

# The Dalles Dam Fishway Status Report

09/01/19

Inspection Period: 8/25-8/31, 2019

## THE DALLES DAM



US Army Corps  
of Engineers  
Portland District

The Dalles Project-Fisheries  
P.O. Box 564  
The Dalles, OR 97058-9998  
Phone: 541-506-3800

The Dalles Dam	Inspections OOC	Criteria Limit	Total Number of Inspections: Comments: Hot Dam!	21	Temperature: 71.4 °F	Secchi: #DIV/0! feet
<b>NORTH FISHWAY</b>						
Exit differential	0	≤ 0.5'				
Count station differential	0	≤ 0.3'				
Weir crest depth	0	1.0' ± 0.1'				
Entrance differential	0	1.0' - 2.0'	Average for week =	1.26		
Entrance weir N1	0	depth (≥ 8')	Average for week =	9.8		
Entrance weir N2	0	Closed				
PUD Intake differential	0	≤ 0.5'				
<b>EAST FISHWAY</b>						
Exit differential	0	≤ 0.5'				
Removable weirs 154-157	0	Per forebay	Weir 157 experiencing mechanical brake failure, able to maintain criteria manually.			
Weir 158-159 differential	0	1.0' ± 0.1'				
Count station differential	0	≤ 0.3'				
153 Weir crest depth	0	1.1' ± 0.1'				
Junction pool weir JP6	0	0.0	Average for week =	11.2		
East entrance differential	0	1.0' - 2.0'	Average for week =	1.47		
Entrance weir E1	0	No criteria				
Entrance weir E2	0	depth (≥ 8')	Average for week =	13.30		
Entrance weir E3	0	depth (≥ 8')	Average for week =	13.31		
Collection channel velocity	0	1.5 - 4 fps	2.15 fps Average	Range:	3.44 fps MU7 - 1.39 fps MU12	
Transportation channel velocity	0	1.5 - 4 fps	2.38 fps	8/28		
North channel velocity	0	1.5 - 4 fps	2.4 fps	8/24		
South channel velocity	0	1.5 - 4 fps	3.36 fps	8/28		
West entrance differential	0	1.0' - 2.0'	Average for week =	1.5		
Entrance weir W1	0	depth (≥ 8')	Average for week =	8.6		
Entrance weir W2	0	depth (≥ 8')	Average for week =	8.6		
Entrance weir W3	closed	No criteria				
South entrance differential	0	1.0' - 2.0'	Average for week =	1.4		
Entrance weir S1	0	depth (≥ 8')	Average for week =	8.6		
Entrance weir S2	0	depth (≥ 8')	Average for week =	8.6		
<b>JUVENILE PASSAGE</b>						
Sluiceway operation	0	Units 1, 8, 18	unit 6-2 and 6-3 instead of 8 starting 8/29			
Turbine trashrack drawdown	0	<1.5', biwkly	Fish check in gatewells 8/28, Only adult shad loafing about in some wells.			
Spill volume/pattern	0	None	Gates 1 and 2 are closed to spill at times according to FPP pattern.			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

## OTHER ISSUES:

### Operation

East & North fish ladders in full operation.

Sluiceway open with 6 gates total. Units 1, 8 and 18 (unit 9 open in place of 8 beginning 8/22 due to unit 8 outage)

Spillway open with summer juvenile passage (40% river).

FPP spill pattern have gates 1 - 6 closed. Possible decrease in north ladder passage. Doing a closer investigation.

### Outages

MU5 FOOS through 8/29/2019 for T3 GSU transformer replacement

MU6 OOS through 8/29/2019 for T3 GSU transformer replacement

T10 (MU19 & 20) FOOS through 10/28/2021 due to acetylene levels

MU7 and 8 OOS for GSU replacement work 8/23

### Maintenance

Calibration check 8/26: all entrances maintaining, calibration and FPP criteria.

Collection channel dewatering pumps 5 and 6 rehab ongoing. Completion prior to Dec for dewatering.

Fishway automation parts purchase ongoing. Labor for assembly and install FY20.

Engineering evaluation of east fishway diffuser valve status/rehab to resume.

Spillway assessment (MRER); No funding for FY20. Spillgate 9 fish priority well communicated to team.

### Predators

USDA hazing season concluded July 31. Post season meeting 9/10 at The Dalles to determine planning for next season. Includes 3 lower Columbia projects.

Continue collecting observation data on Pelicans to determine target species. Numbers of pelicans low, gull counts low.

Sea Lions not observed from dam year to date.

