

FISHWAY STATUS REPORT

Date: 5/22-28/11
 Inspection Period: 5/22-28/11

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:	14	Temperature:	54.0	F
	Out of Criteria	Limit	Comments		Secchi:	1.8	Ft.
NORTH FISHWAY							
Exit differential	0	≤ 0.5'					
Count station differential	0	≤ 0.3'					
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'	Trash rack raked on 5/26/11				
EAST FISHWAY							
Exit differential	0	≤ 0.5'					
Removable weirs 154-157	4	Per forebay	Auto adjusts 1' increments. Weir 155 fixed by electricians				
Weir 158-159 differential	0	1.0' ± 0.1'					
Count station differential	0	≤ 0.3'	Picket leads raked on 5/25 - terrestrial plant leaf material				
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	1.3	Daily differentials & weir depths, see AVGS tab.		
Entrance weir E1	0	No criteria	Average	11.8	Manually adjusted.		
Entrance weir E2	0	depth (≥ 8')	Average	12.1			
Entrance weir E3	0	depth (≥ 8')	Average	11.9			
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	10.2			
Entrance weir W2	0	depth (≥ 8')	Average	10.0			
Entrance weir W3	0	No criteria	Average	8.5			
South entrance differential	0	1.0' - 2.0'	Average	0.0	Daily differentials & weir depths, see AVGS tab.		
Entrance weir S1	0	depth (≥ 8')	Average	9.7	Manually adjusted.		
Entrance weir S2	0	depth (≥ 8')	Average	9.8			
JUVENILE PASSAGE							
Sluiceway operation	0	units 1,5,18					
Turbine trashrack drawdown	0	<1.5', wkly	Range: 0.2-1.1'				
Spill volume	14	40%, 24hr	Average	45.4	Forced spill has increased spill beyond 40%.		
Spill Pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

OTHER ISSUES:**THE DALLES**

Birds: Bird numbers are moderate with active hazing by USDA 16 hours daily. There has been an increase in gull activity in spillway tailrace by spill bays 9-14. These spill bays are being used due to the forced spill and is not covered by avian lines.

USDA - Wildlife Services (non-lethal) bird hazing summary; California gulls total hazed 5,558 (shift high, low, aver.) 649, 237,463. The highest number of gulls hazed occurred 1200 hrs. to 2000 hrs. The lowest number of gulls hazed occurred 0400 hrs. to 0900 hrs. Total pyro's used 2,559 (shift high, low, aver.) 344, 153, 213.

Pikeminnow: Dam angling on hold due to high flows.

Operations:

Fish unit 1 forced out of service 5/22 due to low governor oil pressure alarm for ~20minutes. Operations corrected and returned to service.

Calibrations were completed on 5/26/11. Several values were out of criteria due to the high flows. Electricians have been notified.

Gatewell drawdown was completed on 5/28/11. The differentials ranged from 0.2-1.1', all within criteria limit.

Fishways maintaining criteria despite high flow conditions. Tailwater elevations at upper limits of automation and being closely monitored.

Manual adjustments made as needed.

Spillway open to bay 15, outside spillwall for the high flows. Bays tagged out of service will be used for emergency spill only.

Maintenance:

East entrance automation inaccurate with high tailwater levels, but maintaining criteria. Levels checked daily by tape.

East exit weir 155 out of sync. Maintenance corrected.

Studies:

Supporting east fishladder backup water supply study as needed.

Kickoff meeting for adult fishway PIT installation study this week. First site visit scheduled for 6/8. Information from previous work provided.

Research:

Battelle continues JSAT acoustic telemetry monitoring with expanded spillway array, which was installed last week due to high spills.

Yakama Indian Nation conducting sturgeon brood stock collection from cul-du-sac this week via hook/line. Up to eight mature female white sturgeon and up to 16 mature male sturgeon to be taken. The purpose of collection is brood stock for the mid-Columbia PUD sturgeon mitigation program conducted by Yakama Nation at the Marion Drain Sturgeon Facility. The fish will be transported by trailer to the Marion Drain hatchery, held until ripe, spawned, and returned to the point of capture within two days of spawning. Sampling activities to occur 5/30 - 6/17/2011.

