

FISHWAY STATUS REPORT

Date: 9/18/2011

Inspection Period: 9/11-17/2011

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

Fishways are inspected twice daily. Additional daily monitoring done via automation system in fisheries office.

The Dalles Dam	Inspections	Criteria	Total Number of Inspections:	21	Temperature:	68.2	F
	Out of Criteria	Limit	Comments	Secchi:	5.6	Ft.	
NORTH FISHWAY							
Exit differential	0	≤ 0.5'					
Count station differential	0	≤ 0.3'	Window cleaned on 9/12/11.				
Weir crest depth	1	1.0' ± 0.1'	OOO at 1.2', PLC set point was adjusted.				
Entrance differential	0	1.0' - 2.0'	Average 1.3	Daily differentials & weir depths, see AVGS tab.			
Entrance weir N1	0	depth (≥ 8')	Average 9.1				
Entrance weir N2		Closed	Bulkhead installed.				
PUD Intake differential	0	≤ 0.5'					
EAST FISHWAY							
Exit differential	0	≤ 0.5'					
Removable weirs 154-157	0	Per forebay	Auto adjusts 1' increments.				
Weir 158-159 differential	0	1.0' ± 0.1'					
Count station differential	0	≤ 0.3'	Picket leads raked twice this week and window cleaned on 9/12/11.				
Weir crest depth	0	1.0' ± 0.1'					
Junction pool weir JP6	0	depth (≥ 7')	Manually adjusted as needed.				
East entrance differential	0	1.0' - 2.0'	Average 1.5	Daily differentials & weir depths, see AVGS tab.			
Entrance weir E1	0	No criteria	Average 4.9	Manually adjusted.			
Entrance weir E2	0	depth (≥ 8')	Average 11.4				
Entrance weir E3	0	depth (≥ 8')	Average 11.5				
Collection channel velocity	0	1.5 - 4 fps	Average 2.4	See Velocities tab for more complete information.			
West entrance differential	0	1.0' - 2.0'	Average 1.3				
Entrance weir W1	0	depth (≥ 8')	Average 8.7				
Entrance weir W2	0	depth (≥ 8')	Average 8.7				
Entrance weir W3	0	No criteria	Average Closed				
South entrance differential	0	1.0' - 2.0'	Average 1.3	Daily differentials & weir depths, see AVGS tab.			
Entrance weir S1	0	depth (≥ 8')	Average 8.3	Manually adjusted.			
Entrance weir S2	1	depth (≥ 8')	Average 8.2	OOO at 7.4', manually adjusted			
JUVENILE PASSAGE							
Sluiceway operation	1	units 1,8,16	Closed on 9/12 for J post installation.				
Turbine trashrack drawdown	0	<1.5', wkly	Range: 0.2' - 0.7'				
Spill volume	0	40%, 24hr	Average: On seal				
Spill Pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

OTHER ISSUES:**THE DALLES****Birds:**

Small numbers of cormorants have been observed around the project. Hazing has ended for the season. See the bird tab below for species, number and location information. Appears resident osprey have fledged their offspring and all have left the nest.

Pikeminnow:

The Columbia River Northern Pikeminnow Management Program Dam Angling and Site-Specific Fishery: This week dam angling 29.87 hours, 80 total NPM, 80 NPM \geq 230 mm, nine game fish and two non-game fish. Year to date totals for the fishing season: Dam angling 705.23 hours, 1,129 NPM, 1,121 NPM \geq 230 mm, 33 sturgeon, 87 game fish, and ten non-game fish. The season's management program has been extended. Electro fishing year to date totals: 24 NPM tagged, 23 effort hours, 24 \geq 230mm, 74 adult salmonids, 991 juvenile salmonids, 30 sturgeon, 240 game fish, and 3,901 non-game fish.

Operations:

Gateway drawdown was completed on 09/16/11. Differentials ranged between 0.2' - 0.7' and are all within criteria.

Calibration was not completed this week due to excessive wind.

The third fishway daily inspections trend taken from the fisheries office SCADA system indicated that all fishway entrances and exits remained in criteria during the absence of fisheries personnel from 1700 hrs. to 0630 hrs.

Fall Chinook and Coho passage numbers slightly increasing. All fishways maintaining criteria operation.

Maintenance:

A Bathymetry survey of The Dalles Dam stilling basing is scheduled for 9/27 to 9/28. This will be a three day effort to set up equipment on the spillway deck downstream end of the Westrick park near bay 23, and the actual survey. The survey will be accomplished without interruption to auxiliary water system (AWS) flow to the south and north fish entrances. There will be an option to have the Peoples Utility District (PUD) shut down their AWS to the north entrance for a short time (~ 0.5 hour) due to flow and possible disruption to sonar readings.

There will be a dive survey of both sides of the 8/9 spill wall on 10/6 to 10/7.

