

The Dalles Dam Fishway Status Report

7/28/24

Inspection Period 7/20 - 7/27, 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: | #DIV/0! |
| | | | Comments: Fishways in full operation | | Weekly Ave. Secchi: 5.1 | |

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 | | 10.1 | |
| 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 | | 9.8 | |
| East entrance differential | 0 | 1.0' - 2.0' | Weekly average | | 1.5 | |
| Entrance weir E1 | 0 | No criteria | Weekly average | | 3.7 | |
| Entrance weir E2 | 0 | depth (≥ 8') | Weekly average | | 10.9 | |
| Entrance weir E3 | 0 | depth (≥ 8') | Weekly average | | 10.9 | |
| 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 | | 10.0 | |
| Entrance weir W2 | 0 | depth (≥ 8') | Weekly average | | 10.2 | |
| 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 | | 10.2 | |
| Entrance weir S2 | 0 | depth (≥ 8') | Weekly average | | 10.1 | |

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 | 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 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. Maximum roughly 300.
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. ~350 CAGU taken of 400 permitted. 19 DCCO taken on permit, limit 30.

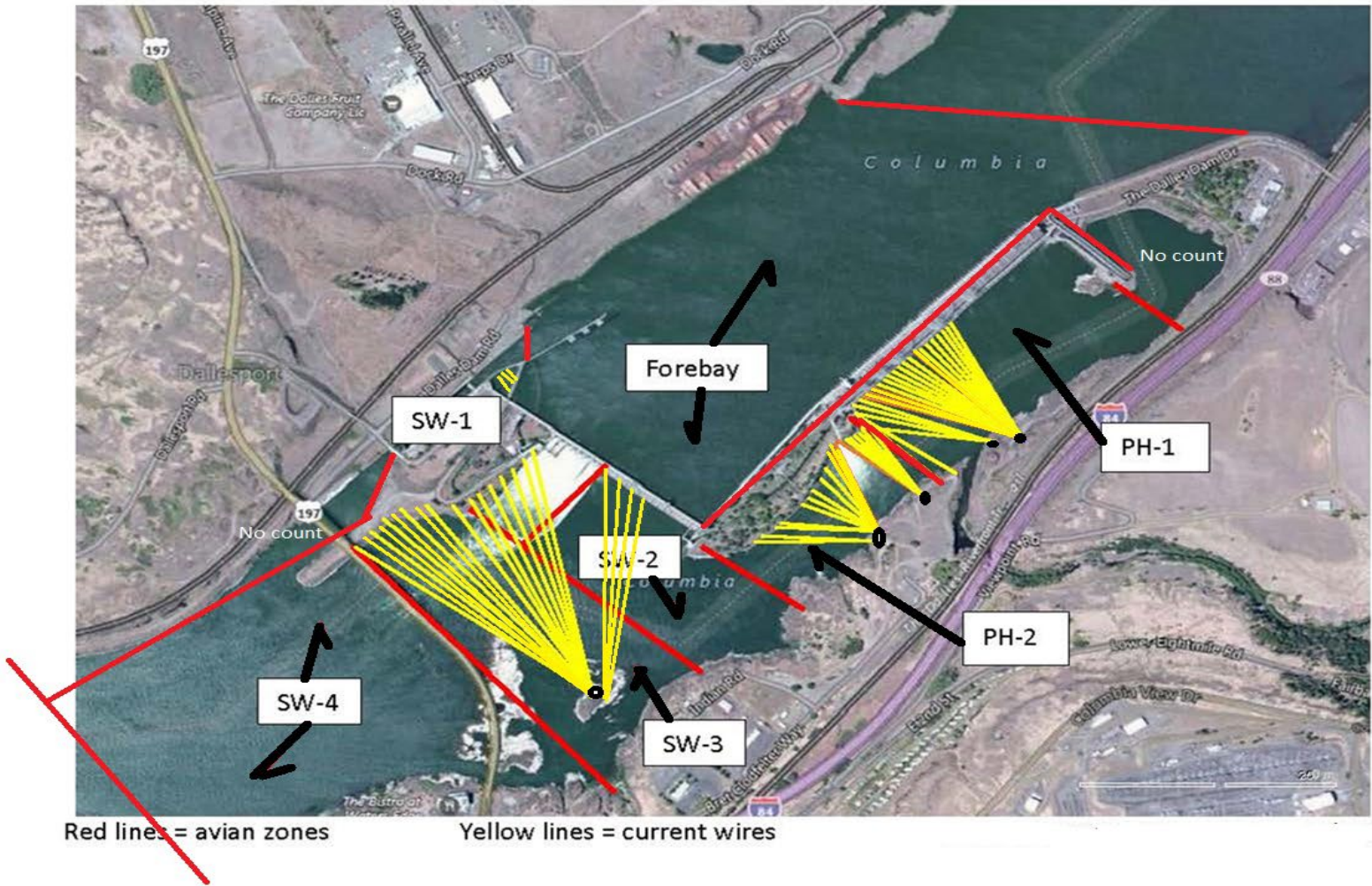
Researchers

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%

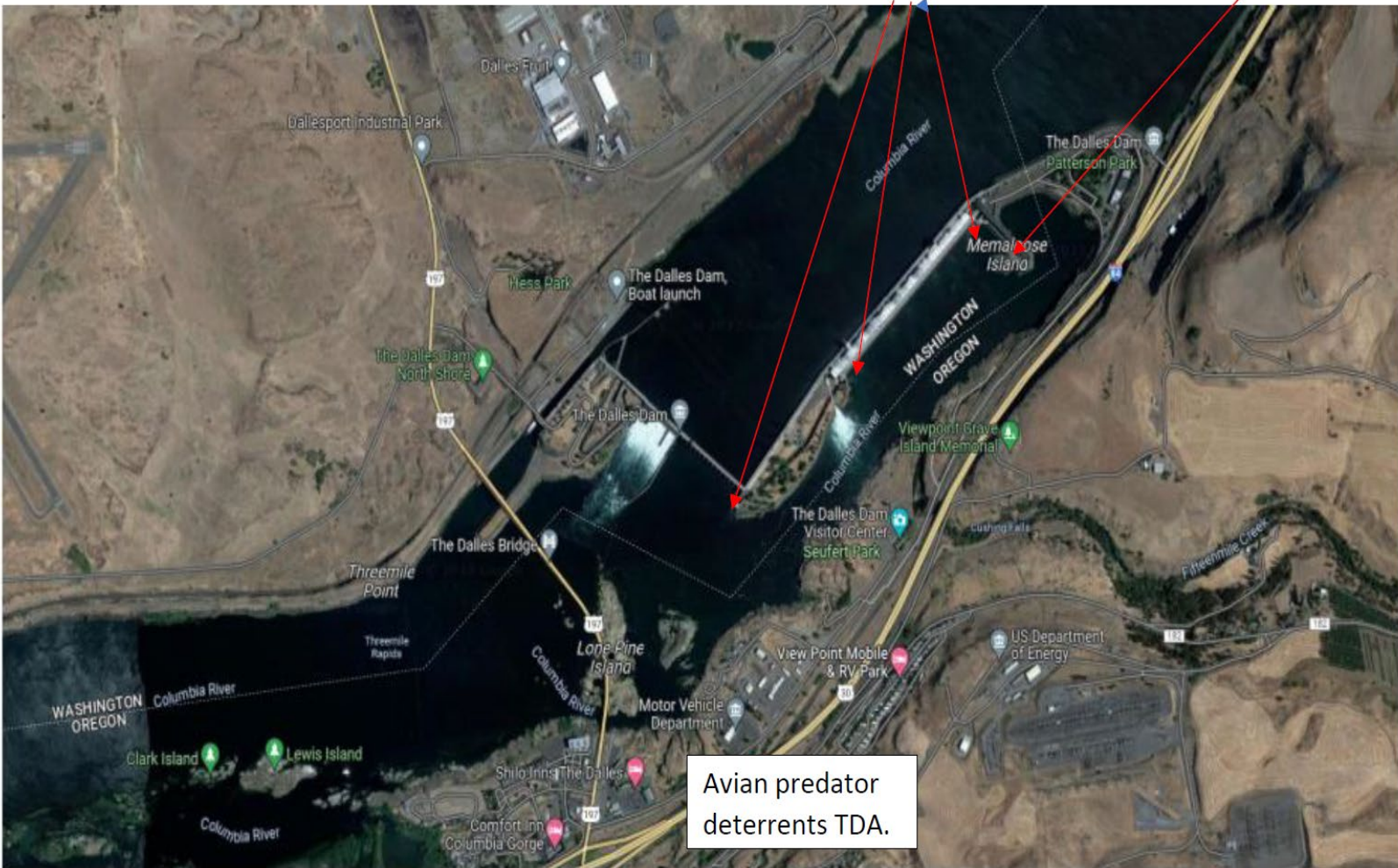
Bird Count Zones, Avian Lines and Deterrent Sites

