

# The Dalles Dam Fishway Status Report

5/25/23

Inspection Period 05/14-05/20, 2023

## 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> 56.2 °F
			<b>Comments:</b> flow-turbidity increase		<b>Weekly Ave. Secchi:</b> 3.3

### 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	12.0	
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.3	
N2		Closed			
PUD Intake differential	0	≤ 0.5'			

### EAST FISHWAY

Exit differential	0	≤ 0.5'			
Removable weirs 154-157	0	Per forebay	Problem with W 157 limit switches require TDE repair.		
Weir 158-159 differential	0	1.1' ± 0.1'			
Count station differential	0	≤ 0.3'			
153 Weir crest depth	0	1' ± 0.1'			
Junction pool weir JP6	0	> 7.0'	Weekly average	20.8	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	6.1	
Entrance weir E2	0	depth (≥ 8')	Weekly average	10.3	
Entrance weir E3	0	depth (≥ 8')	Weekly average	10.3	
Collection channel velocity	0	1.5 - 4 fps	2.02 fps 5/15/23		
Transportation channel velocity	0	1.5 - 4 fps	4.09 fps 5/15/23		
North channel velocity	0	1.5 - 4 fps	2.41 fps 3/11/23		
South channel velocity	0	1.5 - 4 fps	4.72 fps 4/23/23	Entrance	
West entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir W1	0	depth (≥ 8')	Weekly average	9.9	
Entrance weir W2	0	depth (≥ 8')	Weekly average	10.0	
Entrance weir W3	0	No criteria	Weekly average	5.2	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	0	depth (≥ 8')	Weekly average	12.6	
Entrance weir S2	0	depth (≥ 8')	Weekly average	10.6	

### JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18	1-8-18 gates open. Significant floating trash in east sluiceway, large sturgeon mortality.		
Turbine trashrack drawdown	0	<1.5', biwkly	5/14/2023 All in criteria.		
Spill volume/pattern	0	1 to 22	1-8 bays in operation daily		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	Many fish in gatewells, mostly yearlings. No mortality. No trash.		

## Current Outages

-MU19 & MU20 FOOS 10/07/2018 1205 – 10/27/2023 1700 T10 ACETYLENE  
-MU12 OOS 04/12/2021 0001 – 9/22/2023 ANNUAL  
MU4 OOS 04/17/2023 0630 – 11/28/2023 1700, ANNUAL  
MU15 OOS 05/22/2023 0630 – 06/01/2023 1700, ANNUAL  
MU16 OOS 05/22/2023 0630 – 06/29/2023 1700, 6 YR Overhaul

## Maintenance

Plan in place for fish unit intake trashrack rake in preparation for potential debris issues. Monitoring fish unit differential.  
Calibrations at fishways entrances are all within criteria 5/5/2023  
Planning spill gates 9 and 10 cable and gearbox swap. Resealing bulkheads.  
Spillway assessment; Spillgates 1- 9 rehab 2034. Spillway crane replace first priority. Reviewing gate operation frequency.  
Weir 155 out of sequence. Maintenance trouble shooting the problem.

## Predators

100-20 foraging gulls in tailwater/FB/PH1 count zones. Cormorants persisting. ~17 nests counted 5/13.  
Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Waiting on WDFW permit process.  
Falconry abatement at 5 weeks, undertaking mock gull takes in afternoons to some success.

