

FISHWAY STATUS REPORT

Date: 7/31/2011
 Inspection Period: 7/24 to 7/30/2011

THE DALLES DAM



**US Army Corps
of Engineers**
Portland District

The Dalles Project-Fisheries
 P.O. Box 564
 The Dalles, OR 97058-9998
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Fishways are inspected twice daily.

The Dalles Dam	Inspections	Criteria	Total Number of Inspections:	20	Temperature:	65.4 °F
	Out of Criteria	Limit	Comments	Secchi:	4.0	Ft.
NORTH FISHWAY						
Exit differential	0	≤ 0.5'				
Count station differential	0	≤ 0.3'	Window cleaned on 7/25.			
Weir crest depth	0	1.0' ± 0.1'				
Entrance differential	0	1.0' - 2.0'	Average 1.3	Daily differentials & weir depths, see AVGS tab.		
Entrance weir N1	0	depth (≥ 8')	Average 10.1			
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'	Window cleaned 7/25, picket leads raked 7/25, 7/27, 7/30, staff gauges cleaned 7/27.			
Weir crest depth	0	1.0' ± 0.1'	Returned to 1.0 from 1.3' for shad passage on 7/19/11			
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 4.2	Manually adjusted.		
Entrance weir E2	0	depth (≥ 8')	Average 11.5			
Entrance weir E3	0	depth (≥ 8')	Average 11.6			
Collection channel velocity	0	1.5 - 4 fps	Average 2.7	See Velocities tab for more complete information.		
West entrance differential	0	1.0' - 2.0'	Average 1.5			
Entrance weir W1	0	depth (≥ 8')	Average 9.5			
Entrance weir W2	0	depth (≥ 8')	Average 9.6			
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 8.6			
Entrance weir S2	0	depth (≥ 8')	Average 8.5			
JUVENILE PASSAGE						
Sluiceway operation	0	units 1,8,16	18 changed to 16 on 7/25 due to line 6 taken out of service for powerhouse roof work.			
Turbine trashrack drawdown	0	<1.5', wkly	Range: 0.1' to 0.3'			
Spill volume	0	40%, 24hr	Average 39.8			
Spill Pattern	0	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

OTHER ISSUES:**THE DALLES**

Birds: Bird numbers continue to be low to moderate. USDA hazes 16 hours per day everyday of the week. See bird tab below for information on numbers, species and location. Evaluating Fish Field Unit observations and smolt index numbers to determine if hazing extension needed beyond 7/31 deadline.

Pikeminnow:

The Columbia River Northern Pikeminnow Management Dam Angling Program: angler effort 59.17 hours, 189 total northern pikeminnow captured, 189 northern pikeminnow \geq 230 mm, three sturgeon, nine game fish, and two non-game fish. The anglers are presently catching mostly small male pikeminnow.

Operations:

Gatewell drawdown was completed on 7/30. The differentials ranged from 0.1' to 0.3', all well within criteria.

Calibration was completed on 7/29. A couple of channel and tailwater elevations OOC by 0.2', and several weirs are out of criteria. Electricians have been notified.

Main Unit 22 is scheduled for maintenance and fishing 8/2. TDM plans to release tail logs 8/4.

The Dalles Dam Lamprey Collection Facilities Tour scheduled 8/15 to look for sites to improve trapping and improve short term storage (a few days) , end product to develop a Lamprey Collection Plan that would benefit both Tribes and research effort. This includes handling protocols, allocation, and what is needed to create a more comprehensive approach than currently available.

The Ice/trash sluiceway chain gates on 16-2 and 16-2 opened 7/25. This is now the new priority unit. Units 18-2 and 18-3 hoist gates closed.

Maintenance:

ROV inspection of unit trashracks 18, 19, and 20 completed 7/27. A few sticks were observed. An earlier July inspection was postponed due to high flows. On 8/3 a ROV is scheduled for inspection of all fishway entrances, collection channel, and transportation channel diffusion grating. Powerhouse roof rehab has begun, Main Units 17-22 out of service and was coordinated with FPOM. Concerns were raised on potential lack of attraction flow for adult to the east entrance. Flow into tailrace and east fishladder counts are being monitored for potential problems. The average attraction velocity to the east entrance in the tailrace from Main Unit 22 (which is next to the east entrance) to the boil caused by Main Unit 16 is 1.9 fps.

Studies:

The Dalles Adult PIT Tag Study for adult salmonid passage audio conference occurred 7/28. Agenda items included action items from 7/12 review and alternative analysis action items and focus on locations. Possible locations at the east fishladder exit are to fabricate a new fiber-glass reinforced concrete weir 154, antennas at weirs 152 and 153 or telescoping weirs 158 and 159. Also discussed was the possibility of using ferrite tiles to shield antenna from steel and rebar.

