

# The Dalles Dam Fishway Status Report

10/3/21

Inspection Period: 9/26-10/2/2021

## THE DALLES DAM



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> 17		<b>Temperature:</b> 66.2 °F	
			<b>Comments:</b> Overnight temps falling		<b>Weekly Ave. Secchi:</b> 5.0	

### 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	1.0' - 2.0'	Weekly average	9.8
Entrance Differential	0	depth (≥ 8')	Weekly average	1.3
Entrance weir N2	0	Closed		
PUD Intake differential	0	≤ 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' ± 0.1'		
Junction pool weir JP6	0	> 7.0'		
East entrance differential	0	1.0' - 2.0'	Week ave.	1.6
Entrance weir E1	0	No criteria		
Entrance weir E2	0	depth (≥ 8')	Week ave.	11.4
Entrance weir E3	0	depth (≥ 8')	Week ave.	11.5
Collection channel velocity	0	1.5 - 4 fps	2 fps	9/28/21
Transportation channel velocity	0	1.5 - 4 fps	2.47 fps	9/28/21
North channel velocity	0	1.5 - 4 fps	2.89 fps	9/28/21
South channel velocity	0	1.5 - 4 fps	3.66 fps	9/28/21
West entrance differential	0	1.0' - 2.0'	Old SCADA	Week ave. 1.5
Entrance weir W1	0	depth (≥ 8')		Week ave. 9.9
Entrance weir W2	0	depth (≥ 8')		Week ave. 9.9
Entrance weir W3	0	No criteria	Closed	
South entrance differential	0	1.0' - 2.0'		Week ave. 1.5
Entrance weir S1	0	depth (≥ 8')		Week ave. 9.0
Entrance weir S2	0	depth (≥ 8')		Week ave. 9.0

### JUVENILE PASSAGE

Sluiceway operation	0	Units 1,8, 18	Gates over MU4/1-2-3,MU8/1-3,MU18-2 open	
Turbine trashrack drawdown	0	<1.5', biwkly	9/28/21, all gatewells in criteria.	
Spill volume/pattern	0	1 to 8	Spill is closed.	
Turbine Unit Priority	14	per FPP	Main units 1-3 OOS due to crane rail replacement work on intake deck.	
Gatewells	0	Weekly	No fish present. 9/28/2021	

## OTHER ISSUES:

### Current Unit Outages

MU12 OOS 0001 4/12/2021 – 1700 10/27/2022 for Annual & Cooler Upgrades  
MU19 OOS 6/27/2021 0630 – 10/27/2022 1700 for Top Plate Cover Upgrade  
T10 (MU19 & 20) FOOS through 10/27/2022 due to acetylene levels  
MU1-3 OOS 0630 9/12/2021 – /2021 for crane rail replacement

### Maintenance

Completed work on fish units brush wear. AWS opened during fish unit outage.  
Spillway assessment (MRER); Spillgates 1- 9 rehab date estimate 2034. Includes replacement of spillbay 9 trunnion pin repair  
PUD intake rake returned to service with temporary power. Planning underway to transfer rake to N Wasco PUD.  
6 east fishway collection channel dewatering pumps installed in Sept.  
Fishway automation replacement on hold from lack of staff. East exit, east and south entrances complete. West and north operating with old system.  
East exit permanent oil boom removed for repair. Install before Mar1.  
Calibration of all fishway moving gates 9/28/21. All in criteria with only minor deviations in calibrations due to drive motor controls.  
PUD intake differential in criteria.

### Predators

Cormorants presence in east fishladder entrance/exit in spite of frequent ladder walks.  
Mostly juvenile shad moving downstream with some gulls feeding in forebay count zone.  
Common mergansers present at south entrance and in SW3.

