

The Dalles Dam Fishway Status Report

5/5/24

Inspection Period 4/27 - 5/4, 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: 53.4 |
| | | | Comments: Fishways in full operation | | Weekly Ave. Secchi: 4.7 |

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 1.4 |
| N2 | | Closed | |
| PUD Intake differential | 5 | ≤ 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 10.3 |
| East entrance differential | 0 | 1.0' - 2.0' | Weekly average 1.5 |
| Entrance weir E1 | 0 | No criteria | Weekly average 4.3 |
| Entrance weir E2 | 0 | depth (≥ 8') | Weekly average 11.3 |
| Entrance weir E3 | 0 | depth (≥ 8') | Weekly average 11.3 |
| East channel velocity | 0 | 1.5 - 4 fps | 4.21 fps 4/20/24 |
| Transportation channel velocity | 0 | 1.5 - 4 fps | 3.47 fps 4/15/24 |
| North channel velocity | 0 | 1.5 - 4 fps | 2.52 fps 4/13/24 |
| South entrance velocity | 0 | 1.5 - 4 fps | 4.02 fps 4/20/24 |
| 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 -3.1 |
| 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 open while MU18 is OOS. Endgate open. |
| Turbine trashrack drawdown | 0 | <1.5', biweekly | 4/11/24 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 due to MU18 OOS. RTS 4/25/24 |
| Gatewells | 0 | Weekly | Chinook fry, yearling Chinook, and Steelhead in gatewells as of 4/20/24 |

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. Set to cycling on this week during 24 hours a day for cormorants.
Tori lines installed at east, west and south. Mobile Bird Gard operating at peninsula in SW4. Gull effigies in use to deter predators.
Some eagles on project. DCCO on BPA towers greatly reduced and easily flushed from nests (48). Gulls predominately juvenile plumage.
Falconry started 27 April focused on DCCO on BPA towers. RC boat performed well at pushing feeding gulls west from feeding hotspot.
Osprey spending significant time feeding in spill water and nesting.

Researchers

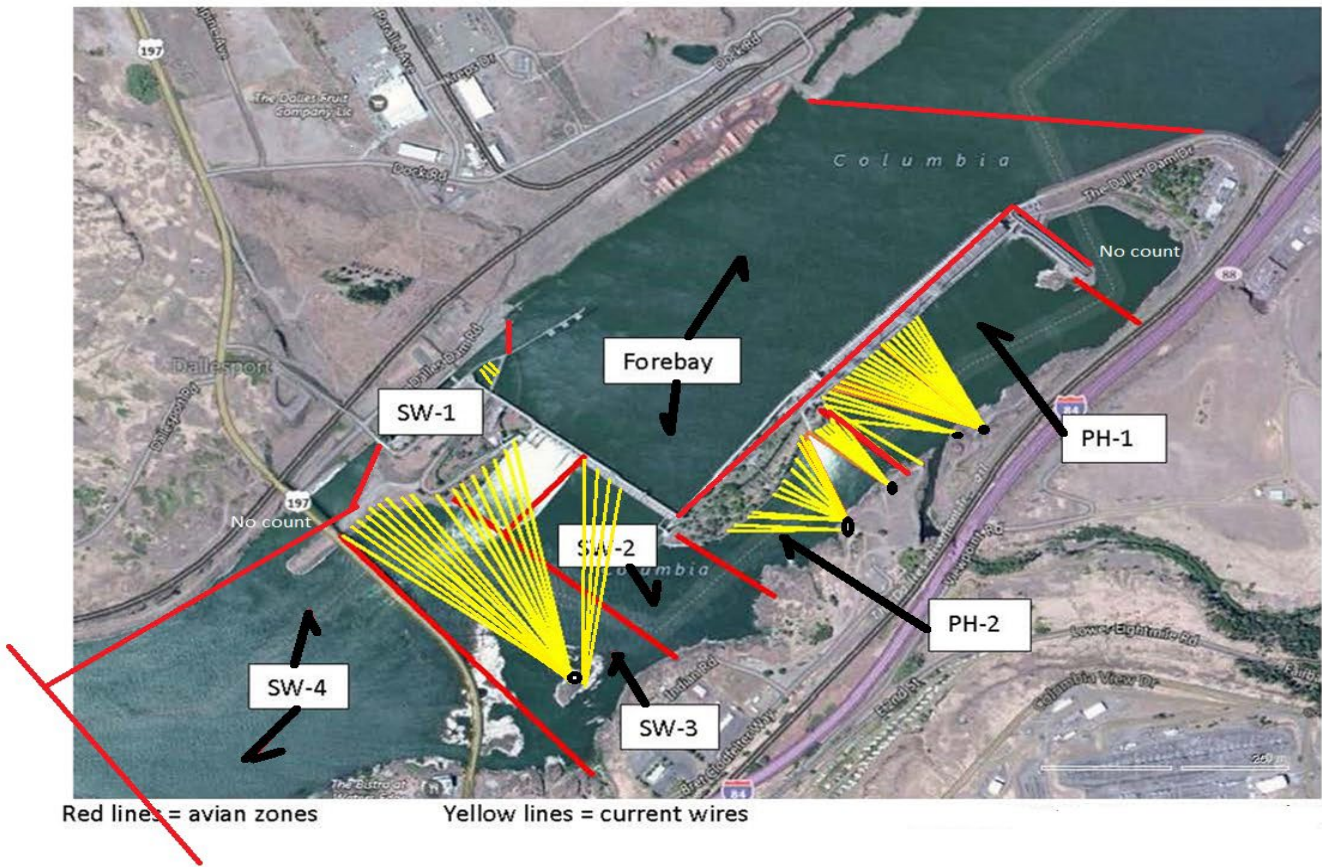
USGS temperature link- [April](#)
4 Peaks fish count Resumed 4/1
No new stomachs from gull taken. Preparations made to take fish GI/Stomach contents.
USDA began lethal gull again and took one juvenile CAGU. DCCO take on hold.
WDFW Dam Angling begin 30 April 2024