East fishladder backup water supply study. No progress this week.

Research:

Fisheries Field Unit's (FFU) Avian Predation Study: observations have concluded 7/28. FFU may do cursory observations for an extended two week period.

This weeks effort for Confederated Tribes Umatilla Indian Reservation (CTUIR), and Yakama Nation lamprey trapping; captured 80 lamprey from the east fish ladder between the picket leads, none captured from the north fish ladder between picket leads, and none from the south rocky channel.

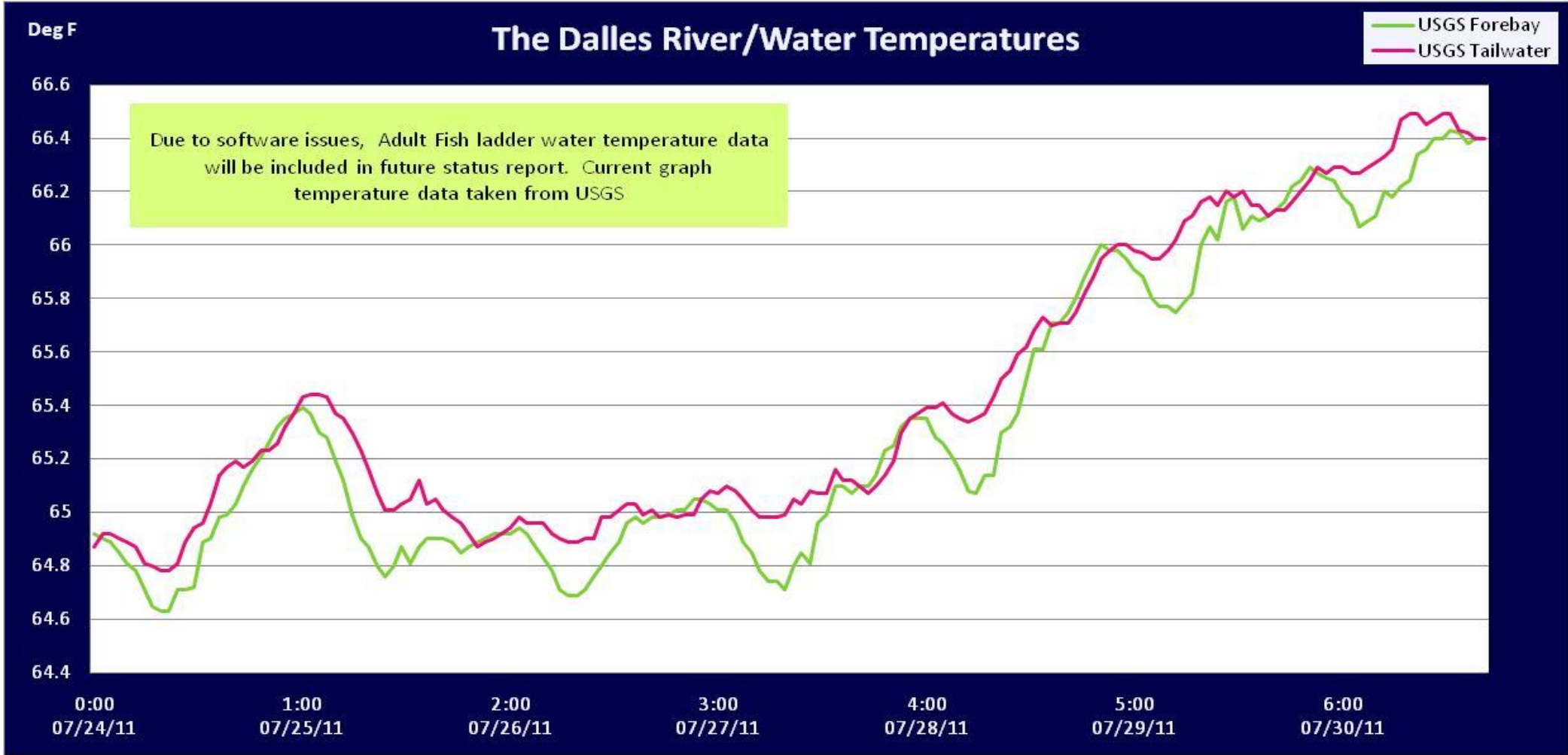
Oregon Department of Fish and Wildlife Bass Dam Angling Project: The Dalles forebay angler effort 20 hours, twelve smallmouth bass captured, eight new tag, four recaptured. There was no angling in the tailrace.