Oregon Department of Fish and Wildlife (ODFW) Bass Dam Angling Project; The Dalles forebay, fishermen effort 34 hours, caught two smallmouth bass, one juvenile salmon, and one non game species, and tagged one smallmouth bass. The Dalles tailrace fishermen effort 24 hours, caught three smallmouth bass, two pikeminnow, one adult salmon, and one non game species. The Dalles tailrace fishermen tagged three smallmouth bass.

Approved by;

Ron D. Twiner

Operation Project Manager

The Dalles Dam

The Dalles Dam Fish Counts

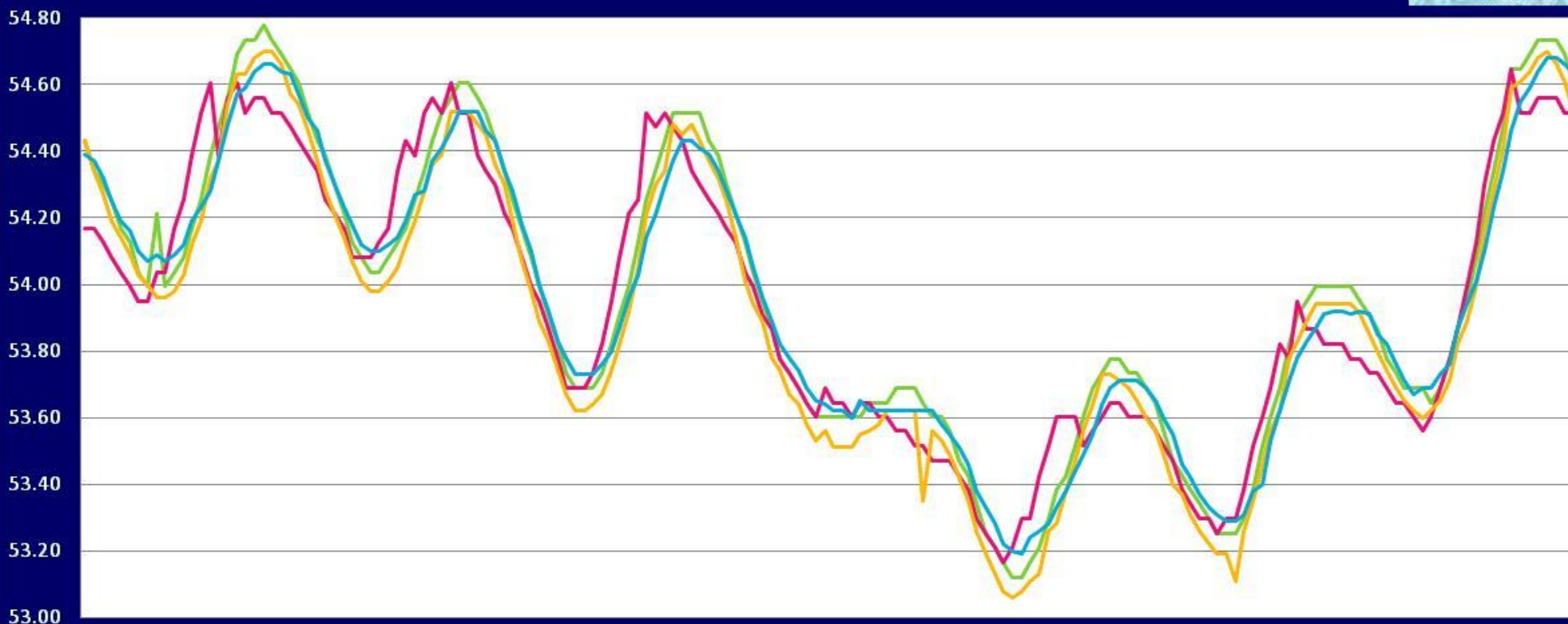
Date	East Chinook Adult	North Chinook Adult	East Chinook Jack	North Chinook Jack	Total East Sthd	Total North Sthd	East Wild Sthd	North Wild Sthd	East Sock	North Sock	East Coho	North Coho	East Coho Jack	North Coho Jack	East Lamprey	North Lamprey	Spill Volume
22-May	834	65	1081	2	2	0	2	1	0	0	0	0	0	0	0	0	43.1
23-May	635	89	1104	2	3	0	1	0	0	0	0	0	0	0	0	0	44.4
24-May	587	101	1249	2	9	0	1	-2	0	0	0	0	0	0	0	0	44.8
25-May	460	48	904	2	4	0	0	0	0	0	0	0	0	0	0	0	45.2
26-May	194	24	470	0	5	0	1	0	0	0	0	0	0	0	0	0	45.4
27-May	344	72	851	5	4	0	2	0	0	0	0	0	0	0	0	0	47.0
28-May	677	94	1228	5	6	0	1	0	1	0	0	0	0	0	0	0	47.8
Wkly Tot	3731	493	6887	18	33	0	8	0	1	0	0	0	0	0	0	0	
% Split	88.3%	11.7%	99.7%	0.3%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