## Research/Construction/Contractors

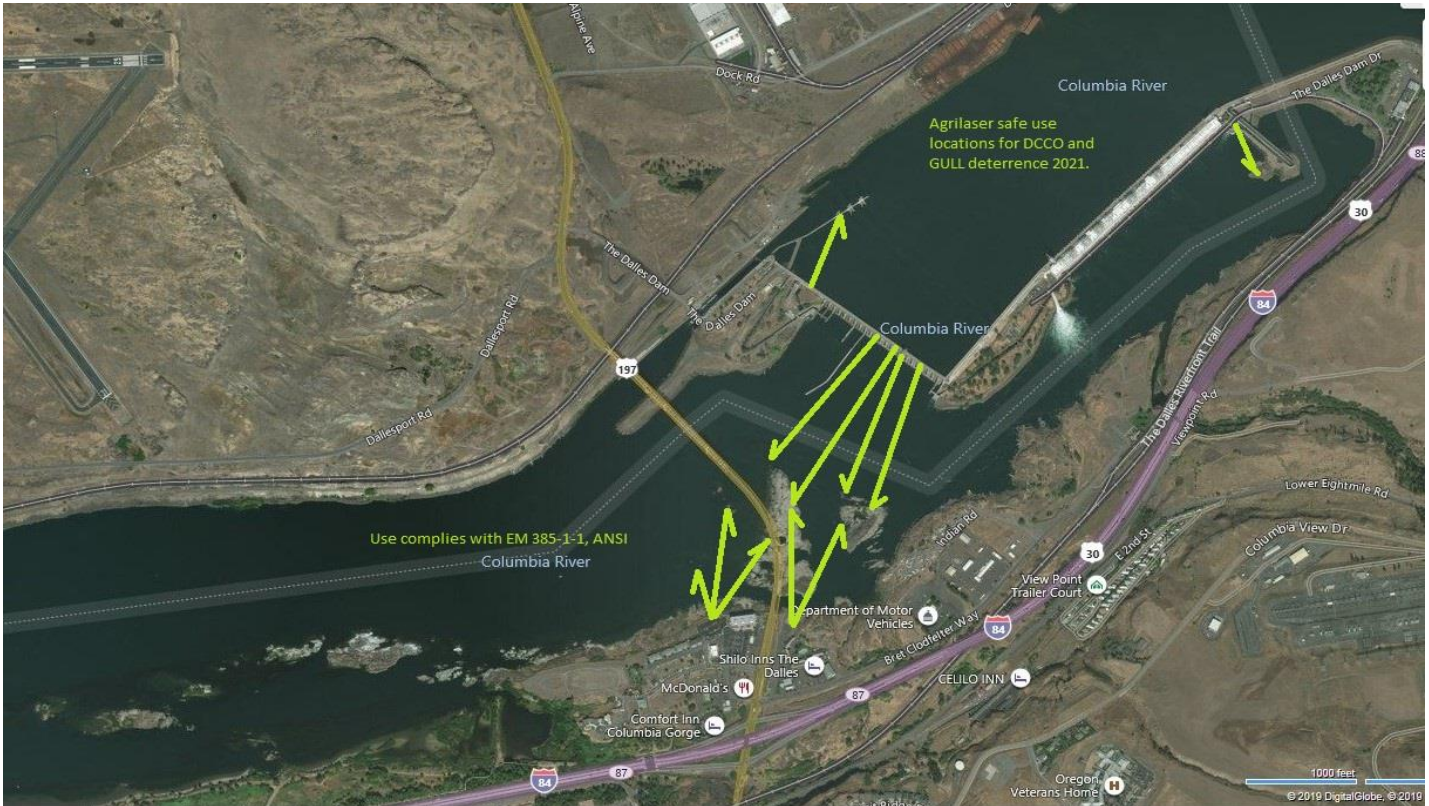
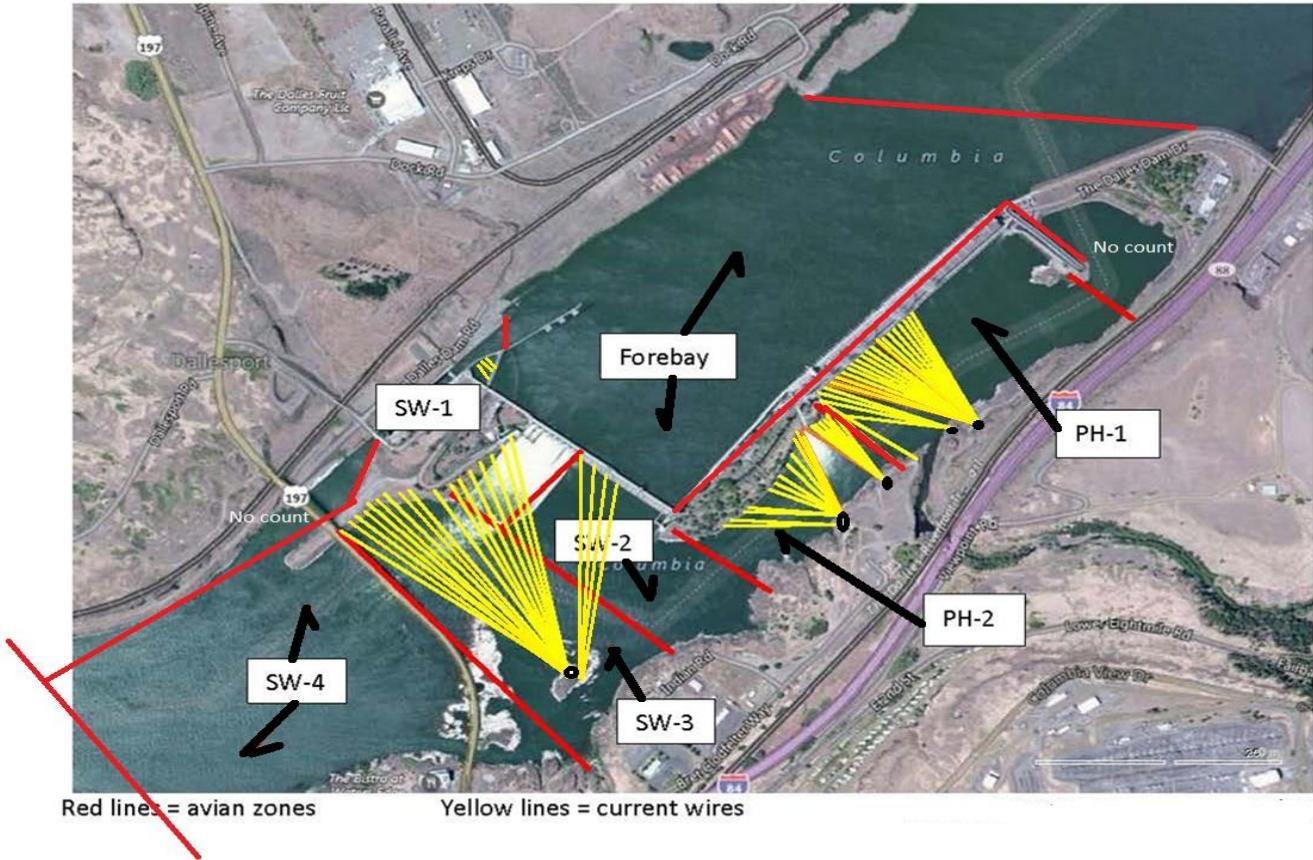
WDFW dam anglers making periodic visits. Catch low with high turbid flows.  
USGS river temperatures link  
4 Peaks fish counters 16hr/7 day/wk started Apr 1.  
Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, other 2 next winter.  
ODFW conducting monthly fishway inspections.  
PTAGIS fishladder data collection at count stations continues