### Research/Construction/Contractors

Fish counting contractors (Four Peaks) fish counting continues.

For fish count data refer to; [FPC FISH COUNTS](#)

AWS backup - Moving forward with follow on contract items and spare parts. Pre meeting this week with potential vendors.

Transformer replacement - T3 ongoing. Testing after august completion. Date to be determined

PSMFC weekly PUD sampling last sample taken for season on 7/31. To resume next April.

PITAGS north and east fishladder data collection at count stations continues.

Pikeminnow dam angling-24/week & 2217 YTD. **Bass/Walleye catch and release continues.** States in 3rd year of internal discussions on the matter.

ODFW monthly fishway inspections ongoing.

Lamprey minor mods - Planning for potential LPS in junction pool. Awaiting planning meetings.

Univ of Idaho lamprey radiotelemetry - Second season of lamprey passage night flow completion last week of August for total 18 night flow adjustments.

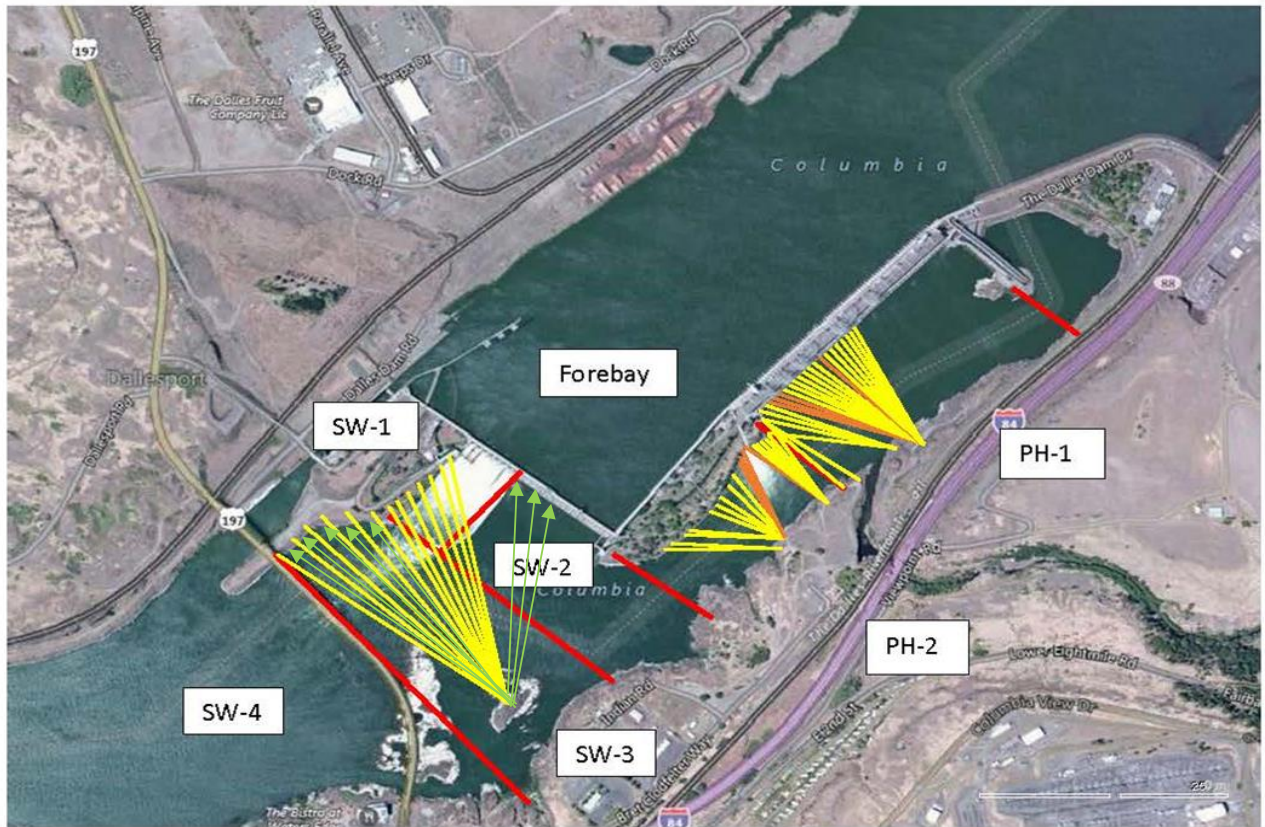
Lamprey trapping - Continues with 355 YTD.

Fish unit breaker replace.- Planning second season of work Dec1-Mid Jan. Multiple measures taken to avoid last years unacceptable schedule slip.