### Research/Construction/Contractors

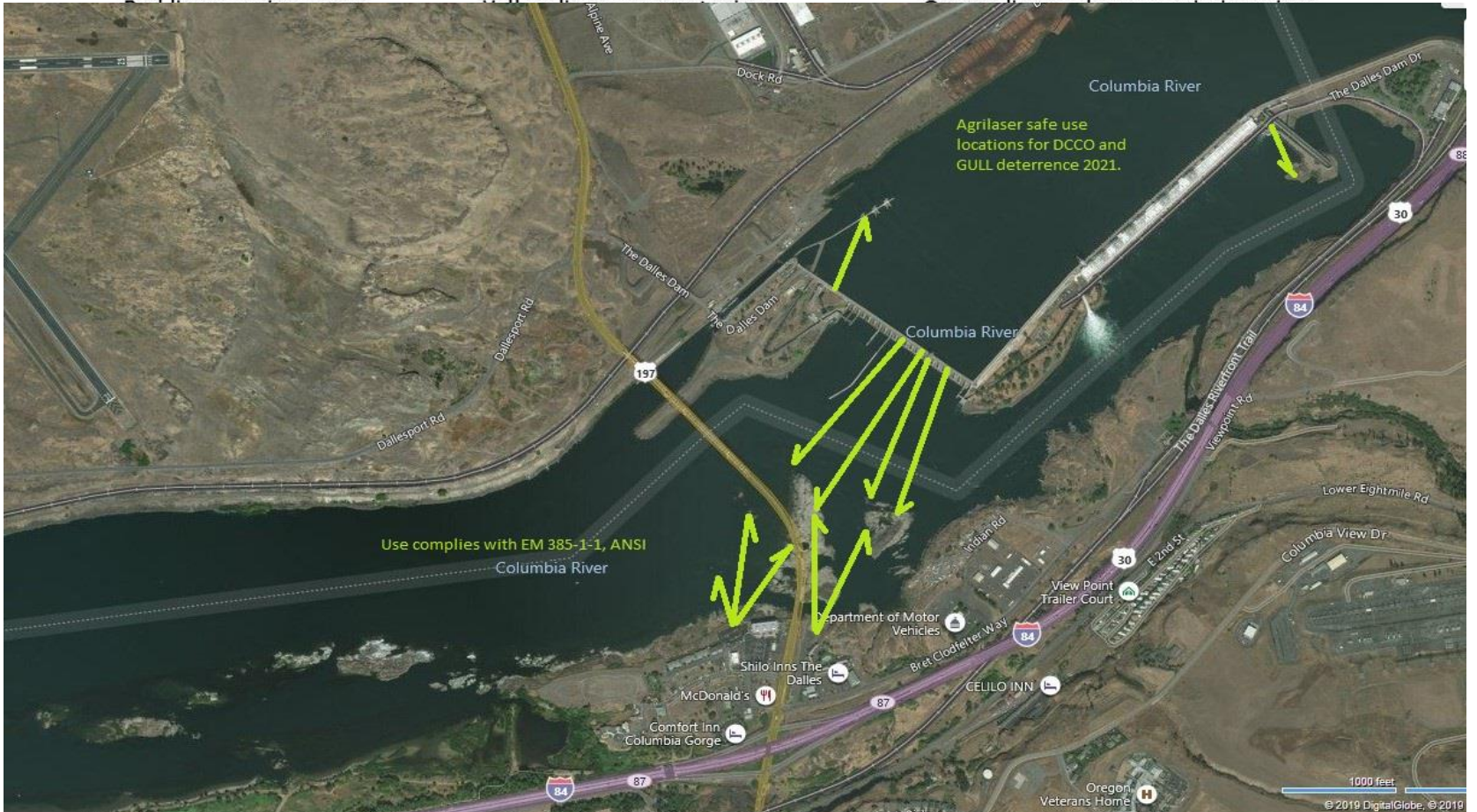
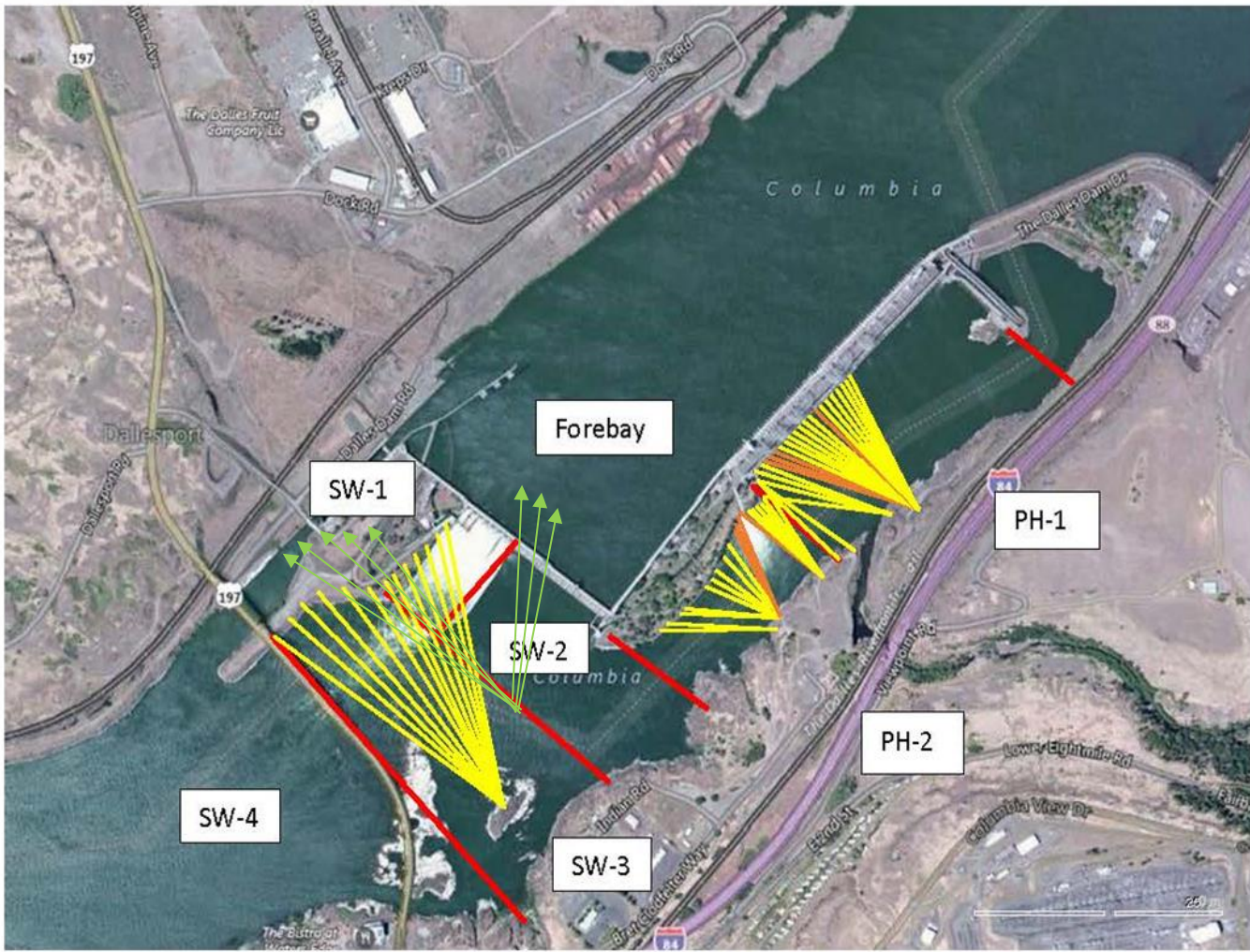
Fish counters started Apr1. No issues.  
AWS intake trashrack - EDR funded for FY21 to investigate solution for debris plugging issue. PDT meetings in progress.  
PITAGS north and east fishladder data collection at count stations continues.  
Fish unit rehab - Phase 1A on hold. Planning operation with AWS backup water supply during construction.  
Northern Pikeminnow Management Program w/20npm for the week, 1369 YTD  
PSMFC concluded juvenile sampling  
USDA concluded Picivorous bird hazing