## Operations

Sluice gates 1-1, 1-2, 1-3, 8-1, 8-3, 18-2 open  
Gatewells contain small numbers of chinook yearlings, no mortality.

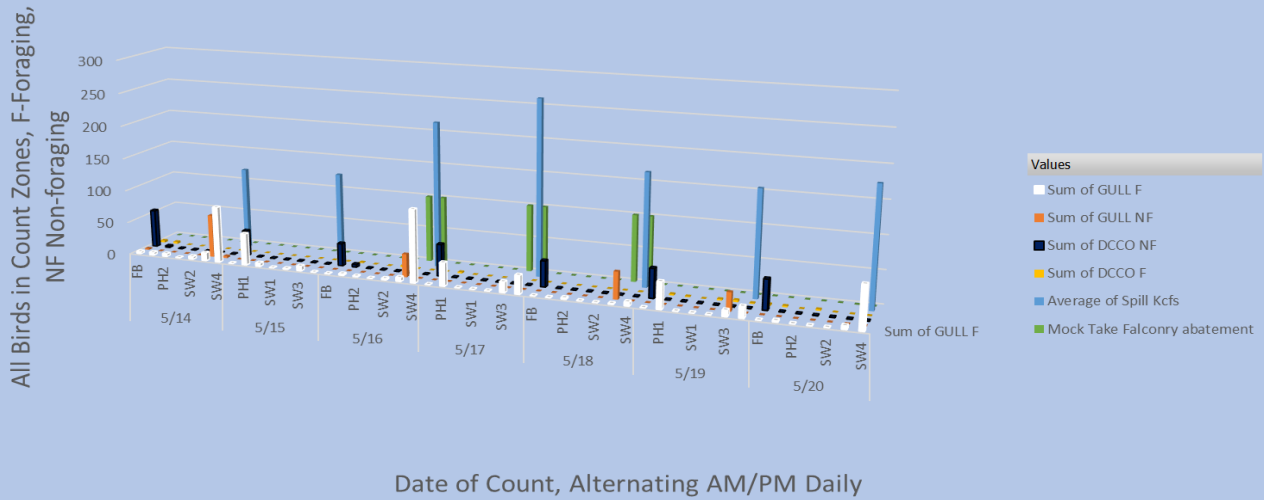
Approved by: Ron Twiner, Operation Project Manager, The Dalles Dam