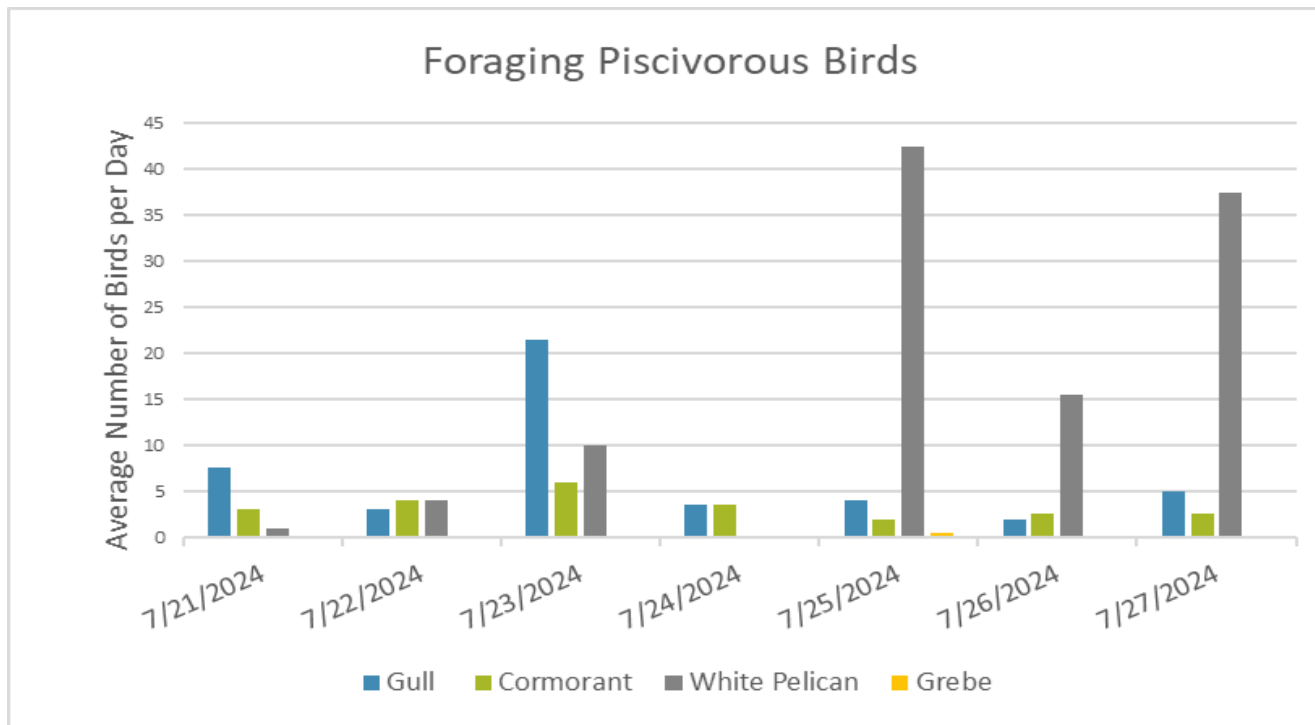


Avian predator tori lines and audio distress Bird Gard. 10/2023

Tori lines at East Ladder entrances.