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

The Dalles Dam Adult Ladders Weekly Usage with Spill Percent

Date	East Chinook Adult	North Chinook Adult	East Chinook Jack	North Chinook Jack	Total East Sthd	Total North Sthd	East Unclipped Sthd	North Unclipped Sthd	East Sock	North Sock	East Coho	North Coho	East Coho Jack	North Coho Jack	East Lamprey	North Lamprey	Spill Volume
7/24/11	593	131	310	43	2158	458	1158	298	221	30	0	0	0	0	28	35	39.9
7/25/11	550	132	365	20	2535	559	1387	338	241	22	1	0	0	0	32	83	40.3
7/26/11	2118	48	832	0	124	0	46	0	5591	1	0	0	0	0	1	0	42.6
7/27/11	1948	217	1276	2	180	0	47	0	7073	19	0	0	0	0	6	1	38.1
7/28/11	1512	53	784	5	155	0	67	0	5506	1	0	0	0	0	2	2	38.2
7/29/11	1612	185	994	12	181	7	44	2	4721	28	0	0	0	0	5	1	36.2
7/30/11	1586	35	953	1	174	2	72	0	5635	11	0	0	0	0	2	0	38.2
Wkly Tot	9919	801	5514	83	5507	1026	2821	638	28988	112	1	0	0	0	76	122	
% Split	92.5%	7.5%	98.5%	1.5%	84.3%	15.7%	81.6%	18.4%	99.6%	0.4%	100.0%	0.0%	#DIV/0!	#DIV/0!	38.4%	61.6%	

Spill range: 36.2% to 42.6%



The Dalles Dam Maximum Daily Bird Observations

Washington Shore

SW-T1: no birds.

SW-T3: Four cormorants active.

SW-T4: Five to 33 pelicans resting on water and rocks, one gull active, and one cormorant fly by.

FB1: Five to 58 cormorants roosting on electrical towers, four to 61 gulls resting on water, three grebes active, and one osprey active.

SW-T2: No birds.

PH-T1: Three to eleven cormorants active.

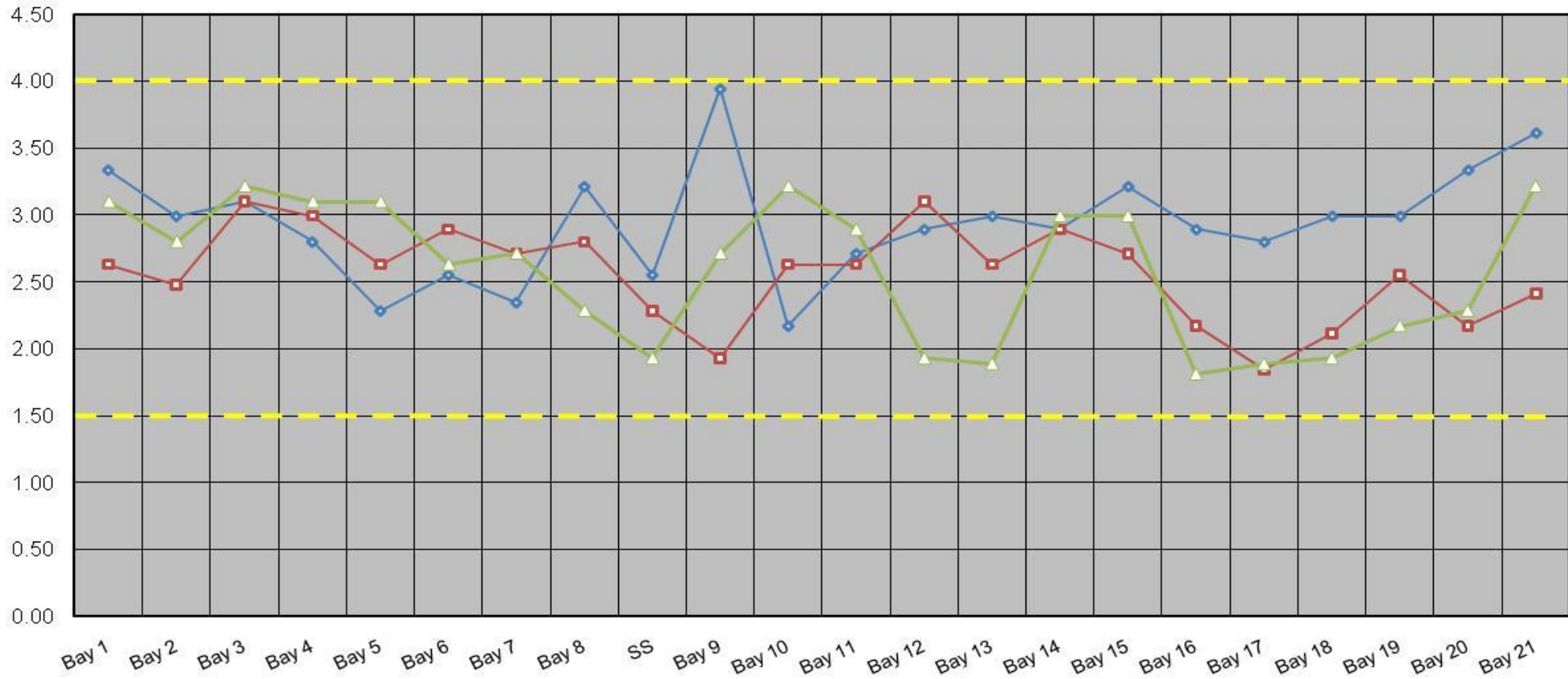
PH-T2: no birds.