Fish unit rehab - Ongoing for phase 1A.

Approved by: Mike Colesar

Operation Project Manager The Dalles Dam



Red lines = avian zones

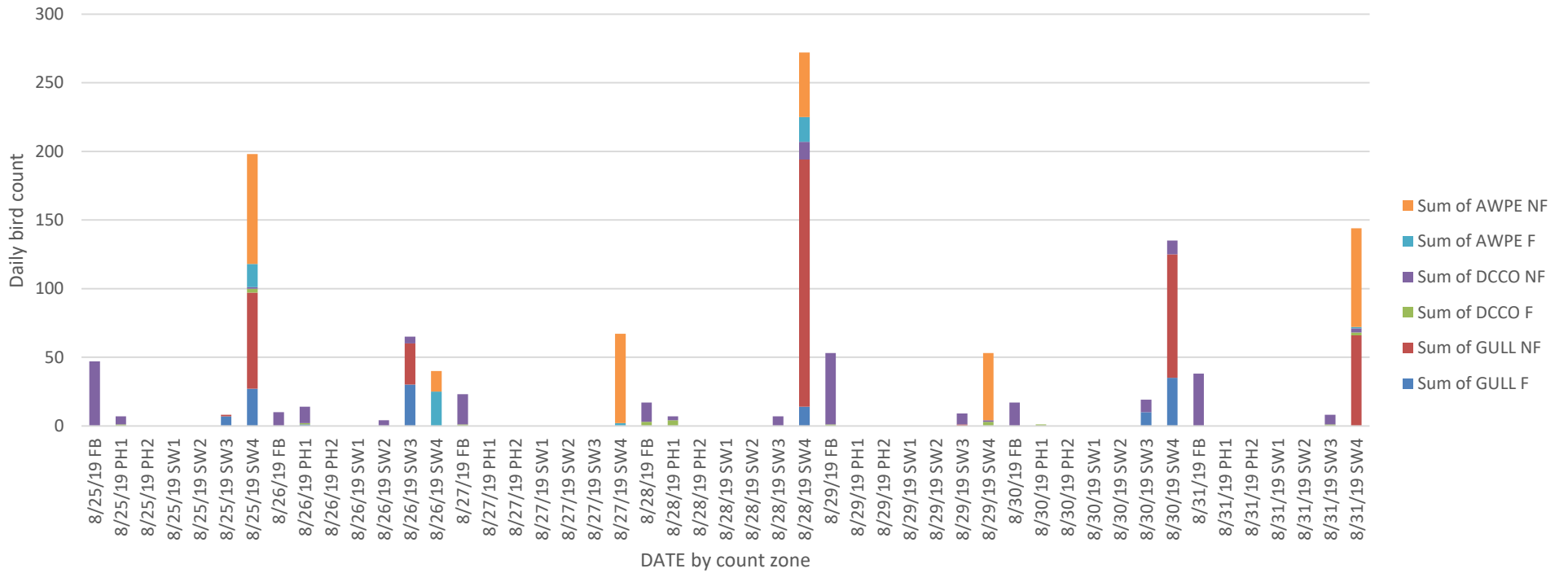
Yellow lines = current wires

Orange lines = down or missing wires

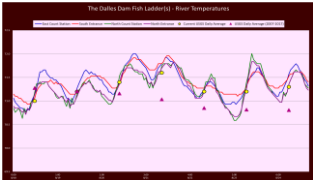
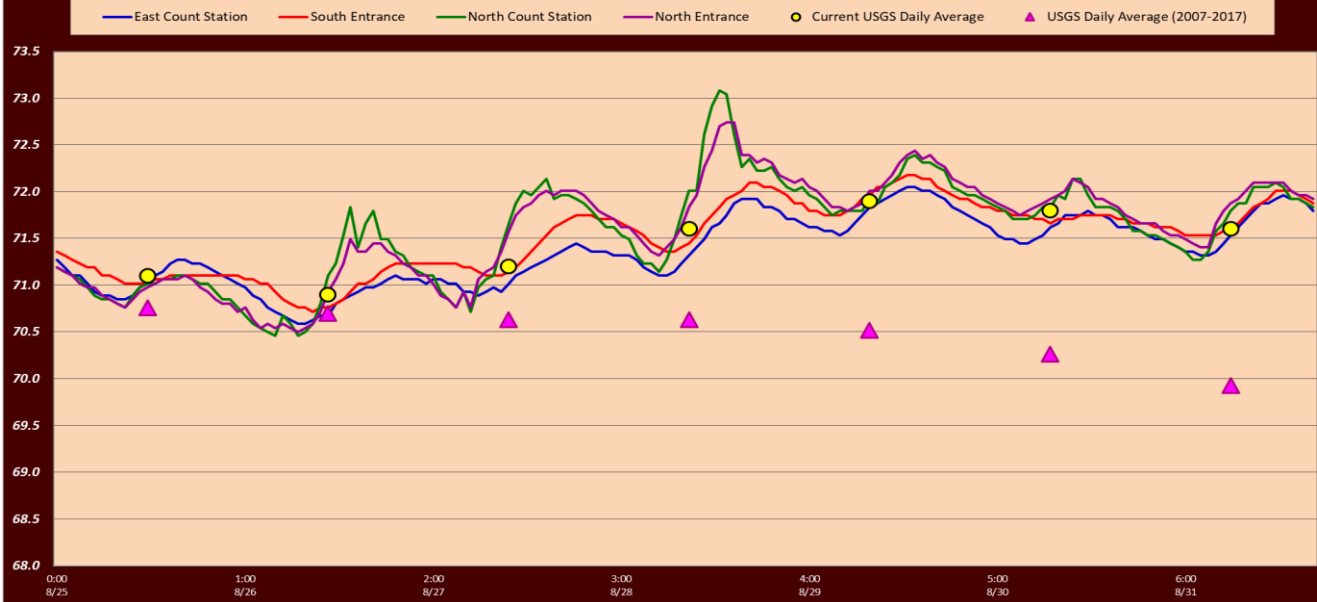