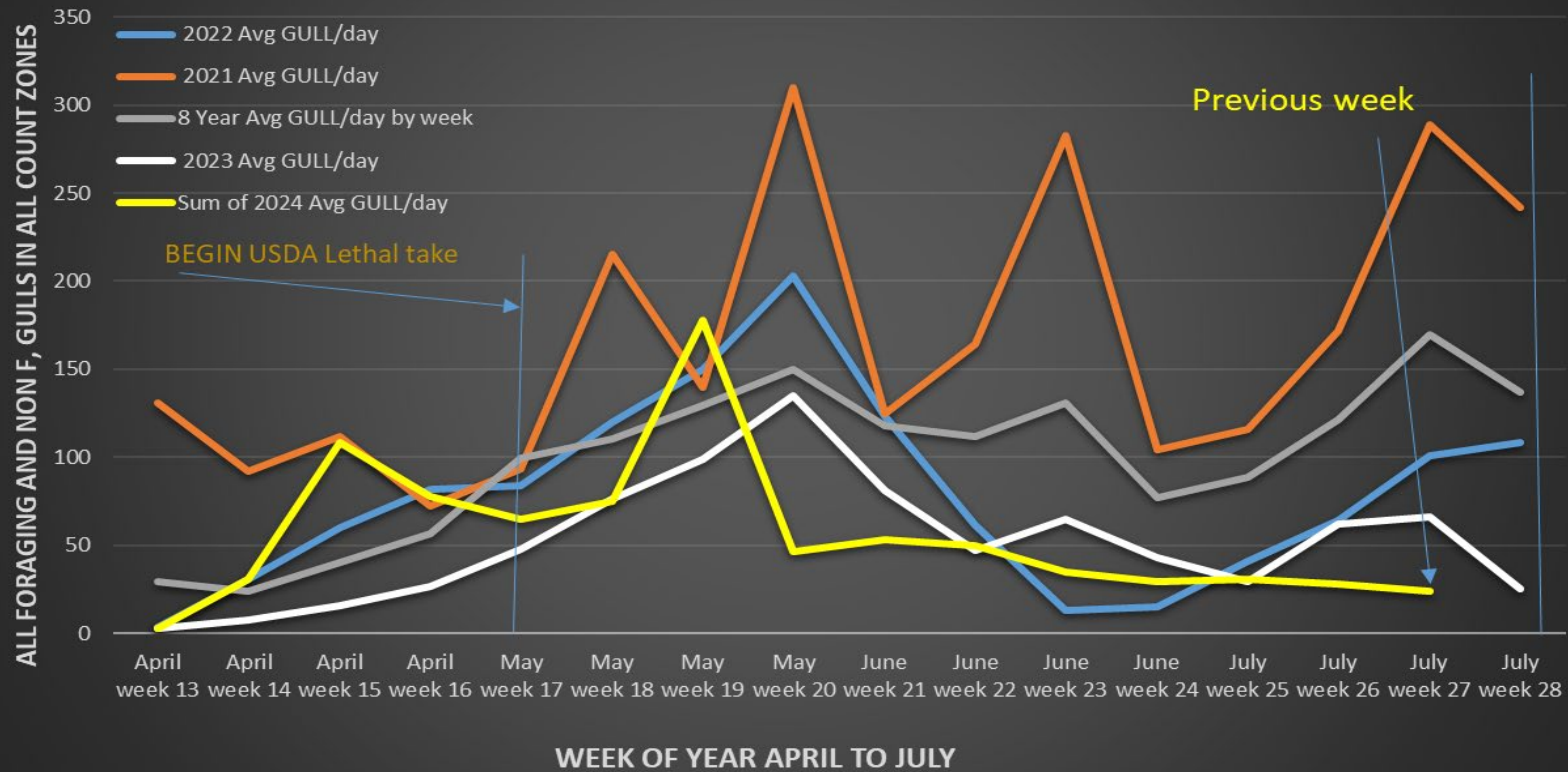
Bird Gard audio deterrent.