Spill range: 43.1% to 47.8%

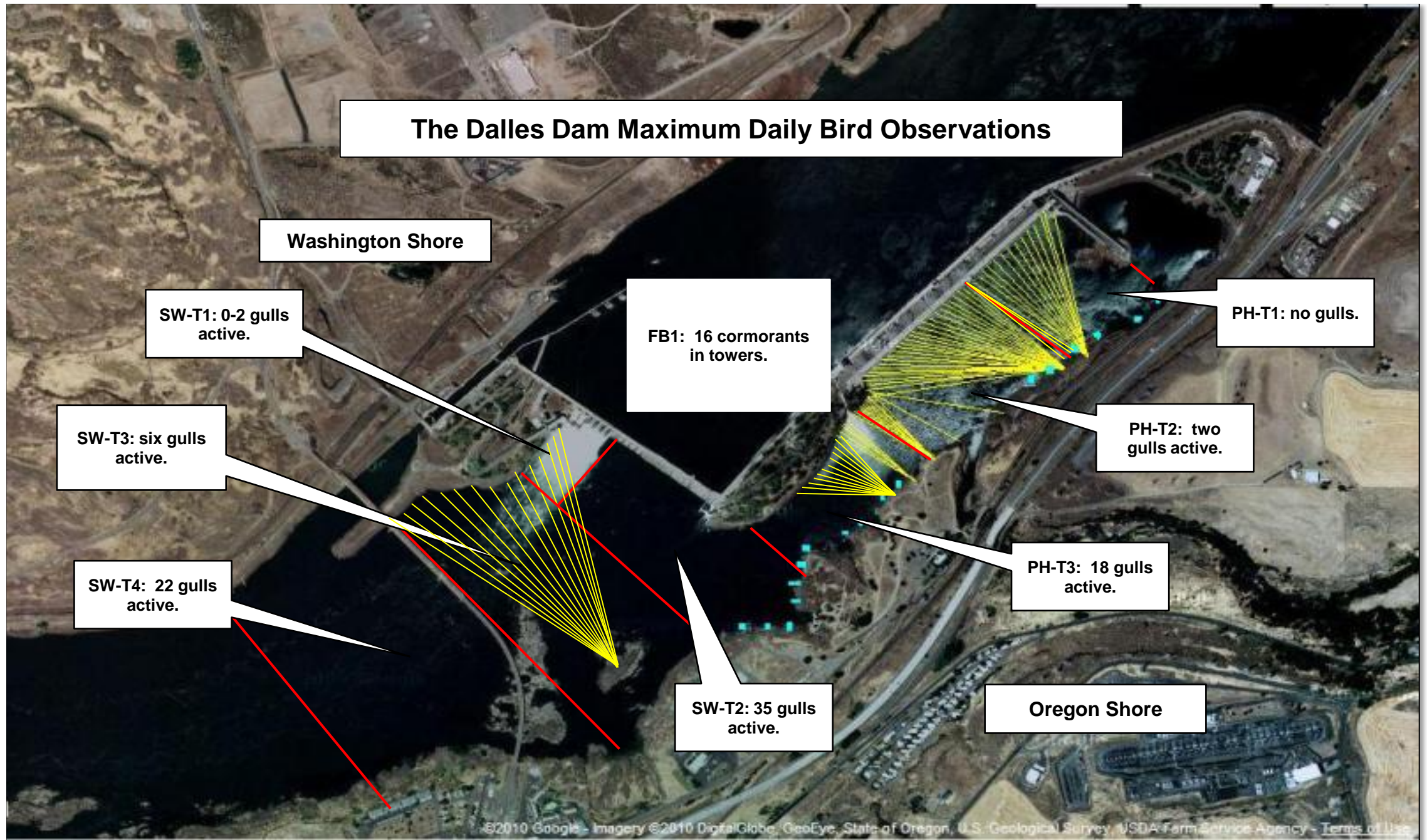
The Dalles River/Water Temperatures

