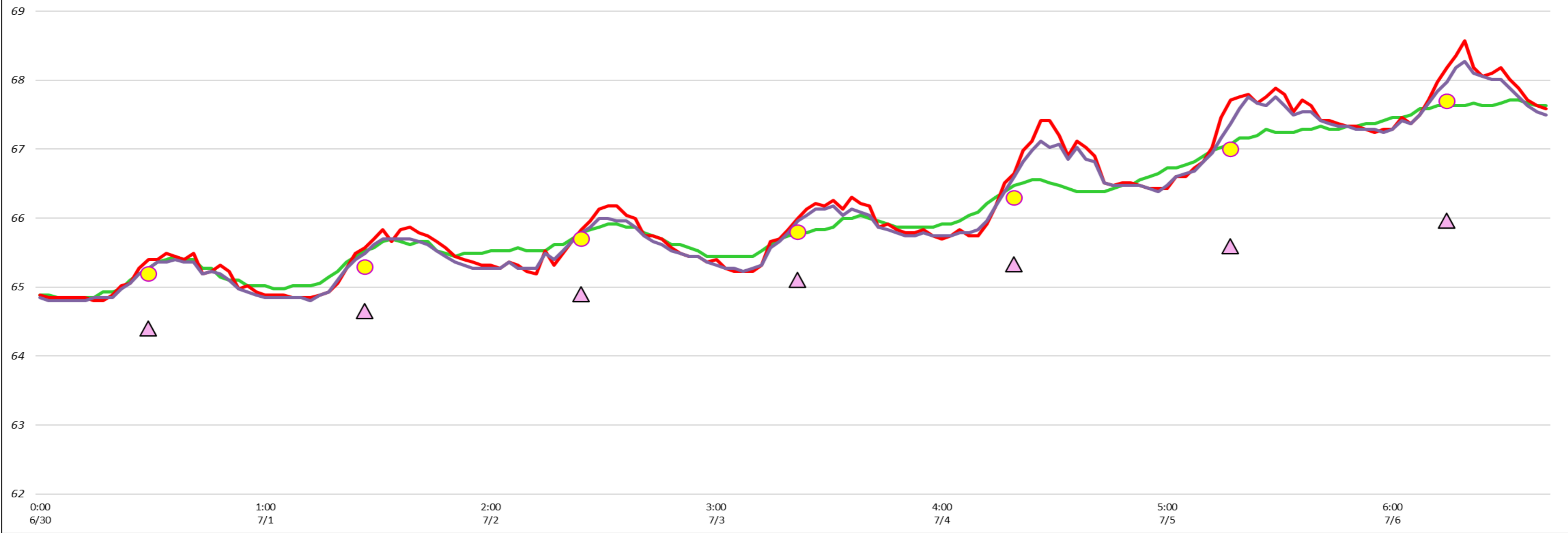
Non-Foraging Piscivorous Birds



Gulls still loafing west of count zones 200+

Adult Fish Ladders-River Temperatures

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

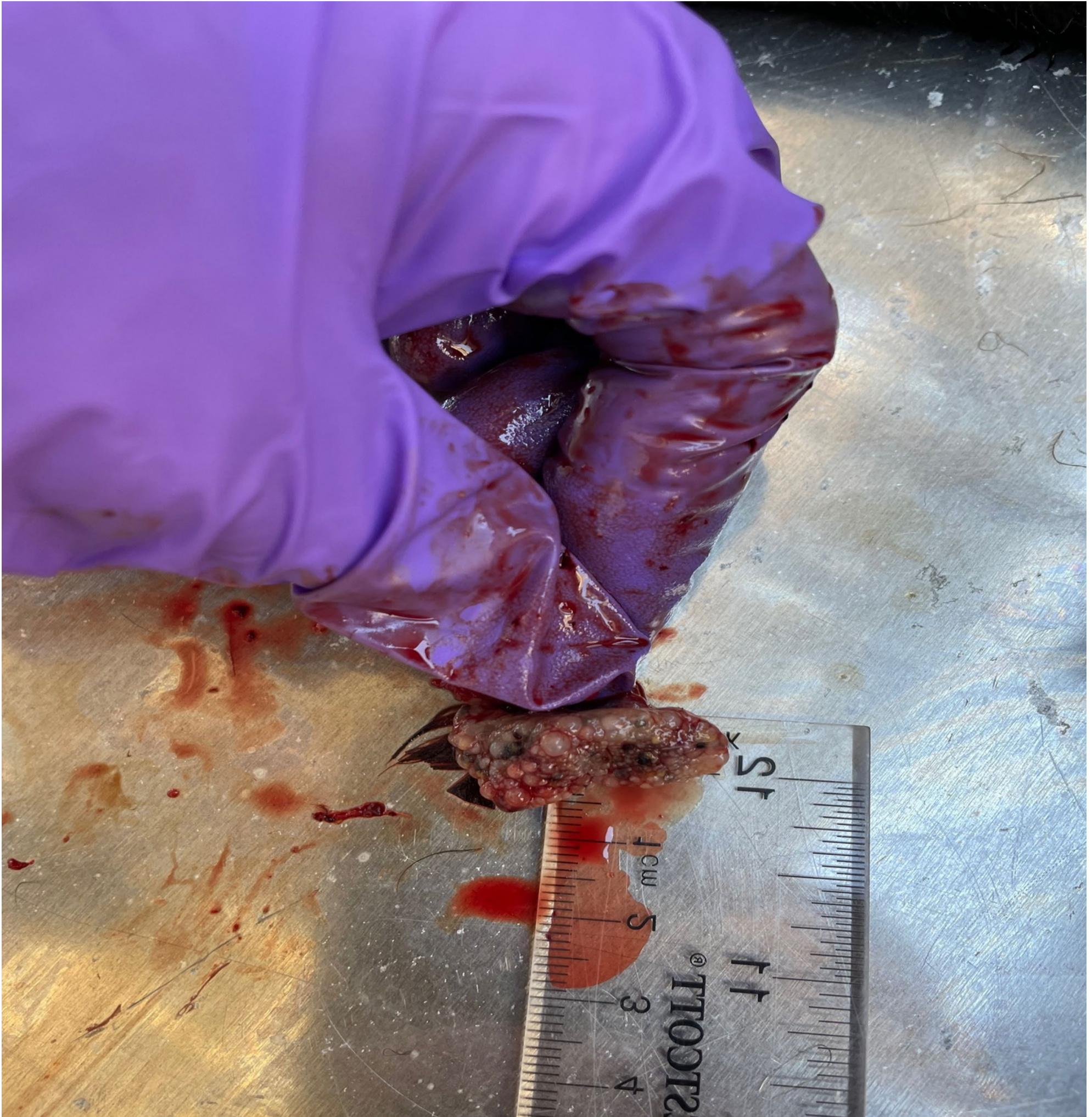


| Secchi: | | USGS |
|---------|-------|------|
| 5.0 | Sun | 65.7 |
| 5.0 | Mon | 65.8 |
| 4.5 | Tue | 66.3 |
| 4.0 | Wed | 67.0 |
| 4.0 | Thurs | 67.7 |
| 3.4 | Fri | 68.0 |
| 4.0 | Sat | 68.0 |
| 4.3 | AVG | 66.9 |

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 |
| 6/30 | 1.2 | 10.6 | 1.5 | 3.9 | 10.9 | 11.7 | 9.9 | 1.4 | 10.1 | 9.6 | -3.5 | 1.3 | 10.2 | 10.4 |
| | 1.2 | 10.5 | 1.6 | 3.8 | 10.8 | 11.6 | 9.8 | 1.4 | 10.1 | 10.1 | -3.5 | 1.4 | 10.1 | 10.2 |
| 7/1 | 1.2 | 10.6 | 1.4 | 4.7 | 11.3 | 12.0 | 10.7 | 1.3 | 10.7 | 10.7 | -2.7 | 1.3 | 10.2 | 10.4 |
| | 1.2 | 10.7 | 1.5 | 5.3 | 11.2 | 11.9 | 11.3 | 1.3 | 10.6 | 10.6 | -2.1 | 1.3 | 10.4 | 10.5 |
| 7/2 | 1.2 | 10.6 | 1.6 | 4.8 | 11.0 | 11.7 | 10.8 | 1.4 | 10.3 | 10.4 | -2.6 | 1.3 | 10.5 | 10.7 |
| | 1.3 | 10.4 | 1.5 | 4.7 | 11.1 | 11.9 | 10.7 | 1.4 | 10.2 | 10.2 | -2.7 | 1.3 | 10.5 | 10.6 |
