

FISHWAY STATUS REPORT

THE DALLES DAM

Date: 10/24/2011
 Inspection Period: 10/16 - 10/22/2011



**US Army Corps
 of Engineers**
 Portland District

The Dalles Project-Fisheries
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Fishways are inspected twice daily. Additional daily monitoring done via automation system in fisheries office.

The Dalles Dam	Inspections Out of Criteria	Criteria Limit	Total Number of Inspections: 21		Temperature: 61.1 F	
			Comments		Secchi: 6.1	Ft.
NORTH FISHWAY						
Exit differential	0	≤ 0.5'				
Count station differential	0	≤ 0.3'	Window cleaned 1/17.			
Weir crest depth	0	1.0' ± 0.1'				
Entrance differential	1	1.0' - 2.0'	Average 1.4	0.7'; see PUD comments below.		
Entrance weir N1	0	depth (≥ 8')	Average 9.5			
Entrance weir N2		Closed	Bulkhead installed			
PUD Intake differential	2	≤ 0.5'	0.6'; Maintenance to rake trash rack.			
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 10/17, 10/19, 10/21. Window cleaned 10/17.			
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 and weir depths, see AVGS tab.		
Entrance weir E1	0	No criteria	Average 5.4	Manually adjusted.		
Entrance weir E2	0	depth (≥ 8')	Average 11.3			
Entrance weir E3	0	depth (≥ 8')	Average 11.3			
Collection channel velocity	0	1.5 - 4 fps	Average 2.3	See Velocities tab for more complete information.		
West entrance differential	0	1.0' - 2.0'	Average 1.4			
Entrance weir W1	0	depth (≥ 8')	Average 8.2			
Entrance weir W2	0	depth (≥ 8')	Average 8.2			
Entrance weir W3	0	No criteria	Average Closed			
South entrance differential	0	1.0' - 2.0'	Average 1.4	Daily differentials & weir depths, see AVGS tab.		
Entrance weir S1	0	depth (≥ 8')	Average 8.3			
Entrance weir S2	0	depth (≥ 8')	Average 8.3			
JUVENILE PASSAGE						
Sluiceway operation	0	units 1,8,18				
Turbine trashrack drawdown	0	<1.5', wkly	Range: 0.1' - 0.5'			
Spill volume	0	40%, 24hr	Average On seal.			
Spill Pattern	0	per FPP	On seal.			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

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

Few grebes and gulls but mostly cormorants around the project. Intermittent Mergansers present at tailrace normal for this time of year. See the Avian Distribution tab below for details. Final Memorandum of Agreement for USDA bird abatement completed. Will include mid April to May. Fisheries Field Unit (FFU) prepared a draft proposal for the evaluation of interaction between over-wintering bald eagles and the avian line array at The Dalles Project. Results will help in future avian abatement management in this area.

Pikeminnow:

The Columbia River Northern Pikeminnow Management Program Dam Angling and Site-Specific Fishery: The study concluded on 10/7/11.

Operations:

Calibration completed on 10/18. East entrance off, but still within operating criteria. Maintenance notified.

Gatewell drawdown was completed on 10/22. The criteria for the difference between the forebay and the gatewell in criteria.

The third fishway daily inspections trend taken from the fisheries office SCADA system indicated that the east entrance differential was out of criteria 10/19 (0920 - 1020 hrs) and 10/21 (0530 - 0647 hrs.) ranging from 2.1' - 2.2'). Corrected by automation.

Maintenance:

Planning is underway for fishway dewatering and preventative maintenance list. Dewatering season is 12/1/11 to 2/29/12.

The People's Utility District (PUD) turbine cooling system failed 10/17. Immediately placed into plunge pool bypass. North maintaining criteria. ETR late next week.

Fishlock debris flush occurred 10/17. ROV inspection of sills by fisheries 10/18.

Planning underway for Battelle's juvenile salmon acoustic tags (JSATS) project and specific issues that need to be addressed for the 2012 field season. Five to six days dive work required to remove the rest of the derelict USGS acoustic gear from half the powerhouse main turbine unit piernoses. Also includes some spillway trolley pipes that need to be fabricated/repaired and installed.

Due to low tailwater, fisheries are unable to maintain > 7' depth for water over weir JP-6. Currently the weir has been raised completely out of the junction pool to achieve criteria.

Studies:

NWW/NWP inland avian predation work group meeting at Westrick scheduled for 10/25.

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:

U.S. Fish and Wildlife and Columbia River Inter-Tribal Fish Commission (CRITFC) pulled lamprey video equipment out from between the count stations picket leads. Monitoring has concluded for the season.