Site visit for The Dalles east fish ladder exit weir replacement scheduled for 9/22. Projects team is putting a contract together to replace weirs as money becomes available. Plans and specifications should be completed by the end of September.

Pacific Northwest National Laboratory (PNNL) is scheduled 9/27 to inspect all trolley pipes on each pier of the spillway forebay to start preparing for repairs and replacement of the trolley pipes that were lost or damaged during this spring. Portland will be contracting divers to replace the missing pipes and properly secure the other pipes sometime this winter. In order to determine the condition of the pipes on the piers, PNNL will use a work boat with personnel on board and boat up to each pipe and inspect the attachments for issues. The work is expected to take ~ 4 hours to complete.

Due to low tailwater (76') fisheries are unable to maintain 7' depth of water over weir JP6. Currently weir has been pulled completely out of the collection channel to achieve weir criteria.

Studies:

The fourth Veliger sample was sent off to Portland State University in order to monitor possible Dressined (Quagga and Zebra) mussel introduction to the Columbia River.

East fish way backup water supply study support continues. Project engineering is planning scope of work for dewatering fish lock channels, cleaning supply piping and testing the amount of water that can be provided by the fish lock system.

Research:

Oregon Department of Fish and Wildlife Bass Angling Project: The seasons program concluded 8/31.