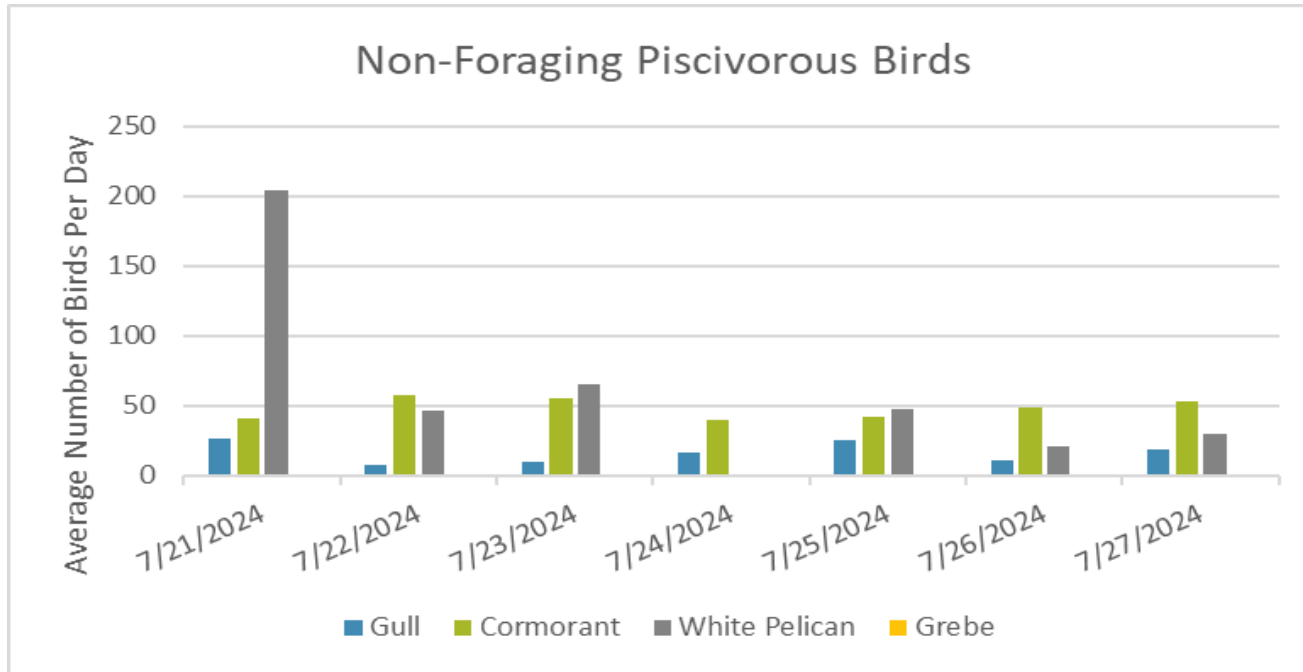


High numbers of pelicans result from evening counts after 1800hr.

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



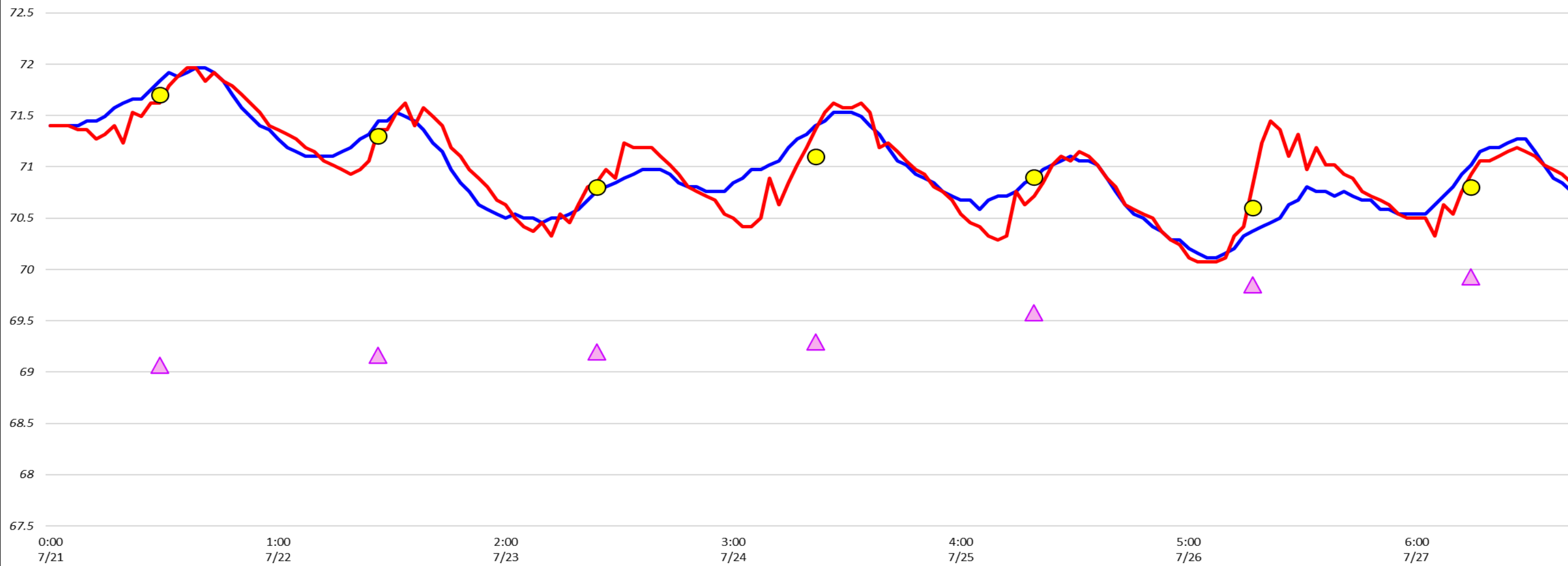
Lethal take does seem to be reducing the total number of gulls on project compared to previous years at this time.



