

FISHWAY STATUS REPORT

Date: 06/19/11
 Inspection Period: 06/12-18/11

THE DALLES DAM



**US Army Corps
 of Engineers**
 Portland District

The Dalles Project-Fisheries
 P.O. Box 564
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Fishways are inspected twice daily. Additional daily monitoring done via automation system in fisheries office.

The Dalles Dam	Inspections	Criteria	Total Number of Inspections:			
	Out of Criteria	Limit	Comments	Secchi:	2.5	Ft.
NORTH FISHWAY						
Exit differential	0	≤ 0.5'				
Count station differential	0	≤ 0.3'	Count station window cleaned 6/13.			
Weir crest depth	0	1.0' ± 0.1'				
Entrance differential	0	1.0' - 2.0'	Average 1.4	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'	Picket leads need to be raked twice a day due to high debris. Window cleaned 6/13.			
Weir crest depth	0	1.0' ± 0.1'	Weir crest depth set at 1.3' for shad passage.			
Junction pool weir JP6	0	depth (≥ 7')	Manually adjusted as needed.			
East entrance differential	0	1.0' - 2.0'	Average 1.6	Daily differentials & weir depths, see AVGS tab.		
Entrance weir E1	0	No criteria	Average 10.3	Manually adjusted.		
Entrance weir E2	0	depth (≥ 8')	Average 10.2			
Entrance weir E3	0	depth (≥ 8')	Average 10.3			
Collection channel velocity	0	1.5 - 4 fps	Average 2.1	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 9.9			
Entrance weir W2	0	depth (≥ 8')	Average 9.9			
Entrance weir W3	0	No criteria	Average 7.6			
South entrance differential	0	1.0' - 2.0'	Average 1.6	Daily differentials & weir depths, see AVGS tab.		
Entrance weir S1	0	depth (≥ 8')	Average 11.0	Manually adjusted.		
Entrance weir S2	0	depth (≥ 8')	Average 11.0			
JUVENILE PASSAGE						
Sluiceway operation	0	units 1,8,18				
Turbine trashrack drawdown	0	<1.5', wkly	Range: 0.2'-1.0'			
Spill volume	14	40%, 24hr	Average 50.2	Spill above 40% due to large volume of water		
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. USDA has been hazing 16hr/day from a boat. See the bird tab below for more information on species, number and location of birds around the project.

USDA - Wildlife Services (non-lethal) bird hazing summary; California gulls total hazed 1,920 (per shift - high/low/aver.) 417, 0, 100. The highest number of gulls hazed occurred 0500 to 0900 hrs. The lowest number of gulls hazed occurred 1200 to 2030 hrs. Total pyro's used 1,322; (per shift - high, low, aver.) 294, 0, 70.

Pikeminnow:

The Columbia River Predator Control Program hook and line removal of northern pikeminnow from the forebay and tailrace is ongoing. Catch rates remain low due to high river flows.

Operations:

Calibration was completed on 06/09/11. Many values are out of criteria due to the high flows. Electricians have been notified.

Gatewell drawdown was completed on 06/10/11. The differentials ranged from 0.2 to 1.0' and all are within criteria.

Maintenance:

The east entrance automation inaccurate with high tailwater levels, but maintain criteria. Levels checked daily by tape.

Fish lock flush test on hold due to high flows.

Studies:

Supporting east fishladder backup water supply study as needed.

The Dalles Adult PIT Tag Study audio conference rescheduled for 6/21.

Research:

Fisheries Field Unit (FFU) conducting avian observations.

Battelle/Pacific Northwest National Laboratory (PNNL) juvenile salmonid acoustic telemetry (JSAT) tag research has been canceled for the rest of the study period because of the high river flows. All of the hydrophones, computers, etc. will remain in place and collect data on adult lamprey migrating upriver. The University of Idaho is doing the tagging at Bonneville Dam and Battelle will collect the data since the equipment is already in place. Data will be collected until the end of summer or early fall.

Washington Department of Fish and Wildlife (WDFW) fish counters started 4/1.

Washington Department of Fish and Wildlife (WDFW) Pikeminnow dam angling underway. Pikeminnow regurgitated juvenile lamprey are being collected for University of Idaho study.