Approved by;
Ron D. Twiner
Operation Project Manager
The Dalles Dam

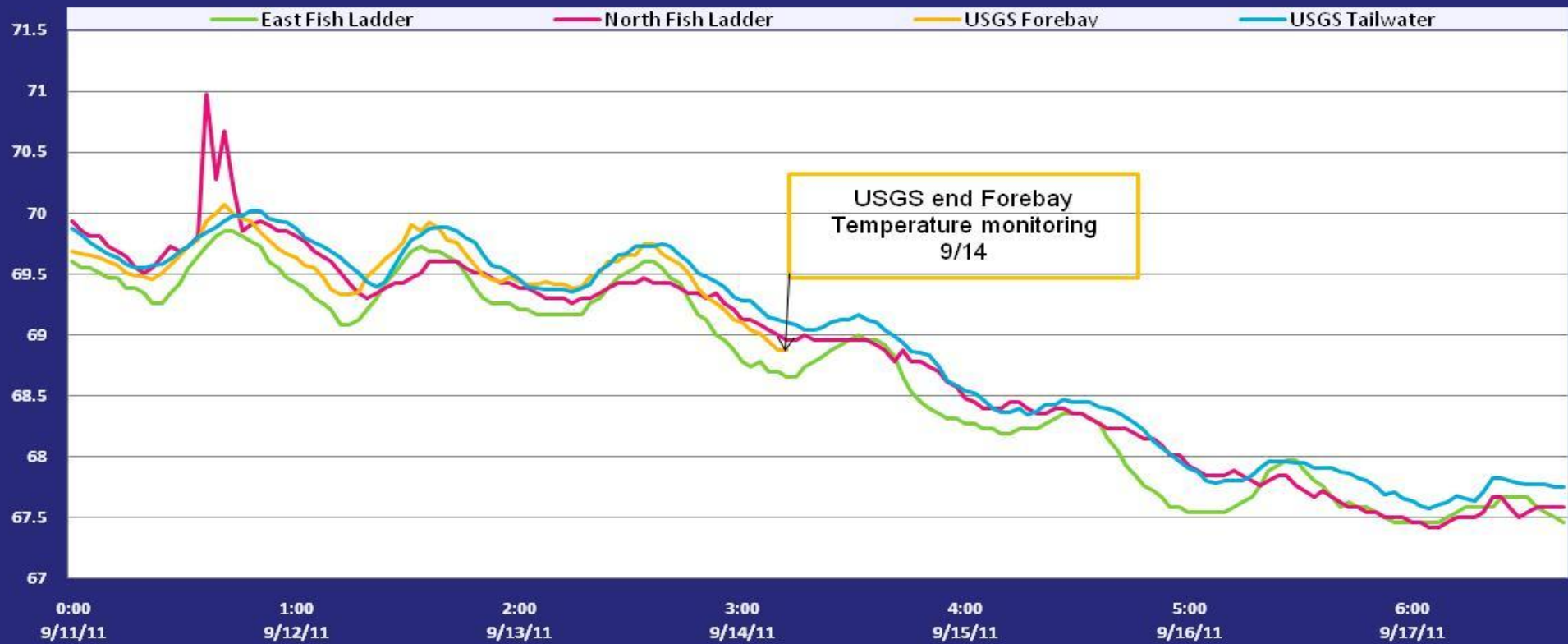
The Dalles Dam Fish Counts

Date	East	North	East	North	Total	Total	East	North					East	North					Spill
	Chinook	Chinook	Chinook	Chinook	East	North	Unclipped	Unclipped	East	North	East	North	Coho	Coho	East	North	East	North	Spill
	Adult	Adult	Jack	Jack	Sthd	Sthd	Sthd	Sthd	Sock	Sock	Coho	Coho	Jack	Jack	Lamprey	Lamprey	Pink	Pink	Volume
11-Sep	6995	1322	1799	229	1752	286	379	77	0	0	758	191	77	20	12	6	16	4	O N S E A L
12-Sep	10295	655	2075	157	2556	244	534	54	0	0	1157	175	97	17	8	2	30	1	
13-Sep	5365	359	2048	227	2634	321	522	56	1	0	1356	296	97	8	14	8	17	2	
14-Sep	6508	266	1888	131	3933	363	841	79	0	0	1614	144	124	7	6	11	16	6	
15-Sep	6428	227	1956	130	4690	585	882	107	0	0	2615	268	118	268	1	8	22	4	
16-Sep	7241	104	2806	88	5743	426	1272	74	0	0	2170	246	167	5	11	7	22	5	
17-Sep	9864	286	2912	140	4808	809	1063	178	0	0	2388	372	136	8	5	2	20	4	
Wkly Tot	52696	3219	15484	1102	26116	3034	5493	625	1	0	12058	1692	816	333	57	44	143	26	
% Split	94.2%	5.8%	93.4%	6.6%	89.6%	10.4%	89.8%	10.2%	0.2%	0.0%	87.7%	12.3%	71.0%	29.0%	56.4%	43.6%	84.62%	15.38%	

Spill range: On seal.

°F

The Dalles River/Water Temperatures



The Dalles Dam Maximum Daily Bird Observations

Washington Shore

SW-T1: two cormorants.

SW-T3: 30 cormorants resting on rocks.

SW-T4: no birds.

FB1: 56 cormorants in the towers, three cormorants and one gull resting on water.

SW-T2: three cormorants.

PH-T1: 24 cormorants resting on rocks and in the water.

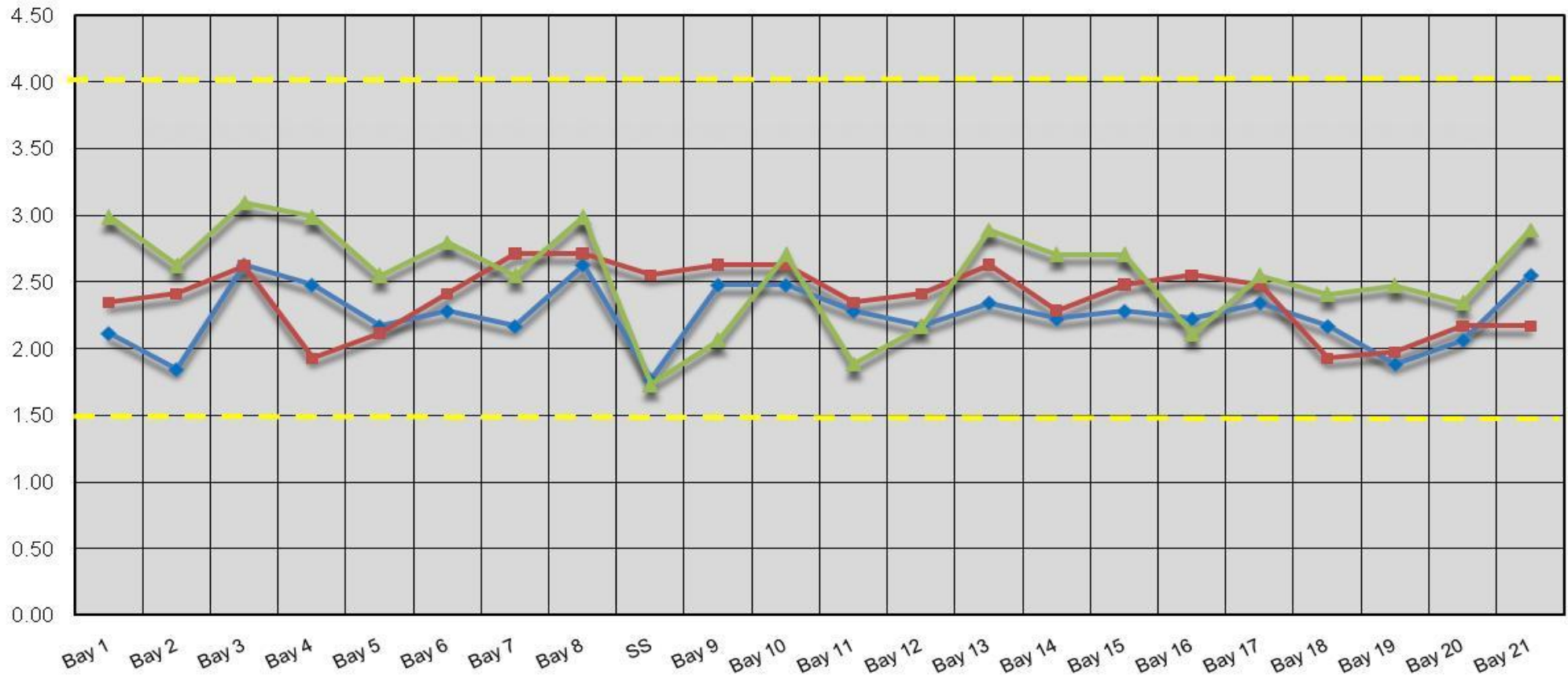
PH-T2: no birds.