Total number of ~300 pelicans feeding in high numbers from 1800 hr to 2200 hours in SW\$

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 | |
| 5.0 | Mon | |
| 5.0 | Tue | |
| 5.0 | Wed | |
| 5.0 | Thurs | |
| 5.0 | Fri | |
| 6.0 | Sat | |
| 5.1 | AVG | #DIV/0! |

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 | 1.1 | 10.3 | 1.6 | 4.1 | 11.1 | 11.9 | 10.1 | 1.5 | 10.0 | 10.1 | -3.2 | 1.4 | 10.0 | 10.1 |
| | 1.1 | 10.4 | 1.5 | 3.8 | 10.7 | 12.1 | 9.8 | 1.5 | 10.0 | 10.1 | -3.6 | 1.3 | 10.0 | 10.1 |
| 7/22 | 1.1 | 10.4 | 1.6 | 3.6 | 10.6 | 12.0 | 9.6 | 1.5 | 9.9 | 10.0 | -3.7 | 1.4 | 9.9 | 9.9 |
| | 1.4 | 10.0 | 1.5 | 5.2 | 10.9 | 12.3 | 11.2 | 1.3 | 10.8 | 10.9 | -2.2 | 1.4 | 10.6 | 10.6 |
| 7/23 | 1.3 | 10.1 | 1.6 | 3.4 | 10.6 | 11.0 | 9.4 | 1.5 | 9.9 | 10.1 | -3.9 | 1.4 | 9.9 | 10.2 |
| | 1.2 | 10.1 | 1.5 | 3.6 | 10.5 | 12.0 | 9.6 | 1.4 | 10.3 | 10.4 | -3.7 | 1.3 | 10.5 | 10.4 |
| 7/24 | 1.3 | 10.1 | 1.6 | 3.5 | 10.6 | 12.1 | 9.5 | 1.5 | 9.8 | 10.0 | -3.8 | 1.3 | 10.1 | 10.2 |
| | 1.3 | 10.1 | 1.4 | 4.5 | 10.8 | 12.3 | 10.5 | 1.3 | 10.7 | 10.8 | -2.9 | 1.3 | 10.5 | 10.4 |
| 7/25 | 1.2 | 10.2 | 1.6 | 3.1 | 11.1 | 11.1 | 11.0 | 1.5 | 9.6 | 9.9 | -2.2 | 1.5 | 10.5 | 9.1 |
| | 1.2 | 10.1 | 1.4 | 2.8 | 10.7 | 11.8 | 8.8 | 1.5 | 9.7 | 10.0 | -4.6 | 1.4 | 9.8 | 9.8 |
| 7/26 | 1.2 | 10.1 | 1.6 | 2.7 | 11.0 | 11.0 | 8.7 | 1.5 | 9.5 | 9.6 | -4.6 | 1.4 | 9.8 | 9.8 |
| | 1.3 | 10.1 | 1.4 | 2.7 | 11.3 | 11.2 | 8.7 | 1.4 | 9.7 | 9.8 | -4.6 | 1.2 | 10.4 | 10.3 |
| 7/27 | 1.2 | 10.3 | 1.5 | 3.8 | 11.3 | 11.2 | 9.8 | 1.4 | 9.7 | 9.9 | -3.5 | 1.4 | 10.1 | 10.1 |
| | 1.1 | 9.4 | 1.5 | 5.2 | 11.6 | 11.4 | 11.2 | 1.4 | 10.6 | 10.7 | -2.2 | 1.3 | 10.9 | 10.9 |
| AVG: | 1.2 | 10.1 | 1.5 | 3.7 | 10.9 | 11.7 | 9.8 | 1.4 | 10.0 | 10.2 | -3.5 | 1.3 | 10.2 | 10.1 |

Fishways inspected twice daily



Pelicans in 3 mile creek 7/27

eDNA samples collected for Cramer Fish sciences.