Operations

Both fishladders in full operation.
Spillway opened 4/10 40%
EFL AWS Backup opened 3 hours on 29 April

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

Bird Count Zones, Avian Lines and Deterrent Sites

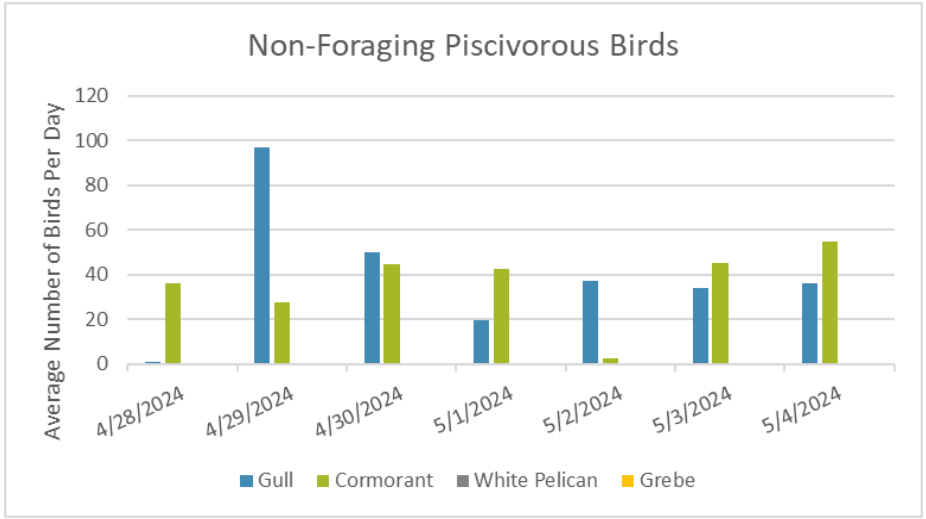
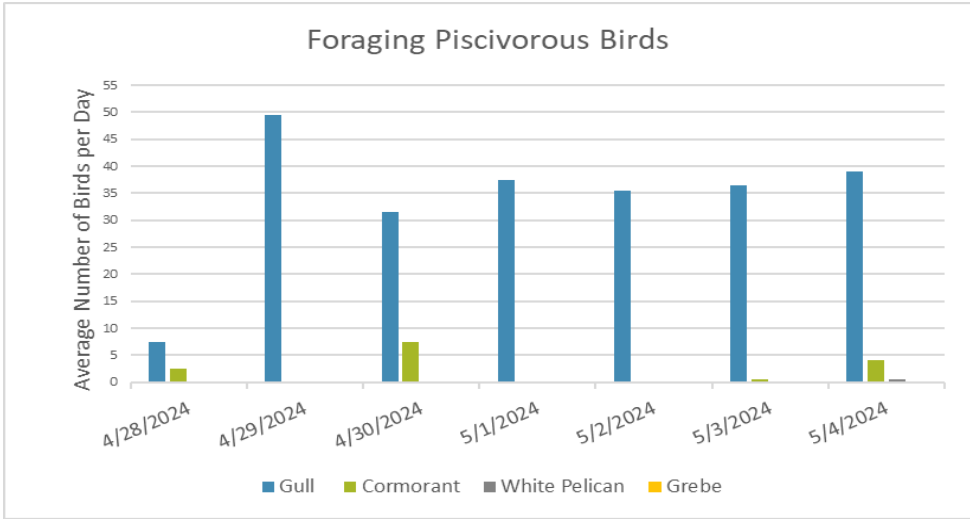