Peoples' Utility District (PUD) juvenile sampling underway.

US Department of Agriculture (USDA) bird hazing started mid April through July.

US Fish and Wildlife lamprey passage and monitoring to occur 6/1 through 10/30. Cameras are mounted inside count station picket leads. USFWS checked camera mounts for lamprey abundance estimates.

The Yakama Nation sturgeon brood stock collection completed 6/17. A total of 244 sturgeon were captured from the east fishway cul-de-sac area.

Two mature female and nine mature male were transported by trailer to the Marion Drain hatchery. After spawning, all fish will be returned to the point of capture. The purpose of collection is brood stock for the mid-Columbia PUD sturgeon mitigation program conducted by Yakama Nation.

Oregon Department of Fish and Wildlife (ODFW) Bass Dam Angling Project; The Dalles forebay, fishermen effort 26 hours, caught 17 smallmouth bass, 17 new tag. The Dalles tailrace fishermen effort 28 hours, caught 24 smallmouth bass, 24 new tag.

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

The Dalles Dam Fish Counts

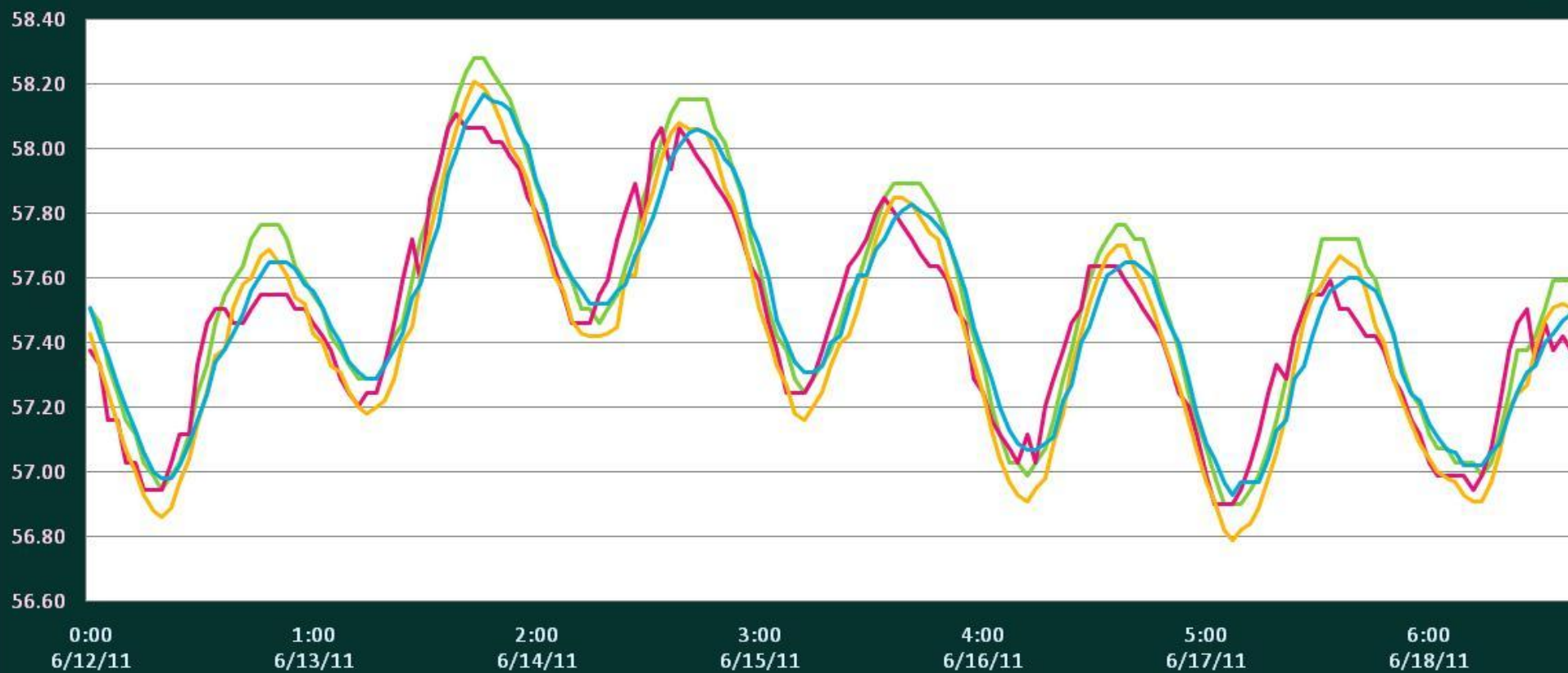
Date	East Chinook Adult	North Chinook Adult	East Chinook Jack	North Chinook Jack	Total East Sthd	Total North Sthd	East Wild Sthd	North Wild Sthd	East Sock	North Sock	East Coho	North Coho	East Coho Jack	North Coho Jack	East Lamprey	North Lamprey	Spill Volume
12-Jun	1718	349	832	4	29	2	4	1	172	0	0	0	0	0	0	0	48.0
13-Jun	1978	396	754	0	22	0	5	0	359	0	0	0	0	0	0	0	50.1
14-Jun	1920	574	835	10	48	0	10	0	485	0	0	0	0	0	0	0	50.3
15-Jun	1384	359	768	5	25	0	5	0	384	0	0	0	0	0	0	0	49.9
16-Jun	1157	330	606	7	31	1	5	0	593	0	0	0	0	0	0	0	53.1
17-Jun	1480	301	644	7	34	0	5	0	601	1	0	0	0	0	1	0	50.7
18-Jun	1226	235	690	2	22	1	10	1	700	0	0	0	0	0	0	0	47.9
Wkly Tot	10863	2544	5129	35	211	4	44	2	3294	1	0	0	0	0	1	0	
% Split	81.0%	19.0%	99.3%	0.7%	98.1%	1.9%	95.7%	4.3%	100.0%	0.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	100.0%	0.0%	50.0