PH-T3: no birds.

Oregon Shore

The Dalles Dam Collection Channel Velocities (fps)

9/12/2011 9/13/2011 9/14/2011



Temp:		Secchi:	
68.8	SUN	6.0	
68.7	MON	5.5	
68.5	TUES	6.0	
67.9	WED	5.5	
67.7	THUR	6.0	
67.7	FRI	5.0	
67.9	SAT	5.0	
AVG: 68.2	AVG:	5.6	

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

North Fish Ladder			East Fish Ladder												% Spill
North Entrance		East Entrance						West Entrance				South Entrance			
Date:	Differential	N1 Depth	Differential	E1Depth	E2 Depth	E3 Depth	JP 6	Differential	W1Depth	W2 Depth	W3 Depth	Differential	S1 Depth	S2 Depth	
9/11/11	1.0	9.1	1.7	3.9	11.1	11.1	9.2	1.4	8.2	8.3		1.3	8.3	8.3	
9/11/11	1.3	9.1	1.4	4.0	11.0	11.0	7.9	1.2	8.6	8.5		1.2	8.3	8.2	
9/11/11			1.6	2.1	11.2	11.8		1.2	8.5	8.4		1.1	8.4	8.3	
9/12/11	1.4	9.2	1.6	6.0	11.5	11.5	11.7	1.6	9.0	9.1		1.5	8.2	8.3	
9/12/11	1.5	9.0	1.5	6.0	12.6	12.6	11	1.4	9.1	9.1		1.3	8.3	8.3	
9/12/11			1.9	4.0	11.0	11.0		1.6	8.3	8.3		1.3	8.3	8.3	
9/13/11	1.4	8.9	1.4	7.3	11.5	11.5	10.1	1.4	8.3	8.5		1.3	8.3	8.2	
9/13/11	1.4	8.8	1.6	8.1	11.0	11.0	9.1	1.5	8.2	8.2		1.2	8.3	8.4	
9/13/11			1.3	5.9	11.4	11.4		1.0	9.0	9.0		1.2	8.3	8.2	
9/14/11	1.4	8.7	1.5	5.1	11.6	11.6	10.6	1.2	9.3	9.2		1.4	8.3	7.4	
9/14/11	1.5	8.6	1.8	2.9	11.1	11.1	9.5	1.5	8.4	8.3		1.3	8.2	8.3	
9/14/11			1.2	7.8	11.2	11.7		1.3	8.4	8.3		1.0	8.3	8.3	
9/15/11	1.5	8.5	1.6	4.6	11.6	11.5	10.6	1.3	8.8	8.8		1.3	8.3	8.3	
9/15/11	1.4	8.7	1.6	3.6	11.5	11.5	9.6	1.4	8.1	8.1		1.3	8.2	8.2	
9/15/11			1.4	2.8	11.5	11.5		1.6	8.6	8.5		1.2	8.4	8.3	
9/16/11	1.3	9.6	1.6	5.5	11.5	11.6	10.5	1.2	9.4	9.5		1.4	8.2	8.3	
9/16/11	1.3	9.5	1.6	5.2	11.5	11.5	10.5	1.4	9.1	9.1		1.4	8.3	8.3	
9/16/11			1.5	5.1	11.4	11.4		1.3	9.0	9.1		1.3	8.3	8.3	
9/17/11	1.3	9.4	1.6	5.5	11.4	11.4	11.4	1.3	9.3	9.3		1.4	8.3	8.3	
9/17/11	1.1	9.6	1.5	4.3	11.5	11.6	11.7	1.2	8.7	8.8		1.2	8.4	8.3	
9/17/11			1.5	4.1	11.5	11.6		1.3	8.5	8.5		1.3	8.3	8.2	
AVG:	1.3	9.1	1.5	4.9	11.4	11.5	10.2	1.3	8.7	8.7	Closed	1.3	8.3	8.2	

ON SEAL

Third fish way inspection for east fish ladder, east, west, and south entrances completed via automation system in fisheries office.