# Bird Count Zones, Avian Lines and Laser Deterrent Sites

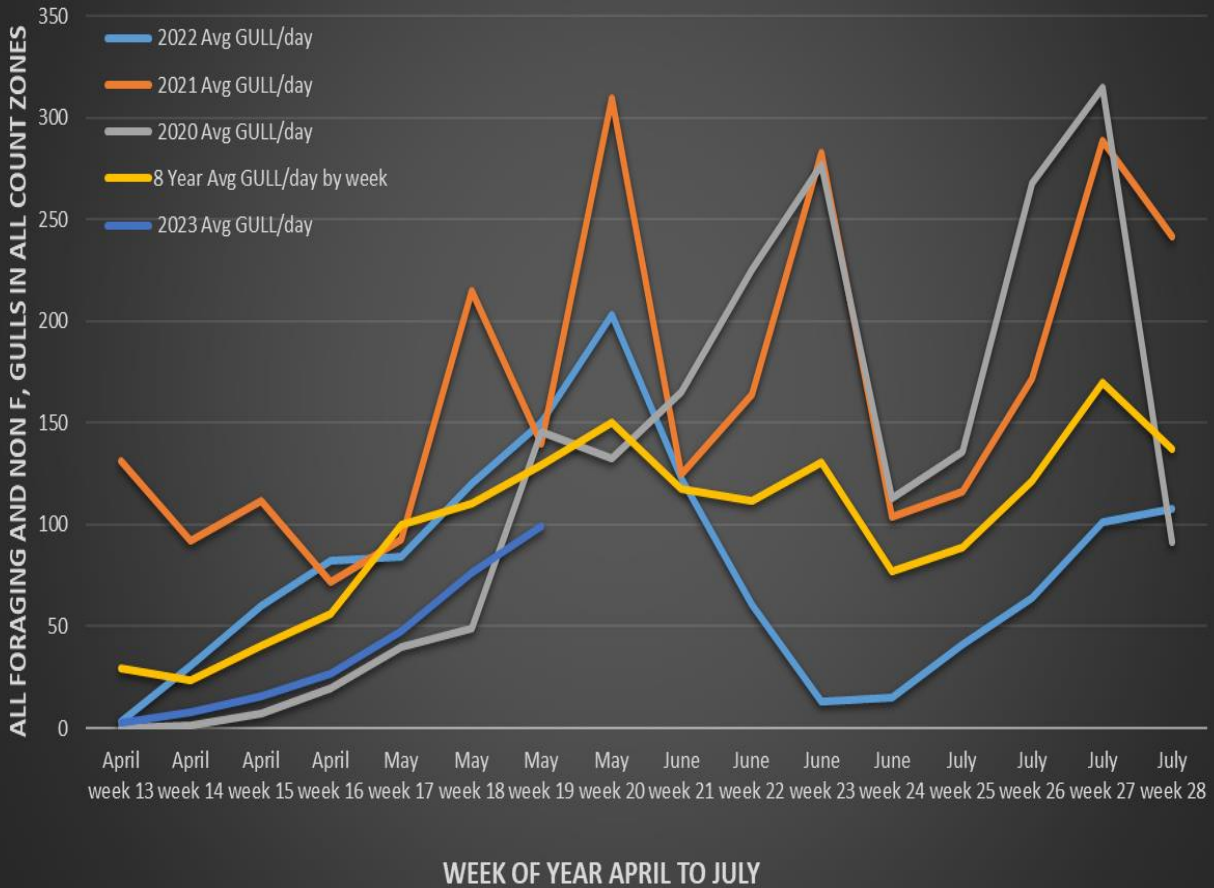




### Avian Count at TDA, 5/14 to 5/20/2023



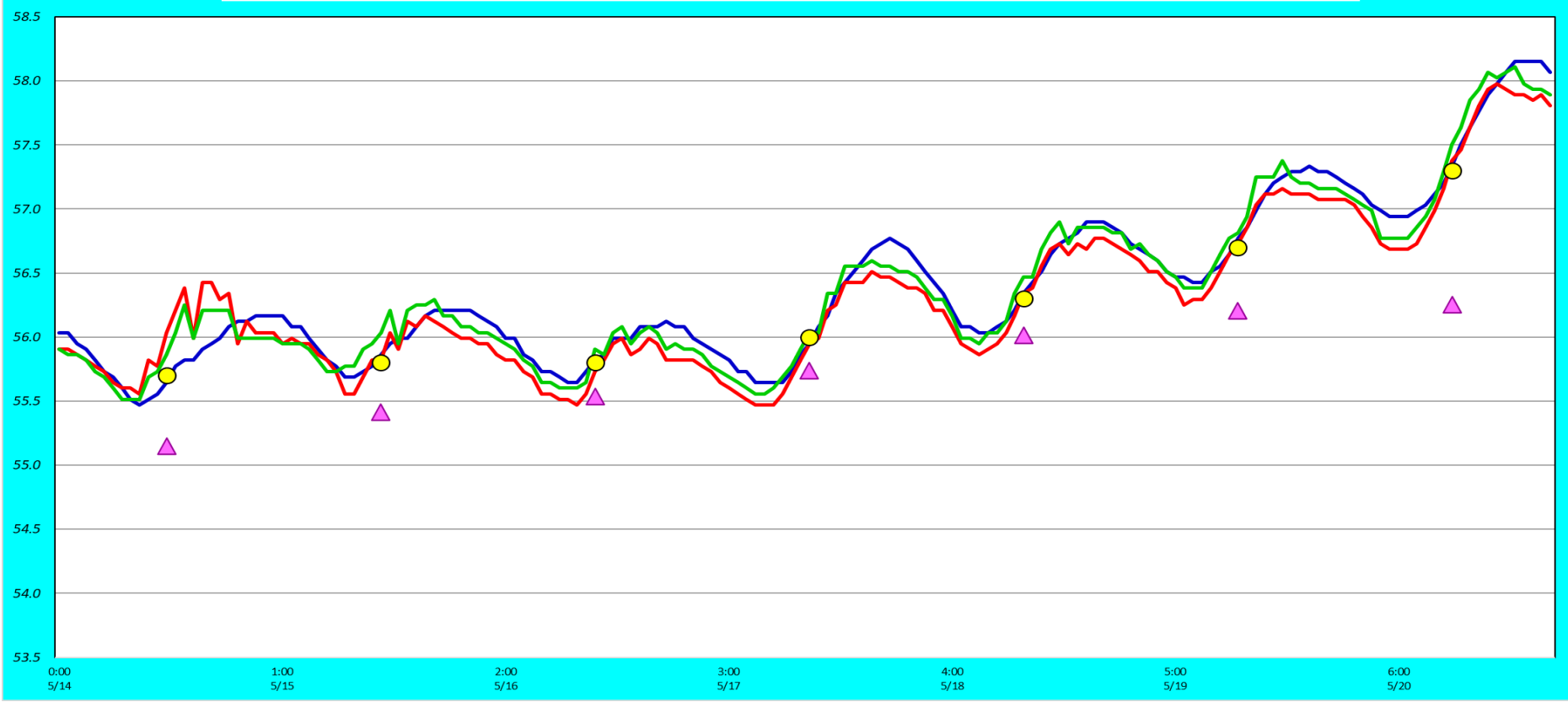
### TDA Daily Mean # of GULLS by Week, April to July 2020 and 2021, 2022, 2023 Compared to Previous 8 years Daily Mean.