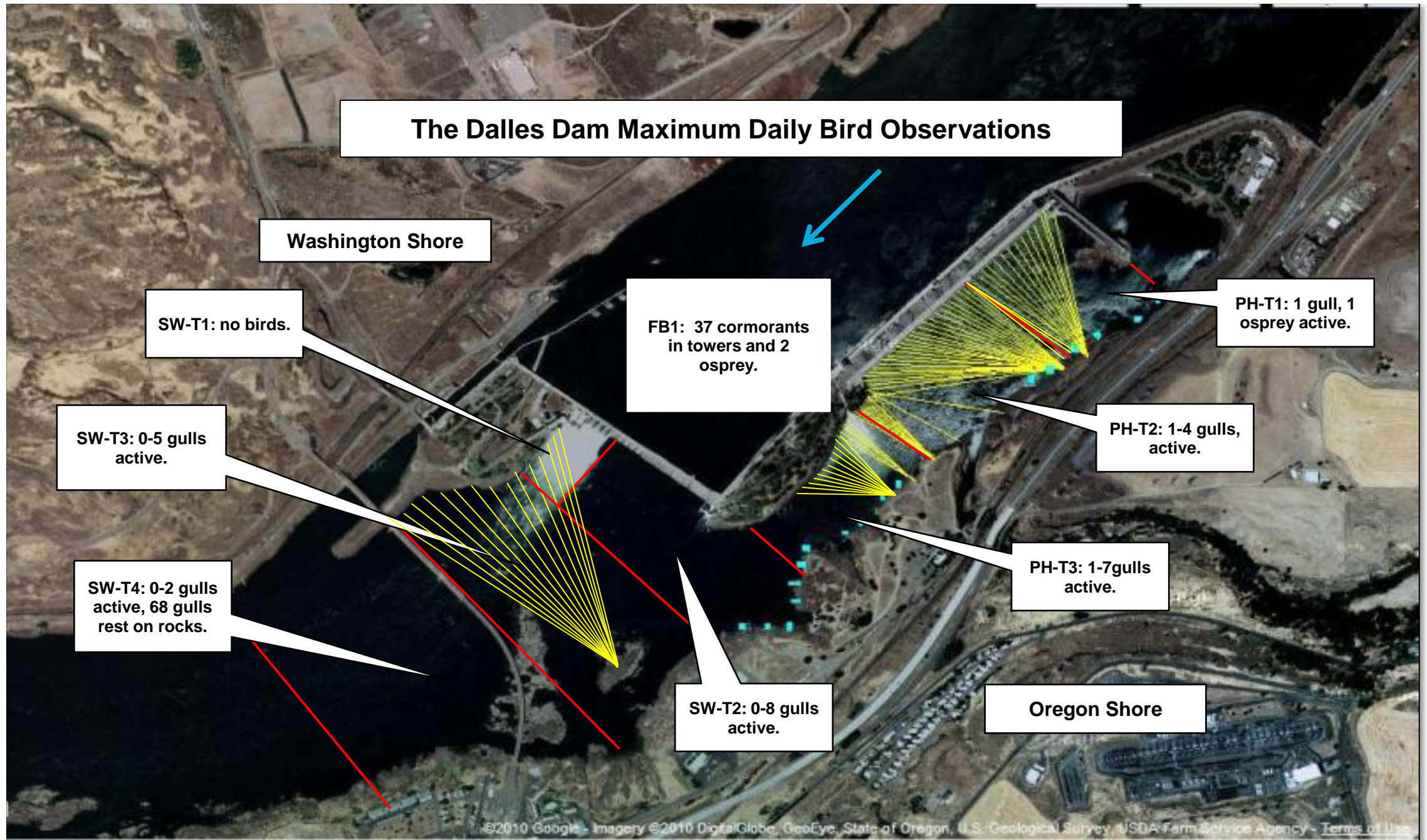
Spill range: 47.9 to 53.1 % spill volume