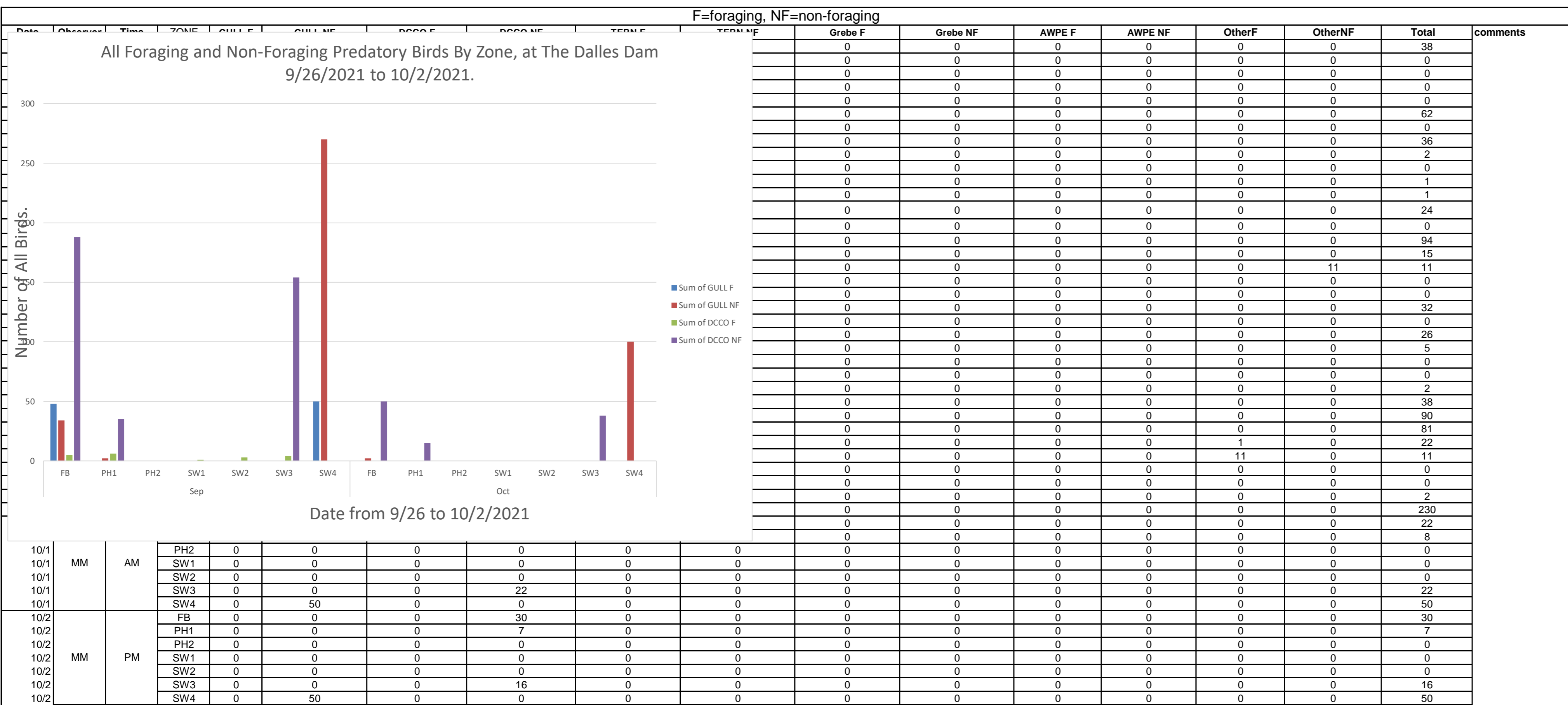
### Fishway Operations

Ice Trash sluiceway opened 24/7. MU4/1-2-3, MU 8/1-2, MU18/2  
East and north fish ladders in full operation per Fish Passage Plan.  
New automation installed at east exit, east entrance and south entrance working well with minor adjustments. Unable to adjust calibrations E1 and S2.  
Spillway gates closed.