Washington Department of Fish and Wildlife (WDFW) fish counters on site through end of October.

Battelle juvenile salmon acoustic tags (JSAT) research demobilizing equipment for winter as needed.

Oregon Department of Fish and Wildlife (ODFW) bass angling finished their field activities at the end of August and are currently working on diet sample lab work. The draft report will be completed some time in February. Preliminary analysis of the catch and effort data propose a June to September sample period for next year.

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

The Dalles Dam Maximum Daily Bird Observations

Washington Shore

SW-T1: One cormorant active.

SW-T3: One great blue heron resting on rocks, 11 to 43 cormorants and 32 gulls resting on rocks.

SW-T4: No birds.

FB1: One to two gulls active, three to 19 grebes active and resting on water, five to 40 cormorants roosting on the Washington shore electrical towers, four cormorants resting on water.

PH-T1: Seven to 12 mergansers resting on water, eight to 28 cormorants resting on rocks and water.

PH-T2: One cormorant resting on water, two gulls resting on rocks.

PH-T3: Two cormorants fly-by, three mergansers resting on water, and two to 18 gulls fly-by.

SW-T2: One to two cormorants active, 34 gulls resting on rocks (five active).

Oregon Shore

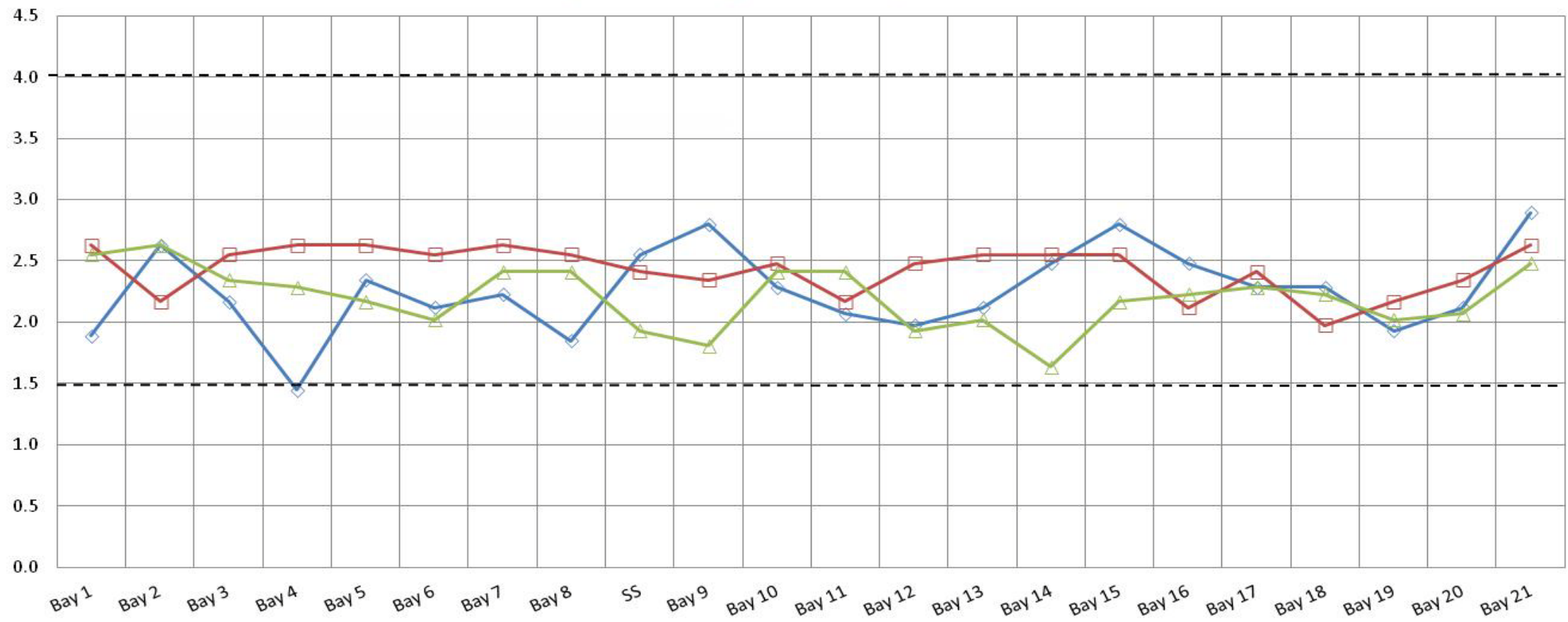
The Dalles Dam Fish Counts

Date	East	North	East	North	Total	Total	East	North					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
16-Oct	726	8	253	10	333	30	97	2	0	0	203	29	13	1	0	0	6	0	o n s e a l
17-Oct	724	17	235	11	346	25	130	8	0	0	206	42	7	1	1	0	0	2	
18-Oct	708	12	235	11	280	41	116	16	0	0	149	34	12	1	1	1	2	0	
19-Oct	402	11	160	17	180	23	65	1	0	0	108	22	5	0	1	0	1	0	
20-Oct	515	30	192	26	238	23	102	4	0	0	136	19	8	0	0	0	0	0	
21-Oct	540	13	176	12	216	17	90	6	0	0	65	22	1	1	0	0	0	0	
22-Oct	560	10	158	10	232	33	92	10	0	0	90	14	1	1	0	0	0	0	
Wkly Tot	4175	101	1409	97	1825	192	692	47	0	0	957	182	47	5	3	1	9	2	
% Split	97.6%	2.4%	93.6%	6.4%	90.5%	9.5%	93.6%	6.4%	0.0%	#DIV/0!	84.0%	16.0%	90.4%	9.6%	75.0%	25.0%	81.82%	18.2%	

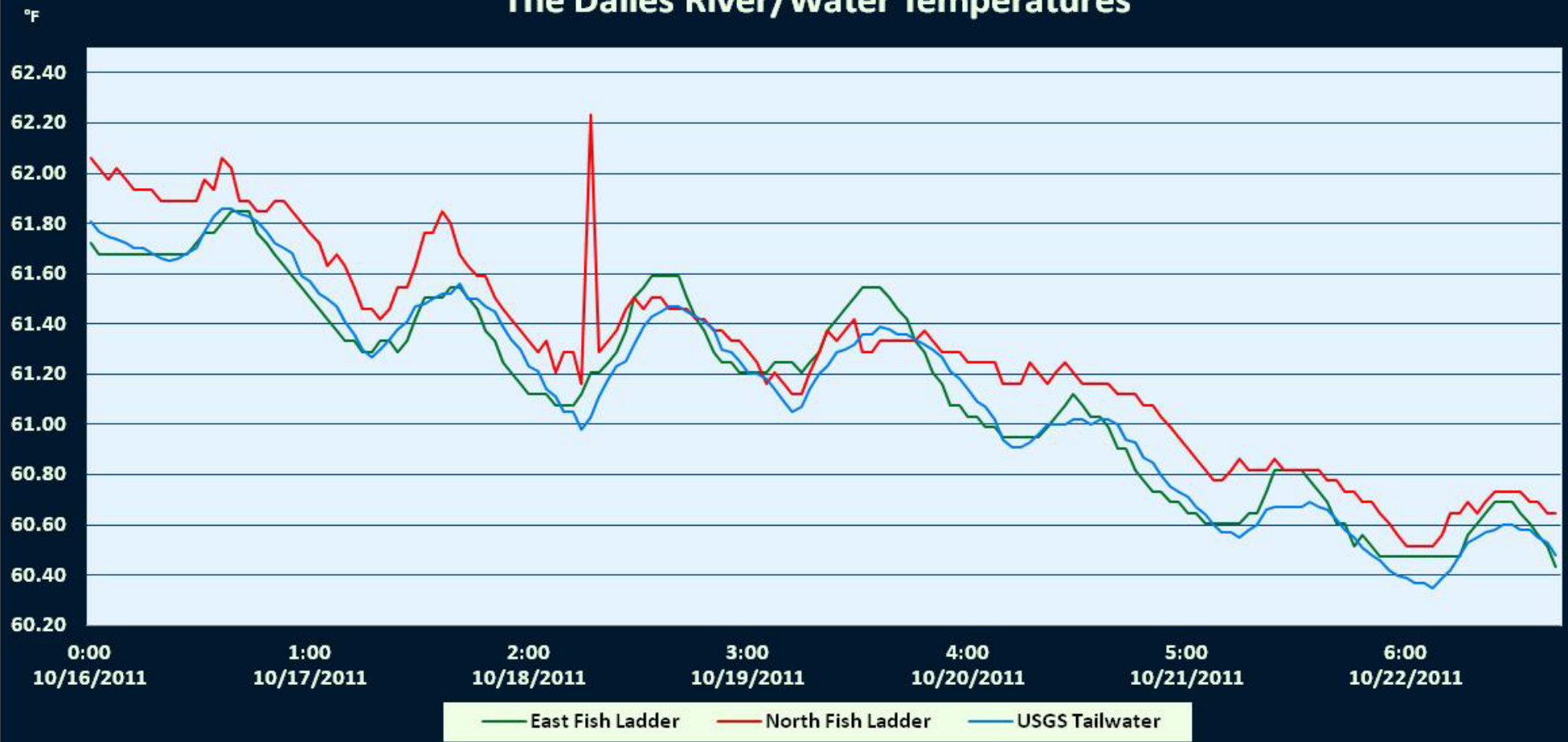
Spill range: On seal.