The Dalles River/Water Temperatures

- East Fish Ladder
- North Fish Ladder
- USGS Forebay
- USGS Tailwater

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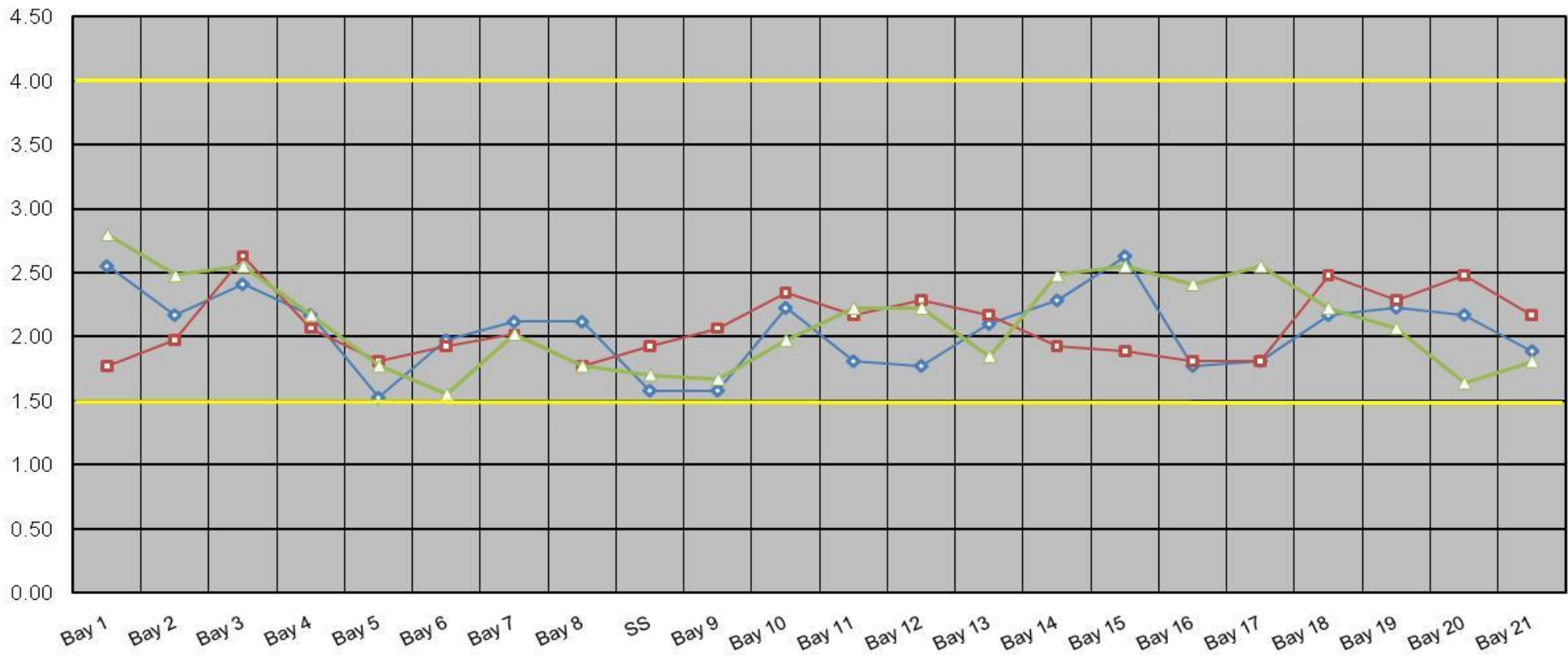