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

New Avian Lines and laser deterrent zones





Row Labels	Sum of GULL F	Sum of GULL NF	Sum of DCCO F	Sum of DCCO NF
<b>Sep</b>	<b>98</b>	<b>306</b>	<b>19</b>	<b>377</b>
FB	48	34	5	188
PH1	0	2	6	35
PH2	0	0	0	0
SW1	0	0	1	0
SW2	0	0	3	0
SW3	0	0	4	154
SW4	50	270	0	0
<b>Oct</b>	<b>0</b>	<b>102</b>	<b>0</b>	<b>103</b>
FB	0	2	0	50
PH1	0	0	0	15
PH2	0	0	0	0
SW1	0	0	0	0
SW2	0	0	0	0
SW3	0	0	0	38
SW4	0	100	0	0
<b>Grand Total</b>	<b>98</b>	<b>408</b>	<b>19</b>	<b>480</b>

**a resumes next week**

Secchi:		°F	
9/26	5.0	Sun	67.3
9/27	5.0	Mon	67.0
9/28	5.0	Tue	66.5
9/29	5.0	Wed	66.0
9/30	5.0	Thurs	65.8
10/1	5.0	Fri	65.6
10/2	5.0	Sat	65.4
	5.0	AVG	66.2

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

E1 and W3 no criteria  
out of criteria

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
9/26	1.2	9.7	1.7	6.7	11.1	11.2	9.6	1.4	10.3	10.3	-2.8	1.5	8.7	8.7
	1.2	9.6	1.7	6.6	11.2	11.4	9.6	1.4	10.0	10.0	-3.0	1.5	8.7	8.7
9/27	1.3	9.6	1.4	7.3	11.9	12.1	10.3	1.5	10.0	10.0	-2.3	1.4	9.3	9.3
	1.4	10.6	1.4	7.3	12.0	12.2	10.4	1.6	9.9	9.9	-2.3	1.5	9.2	9.2
9/28	1.2	9.7	1.6	7.2	11.4	11.7	10.1	1.4	8.4	8.4	-2.5	1.5	9.1	9.1
	1.3	10.7	1.7	6.8	10.9	10.9	9.8	1.6	10.0	10.0	-1.6	1.6	8.8	8.7
9/29	1.3	9.6	1.5	7.2	11.0	11.0	10.1	1.6	10.0	10.0	-2.6	1.6	8.6	8.5
	1.3	10.8	1.7	7.3	11.4	11.4	10.3	1.5	10.1	10.1	-2.4	1.6	8.6	8.5
9/30	1.3	9.7	1.6	7.5	11.6	11.6	10.5	1.5	10.1	10.1	-2.3	1.6	8.7	8.6
	1.2	9.8	1.6	7.7	11.8	11.8	10.7	1.5	9.9	9.9	-2.1	1.4	9.3	9.6
10/1	1.2	9.6	1.7	7.4	11.5	11.5	10.3	1.5	10.2	10.2	-2.5	1.4	9.1	9.4
	1.2	8.8	1.8	7.0	11.1	11.1	10.0	1.6	10.0	10.0	-2.6	1.5	8.8	9.1
10/2	1.3	9.6	1.7	7.5	11.6	11.6	10.5	1.5	10.0	10.0	-2.1	1.5	9.2	9.4
	1.3	9.6	1.7	7.5	11.5	11.5	10.4	1.6	10.0	10.0	-2.2	1.5	9.3	9.5
<b>AVG:</b>	<b>1.3</b>	<b>9.8</b>	<b>1.6</b>	<b>7.2</b>	<b>11.4</b>	<b>11.5</b>	<b>10.2</b>	<b>1.5</b>	<b>9.9</b>	<b>9.9</b>	<b>-2.4</b>	<b>1.5</b>	<b>9.0</b>	<b>9.0</b>

*Fishways are inspected twice daily. Overnight trend monitored via Old SCADA operating at west entrance.*