The Dalles Dam Collection Channel Velocities (fps)

10/19/2011 10/20/2011 10/21/2011



The Dalles River/Water Temperatures



Temp:			Secchi:	
	61.7	SUN		6.0
	61.4	MON		6.0
	61.3	TUES		6.0
	61.3	WED		6.0
	61.0	THUR		6.5
	60.7	FRI		6.0
	60.5	SAT		6.3
AVG:	61.1	AVG:		6.1

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

Date:	North Fish Ladder			East Fish Ladder											% Spill
	North Entrance		East Entrance					West Entrance				South Entrance			
	Differential	N1 Depth	Differential	E1Depth	E2 Depth	E3 Depth	JP 6	Differential	W1Depth	W2 Depth	W3 Depth	Differential	S1 Depth	S2 Depth	
10/16/11	1.3	9.4	1.4	6.5	11.5	11.5	10.8	1.6	8.1	8.1		1.4	8.4	8.4	ON SEAL
10/16/11	1.2	9.4	1.2	6.5	11.6	11.6	9.8	1.3	8.3	8.3		1.3	8.3	8.3	
10/16/11			1.2	6.4	11.6	11.4		1.3	8.1	8.2		1.3	8.2	8.3	
10/17/11	1.4	9.3	1.6	6.5	11.6	11.5	10.6	1.6	8.2	8.2		1.3	8.4	8.4	
10/17/11	0.7	9.4	1.7	6.5	11.5	11.5	10.8	1.4	8.3	8.3		1.5	8.2	8.2	
10/17/11			1.3	6.5	11.5	11.6		1.3	8.2	8.3		1.3	8.4	8.4	
10/18/11	1.4	9.2	1.6	0.9	11.0	11.0	8.6	1.3	8.2	8.1		1.4	8.3	8.2	
10/18/11	1.4	9.7	1.9	0.8	11.0	11.0	9.2	1.4	8.2	8.1		1.4	8.3	8.2	
10/18/11			1.2	5.7	11.0	11.5		1.2	8.0	8.1		1.2	8.3	8.3	
10/19/11	1.5	9.7	1.3	2.0	11.0	11.1	8.2	1.1	8.3	8.1		1.2	8.5	8.4	
10/19/11	1.4	9.8	1.9	2.0	10.9	11.0	9.2	1.4	8.1	8.2		1.3	8.3	8.2	
10/19/11			1.5	2.1	11.1	11.0		1.2	8.2	8.3		1.3	8.2	8.3	
10/20/11	1.5	9.6	1.8	4.0	11.0	11.0	9.9	1.5	8.3	8.1		1.4	8.4	8.3	
10/20/11	1.5	9.4	1.6	closed	11.0	11.1	9.2	1.4	8.2	8.3		1.3	8.4	8.4	
10/20/11			1.4	4.0	11.1	11.1		1.1	8.2	8.3		1.2	8.5	8.2	
10/21/11	1.5	9.6	1.7	8.1	11.6	11.6	10.6	1.5	8.3	8.3		1.5	8.2	8.2	
10/21/11	1.4	9.8	1.6	8.0	11.5	11.5	10.5	1.5	8.3	8.3		1.4	8.3	8.3	
10/21/11			1.7	8.0	11.5	11.5		1.6	8.1	8.2		1.4	8.3	8.3	
10/22/11	1.4	9.6	1.6	7.9	11.5	11.5	10.1	1.4	8.3	8.3		1.4	8.2	8.3	
10/22/11	1.4	9.6	1.6	8.1	11.5	11.5	10.3	1.5	8.2	8.1		1.3	8.3	8.3	
10/22/11			1.6	7.9	11.5	11.5		1.5	8.1	8.1		1.4	8.2	8.3	
AVG:	1.4	9.5	1.5	5.4	11.3	11.3	9.8	1.4	8.2	8.2	Closed	1.3	8.3	8.3	

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