Yellow lines indicate locations of avian lines.
 Red lines indicate zones of observation.
 Blue rectangles represent tribal fishing platforms.

The Dalles Dam Collection Channel Velocities (fps)

6/13/2011 6/14/2011 6/15/2011



Temp:			Secchi:	
	57.3	SUN		2.0
	57.7	MON		2.5
	57.8	TUES		2.7
	57.6	WED		2.5
	57.4	THUR		2.5
	57.3	FRI		2.5
	57.3	SAT		2.5
AVG:	57.5	AVG:		2.5

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

North Fish Ladder			East Fish Ladder												
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	% Spill
6/12/11	1.5	10.0	1.7	10.1	9.6	10.1	12.1	1.8	9.4	9.4	7.4	1.8	9.8	10.2	47.7
6/12/11	1.4	10.1	1.5	10.7	10.2	10.7	12.7	1.4	10.2	10.2	8.2	1.9	10.3	10.3	48.6
6/13/11	1.4	10.0	1.6	10.2	9.7	9.9	12.2	1.6	9.6	9.6	7.6	1.6	11.2	11.2	50.6
6/13/11	1.4	10.2	1.6	10.2	10.4	10.3	11.8	1.5	10.0	9.9	8.4	1.6	11.3	11.3	49.6
6/14/11	1.4	10.1	1.6	10.4	10.6	10.5	12	1.5	10.2	10.1	7.9	1.5	11.2	11.3	49.0
6/14/11	1.4	10.2	1.4	10.5	10.7	10.5	12.6	1.5	10.1	10.0	8.5	1.5	11.1	11.2	50.5
6/15/11	1.5	10.1	1.6	10.2	10.4	10.3	11.8	1.6	9.8	9.9	7.6	1.5	11.2	11.3	50.0
6/15/11	1.5	10.0	1.6	10.1	10.2	10.1	11.7	1.6	9.9	9.9	3.7	1.5	11.2	11.3	48.9
6/16/11	1.5	10.0	1.8	9.6	9.7	9.6	11.1	1.5	9.4	9.4	7.3	1.4	10.8	10.8	49.8
6/16/11	1.4	10.0	1.3	11.0	10.9	10.9	12.4	1.2	10.4	10.5	8.3	1.6	11.3	11.3	52.9
6/17/11	1.4	10.1	1.5	10.2	10.3	10.3	11.8	1.4	9.9	10.0	7.9	1.4	11.3	11.2	51.3
6/17/11	1.4	10.2	1.5	10.5	10.6	10.6	12.1	1.1	10.4	10.5	8.4	1.6	11.2	11.1	50.8
6/18/11	1.4	10.1	1.9	9.3	9.4	9.4	10.9	1.7	9.1	9.1	6.9	1.5	10.6	10.5	48.0
6/18/11	1.5	10.0	1.5	10.5	10.7	10.6	12.1	1.2	10.5	10.5	8.3	1.6	11.2	11.1	54.4
AVG:	1.4	10.1	1.6	10.3	10.2	10.3	12.0	1.5	9.9	9.9	7.6	1.6	11.0	11.0	50.2

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



155 weir pulled at low forebay level. Exit weirs 154 - 159 condition being assessed for future rehab work.