Additional avian lines installed 9/2018

Daily bird counts by zone 8/25 to 8/31

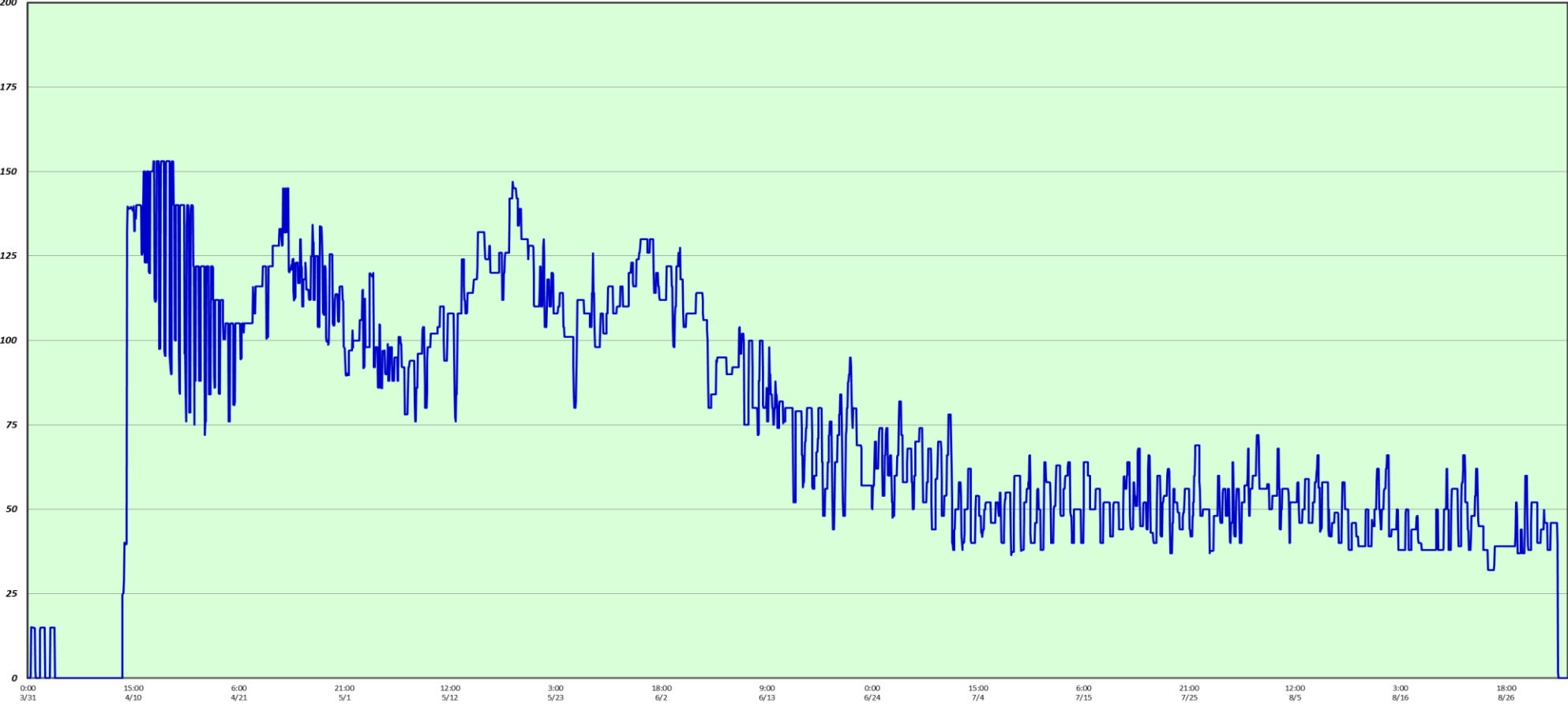


### The Dalles Dam Fish Ladder(s)-River Temperatures



# 2019 Spill Season

KCFS



		USGS:
Secchi:		Temperatures
8/25	Sun	71.1
8/26	Mon	70.9
8/27	Tue	71.2
8/28	Wed	71.6
8/29	Thurs	71.9
8/30	Fri	71.8
8/31	Sat	71.6
#DIV/0!	AVG	71.4

Aug. Temps

**The Dalles Dam Daily Readings and Averages for  
Temperatures, Secchi, Entrances, and Spill**

SCADA INSPECTION  
Lamprey passage modifications  
Data omitted

Date:	North Ladder Entrance		East Ladder											
			East Entrance- open					West Entrance				South Entrance		
	Differential	N1 Depth	Differential	E1 Depth	E2 Depth	E3 Depth	JP 6	Differential	W1	W2	W3	Differential	S1	S2
8/25			1.3		13.2	13.2	10.3	1.4	8.4	8.4		1.5	8.4	8.4
	1.2	9.8	1.4		13.0	13.1	10.4	1.4	8.5	8.5		1.5	8.5	8.5
	1.3	10.0	1.4		13.0	13.1	10.6	1.4	8.5	8.5		1.4	8.5	8.5
8/26			1.5		13.1	13.0	10.8	1.5	8.6	8.6		1.5	8.5	8.6
	1.2	9.8	1.5		12.9	13.1	10.7	1.5	8.4	8.4		1.5	8.4	8.4