### Adult Fish Ladders-River Temperatures

— East Count Station    — North Count Station    — North Entrance    ● Current USGS Daily Average    ▲ USGS Daily Average (2007-2022)



Secchi:		USGS F°
3.5	Sun	55.7
3.5	Mon	55.8
3.5	Tue	55.8
4.0	Wed	56.0
3.5	Thurs	56.3
2.5	Fri	56.7
2.5	Sat	57.3
3.3	AVG	56.2

## 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
5/14	1.3	11.6	1.6	10.0	10.1	9.7	16.0	1.5	9.6	9.6	2.3	1.5	11.6	10.0
	1.4	11.4	1.4	10.5	10.6	10.2	16.5	1.4	10.2	10.1	2.9	1.2	12.4	10.6
5/15	1.3	11.5	1.6	10.7	9.1	8.6	16.7	1.5	10.2	10.2	3.1	1.4	12.1	10.5
	1.3	11.5	1.3	12.1	8.6	7.9	18.1	1.5	10.4	10.4	4.3	1.4	12.9	10.5
5/16	1.3	11.6	1.3	7.2	9.6	9.6	19.3	1.3	10.9	10.9	5.4	1.2	13.4	10.4
			1.8	5.6	12.6	13.2	17.6	1.7	9.0	9.0	4.5	1.5	11.2	8.7
5/17	1.4	12.2	1.3	3.6	14.0	14.4	19.6	1.4	10.0	10.0	5.9	1.4	9.1	8.1
	1.4	12.8	1.4	3.4	11.1	11.3	19.4	1.4	9.7	9.8	5.7	1.4	13.5	11.0
5/18	1.4	12.2	1.5	3.7	9.8	9.8	19.6	1.4	10.0	10.1	6.0	1.3	12.8	12.2
	1.4	12.0	1.5	3.4	10.5	10.5	19.4	1.6	9.5	9.6	5.5	1.4	12.7	11.7
5/19	1.3	12.3	1.3	4.0	9.9	9.8	50.0	1.6	10.1	10.2	10.1	1.4	13.4	11.5
	1.4	12.0	1.6	3.7	9.6	9.4	19.7	1.4	9.9	9.9	5.8	1.5	13.3	11.1
5/20	1.4	12.1	1.6	3.7	9.0	9.1	19.7	1.5	9.9	10.1	5.9	1.6	13.5	10.3
	1.3	12.2	1.5	3.8	9.5	9.5	19.8	1.6	9.8	9.9	5.8	1.3	14.5	11.2
<b>AVG:</b>	<b>1.3</b>	<b>12.0</b>	<b>1.5</b>	<b>6.1</b>	<b>10.3</b>	<b>10.2</b>	<b>20.8</b>	<b>1.5</b>	<b>9.9</b>	<b>10.0</b>	<b>5.2</b>	<b>1.4</b>	<b>12.6</b>	<b>10.6</b>

*Fishways inspected twice daily*



Falcon mock take near SW4. Mock takes performed at various locations. Visible gull reduction. Data will be processed at end of season.





No fish coming in north entrance