Avian predator tori lines and audio distress Bird Gard. 10/2023

Tori lines at East Ladder entrances.

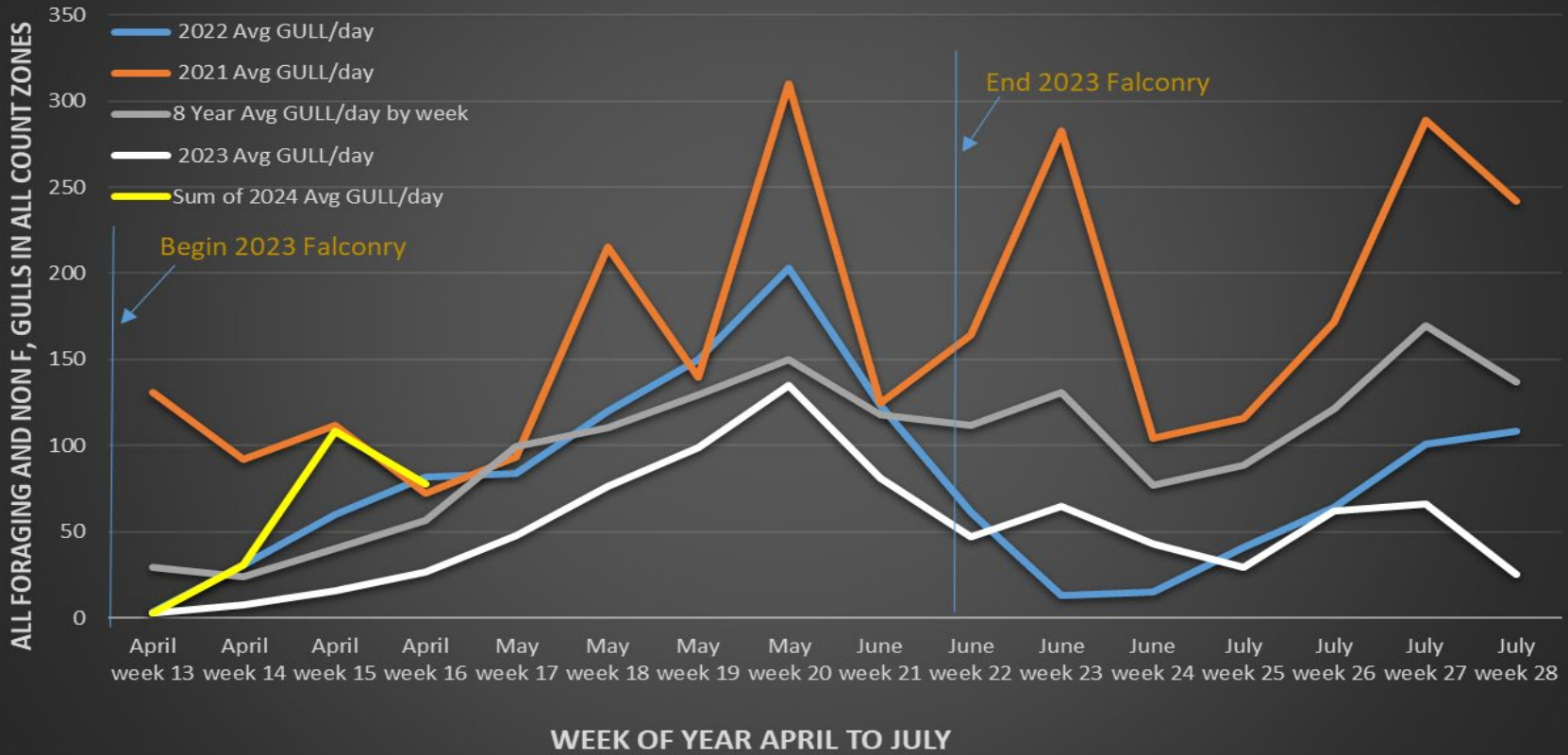
Bird Gard audio deterrent.