	1.3	9.7	1.6		12.9	12.9	10.7	1.5	8.4	8.4		1.5	8.4	8.4
8/27			1.5		13.1	13.1	10.6	1.5	8.4	8.4		1.5	8.5	8.5
	1.3	9.8	1.4		13.0	13.0	10.3	1.3	8.4	8.4		1.4	8.5	8.5
	1.3	9.7	1.4		13.1	13.1	10.4	1.5	8.6	8.6		1.4	8.5	8.5
8/28			1.4		13.6	13.6	10.8	1.4	8.4	8.4		1.5	8.5	8.5
	1.2	9.9	1.4		13.6	13.5	10.7	1.4	8.5	8.5		1.4	8.5	8.5
	1.3	9.7	1.4		13.6	13.5	10.7	1.4	8.5	8.5		1.4	8.5	8.5
8/29			1.6		13.5	13.5	12.2	1.5	8.8	8.8		1.5	8.8	8.8
	1.3	9.8	1.5		13.6	13.6	12.7	1.6	8.7	8.7		1.5	8.8	8.8
	1.3	9.7	1.5		13.6	13.6	12.7	1.6	8.7	8.7		1.5	8.8	8.8
8/30			1.5		13.4	13.4	12.1	1.5	8.9	8.9		1.4	8.9	8.9
	1.4	9.8	1.6		13.6	13.6	12.0	1.6	8.8	8.8		1.4	8.8	8.7
	1.3	9.9	1.6		13.6	13.6	12.0	1.5	8.9	8.9		1.4	8.2	8.2
8/31			1.3		13.5	13.5	11.3	1.3	8.8	8.8		1.4	8.9	8.9
	1.3	9.8	1.6		13.5	13.5	11.7	1.5	8.9	8.9		1.4	8.8	8.8
	1.0	9.6	1.5		13.5	13.5	12.0	1.4	8.9	8.9		1.4	8.8	8.8
<b>AVG:</b>	<b>1.3</b>	<b>9.8</b>	<b>1.5</b>		<b>13.3</b>	<b>13.3</b>	<b>11.2</b>	<b>1.5</b>	<b>8.6</b>	<b>8.6</b>		<b>1.4</b>	<b>8.6</b>	<b>8.6</b>

***Fishways are inspected twice daily plus one SCADA inspection.***