PH-T3: One cormorant

Oregon Shore

The Dalles Dam Collection Channel Velocities (fps)

7/27/2011 7/28/2011 7/29/2011



Temp:		Secchi:	
	64.96	SUN	4.0
	65.07	MON	4.0
	64.92	TUES	4.0
	65.01	WED	4.5
	65.44	THUR	3.8
	66.02	FRI	4.2
	66.31	SAT	3.5
AVG:	65.39	AVG:	4.0

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

North Fish Ladder			East Fish Ladder												
<i>North Entrance</i>			<i>East Entrance</i>					<i>West Entrance</i>				<i>South Entrance</i>			
Date:	Differential	N1 Depth	Differential	E1Depth	E2 Depth	E3 Depth	JP 6	Differential	W1Depth	W2 Depth	W3 Depth	Differential	S1 Depth	S2 Depth	% Spill
24-Jul-11	1.2	10.2	1.5	4.0	11.1	11.0	8.2	1.4	9.2	9.2		1.4	8.5	8.5	40.8
24-Jul-11	1.4	10.1	1.7	4.1	11.5	11.5	11.3	1.7	9.5	9.6		1.2	11.0	8.4	39.7
24-Jul-11			1.4	4.0	10.9	10.9		1.2	9.7	9.7		1.3	8.6	8.6	
25-Jul-11	1.4	10.1	1.3	5.4	11.1	11.2	9.1	1.3	10.0	10.0		1.3	8.5	8.5	39.6
25-Jul-11	1.4	10.0	1.6	5.5	11.2	11.2	10.8	1.5	10.0	10.0		1.4	8.5	8.5	38.9
25-Jul-11			1.2	5.5	11.6	11.5		1.3	9.9	10.0		1.3	8.4	8.4	
26-Jul-11	1.3	10.1	1.8	3.5	10.5	10.5		1.4	10.0	10.0		1.4	8.6	8.5	39.5
26-Jul-11	1.4	10.0	1.9	3.6	10.5	10.5		1.5	10.0	10.0		1.3	8.6	8.1	39.8
26-Jul-11			1.9	3.5	10.6	10.6		1.6	10.1	10.1		1.4	8.6	8.5	
27-Jul-11	1.3	10.1	1.4	3.6	12.0	12.0	9.2	1.4	10.0	10.0		1.6	8.2	8.2	39.8
27-Jul-11	1.3	10.0	1.5	3.5	11.9	11.9		1.4	10.0	10.1		1.4	8.5	8.5	39.7
27-Jul-11															
28-Jul-11	1.3	10.1	1.5		12.0	12.0	9.1	1.6	9.0	9.0		1.4	8.5	8.5	39.9
28-Jul-11	1.4	10.0	1.5		12.0	12.0	9.1	1.6	9.1	9.1		1.4	8.5	8.5	39.9
28-Jul-11			1.2		12.0	12.0		1.3	10.1	10.1		1.3	8.5	8.5	
29-Jul-11	1.3	10.1	1.3		11.9	12.0	7.3	1.4	9.0	8.9		1.3	8.4	8.4	40.1
29-Jul-11	1.4	10.0	1.4		12.0	12.1	9.5	1.6	9.0	9.1		1.4	8.5	8.6	39.1
29-Jul-11			1.7		11.9	12.1		1.7	9.0	9.1		1.4	8.6	8.5	
30-Jul-11	1.2	10.1	1.3		12.1	12.0	8.2	1.5	9.0	9.0		1.3	8.6	8.6	40.0
30-Jul-11	1.3	10.1	1.6		12.0	12.1	9.1	1.6	9.0	9.0		1.4	8.4	8.4	39.7
30-Jul-11			1.4		12.1	12.0		1.4	9.0	9.0		1.3	8.5	8.6	
AVG:	1.3	10.1	1.5	4.2	11.5	11.6	9.2	1.5	9.5	9.6	Closed	1.4	8.6	8.5	39.8

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



Attraction flow at the east entrance with Main Units 17 to 22 out of service for powerhouse roof contract. Previously coordinated through FPOM.