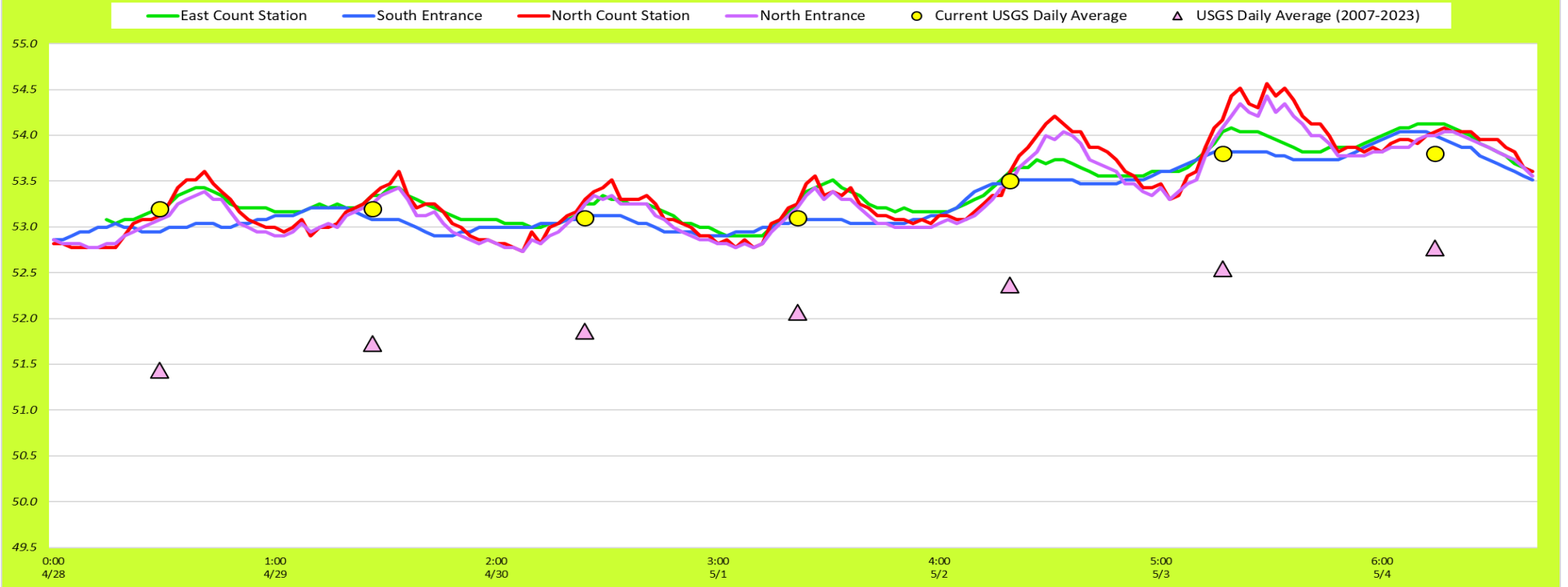


Bird numbers reduced this week from unusual highs last week.
 Pyro boat work is very effective but gulls return rapidly after boat work ends about 1330 hrs.