| 7/3 | 1.3 | 10.6 | 1.5 | 4.8 | 11.1 | 11.8 | 10.8 | 1.3 | 10.7 | 10.7 | -2.5 | 1.2 | 10.6 | 10.7 |
| | 1.2 | 10.3 | 1.4 | 5.2 | 10.4 | 11.1 | 11.2 | 1.3 | 10.7 | 10.7 | -2.3 | 1.2 | 10.6 | 10.8 |
| 7/4 | 1.2 | 10.6 | 1.5 | 4.4 | 10.9 | 11.8 | 10.4 | 1.5 | 10.1 | 10.1 | -3.1 | 3.3 | 10.3 | 10.7 |
| | 1.3 | 10.3 | 1.4 | 5.4 | 11.2 | 12.0 | 11.4 | 1.3 | 10.8 | 10.8 | -1.9 | 1.3 | 10.5 | 10.5 |
| 7/5 | 1.2 | 10.5 | 1.4 | 5.5 | 11.1 | 12.0 | 11.5 | 1.3 | 10.5 | 10.5 | -2.4 | 1.3 | 10.5 | 10.5 |
| | 1.1 | 10.5 | 1.3 | 6.9 | 11.7 | 11.6 | 12.9 | 1.3 | 11.2 | 11.1 | -0.6 | 1.2 | 10.6 | 10.8 |
| 7/6 | 1.2 | 10.6 | 1.6 | 5.1 | 11.2 | 11.2 | 11.1 | 1.5 | 10.2 | 10.1 | -2.3 | 1.3 | 10.5 | 10.6 |
| | 1.2 | 10.5 | 1.3 | 6.9 | 11.5 | 11.3 | 12.9 | 1.3 | 11.2 | 11.1 | -0.6 | 1.2 | 9.1 | 9.0 |
| AVG: | 1.2 | 10.5 | 1.5 | 5.1 | 11.1 | 11.7 | 11.1 | 1.4 | 10.5 | 10.5 | -2.4 | 1.4 | 10.3 | 10.4 |

Fishways inspected twice daily



Cormorant ovum taken from female 7/2 Many more eggs than a typical female CAGU
1 of 3 DCCO taken recently w/15 total YTD
14 PIT tags recovered out of 220 birds sampled YTD ~250 CAGU taken -no RBGU