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



Fish Ladders-River Temperatures



| Secchi: | | USGS |
|---------|-------|------|
| 5.0 | Sun | 53.2 |
| 5.0 | Mon | 53.2 |
| 5.0 | Tue | 53.1 |
| 5.0 | Wed | 53.1 |
| 5.0 | Thurs | 53.5 |
| 4.0 | Fri | 53.8 |
| 4.0 | Sat | 53.8 |
| 4.7 | AVG | 53.4 |

Reporting week data

| Date: | North Ladder | | East Ladder | | | | | | | | | | | |
|-------------|--------------|-------------|---------------|------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|----------------|-------------|-------------|
| | | | East Entrance | | | | | West Entrance | | | | South Entrance | | |
| | Differential | N1 Depth | Differential | E1 Depth | E2 Depth | E3 Depth | JP 6 | Differential | W1 | W2 | W3 | Differential | S1 | S2 |
| 4/28 | 1.3 | 10.8 | 1.5 | 4.6 | 11.4 | 11.3 | 10.6 | 1.5 | 10.2 | 10.3 | -2.9 | 1.3 | 10.8 | 10.7 |
| | 1.3 | 10.7 | 1.5 | 4.6 | 11.3 | 11.1 | 10.7 | 1.5 | 10.2 | 10.4 | -2.8 | 1.3 | 10.8 | 10.7 |
| 4/29 | 1.4 | 10.7 | 1.3 | 5.7 | 11.8 | 11.7 | 11.8 | 1.4 | 8.8 | 9.0 | -1.9 | 1.5 | 8.8 | 8.5 |
| | 1.3 | 10.3 | 1.4 | 4.2 | 11.7 | 11.5 | 10.2 | 1.5 | 9.8 | 9.9 | -3.3 | 1.3 | 10.3 | 10.2 |
| 4/30 | 1.4 | 10.4 | 1.6 | 4.3 | 11.2 | 11.4 | 10.3 | 1.3 | 10.5 | 10.6 | -2.8 | 1.3 | 10.7 | 10.7 |
| | 1.8 | 9.8 | 1.5 | 3.4 | 11.2 | 11.5 | 9.5 | 1.4 | 10.1 | 10.3 | -3.8 | 1.3 | 10.4 | 10.2 |
| 5/1 | 1.4 | 10.5 | 1.6 | 4.6 | 11.4 | 11.6 | 10.6 | 1.3 | 10.6 | 10.7 | -2.8 | 1.3 | 10.6 | 10.7 |
| | 1.2 | 10.4 | 1.5 | 3.5 | 11.2 | 11.5 | 9.6 | 1.4 | 9.9 | 10.1 | -3.8 | 1.3 | 10.3 | 10.2 |
| 5/2 | 1.3 | 10.5 | 1.5 | 4.6 | 11.3 | 10.5 | 10.6 | 1.3 | 10.4 | 10.5 | -2.8 | 1.3 | 12.5 | 12.5 |
| | 1.3 | 10.7 | 1.5 | 3.6 | 11.3 | 11.3 | 9.6 | 1.5 | 9.8 | 10.0 | -3.7 | 1.3 | 10.3 | 10.0 |
| 5/3 | 1.3 | 10.6 | 1.5 | 4.2 | 11.3 | 12.6 | 10.2 | 1.4 | 10.2 | 10.3 | -3.2 | 1.2 | 10.6 | 10.4 |
| | 1.4 | 10.5 | 1.5 | 4.1 | 11.2 | 11.4 | 10.1 | 1.5 | 10.1 | 10.2 | -3.3 | 1.3 | 10.4 | 10.1 |
| 5/4 | 1.4 | 10.5 | 1.7 | 4.2 | 11.3 | 12.6 | 10.2 | 1.5 | 10.0 | 10.2 | -3.2 | 1.2 | 10.6 | 10.3 |
| | 1.3 | 10.5 | 1.6 | 4.7 | 11.1 | 11.1 | 9.7 | 1.6 | 9.9 | 10.0 | -3.7 | 1.4 | 10.1 | 9.3 |
| AVG: | 1.4 | 10.5 | 1.5 | 4.3 | 11.3 | 11.5 | 10.3 | 1.4 | 10.0 | 10.2 | -3.1 | 1.3 | 10.5 | 10.3 |

Fishways inspected twice daily