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

Deg F



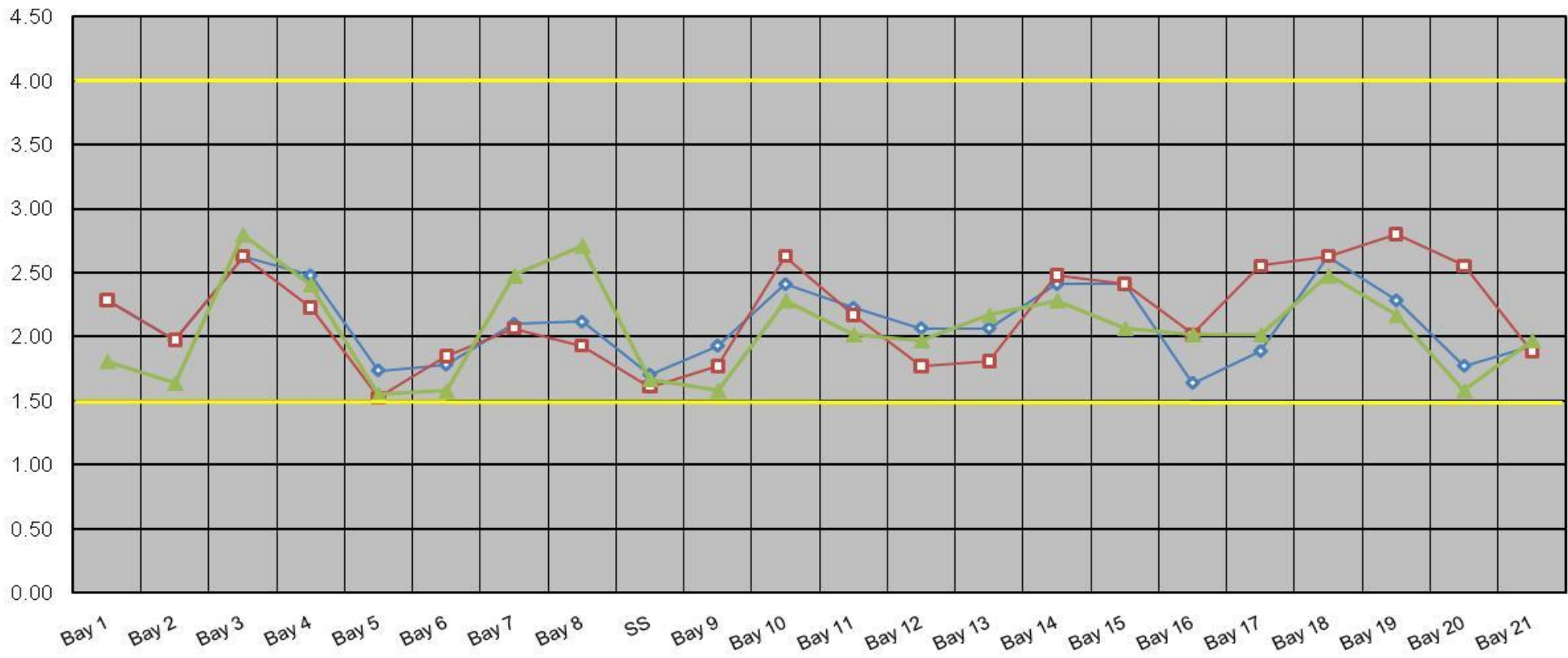
0:00 5/22/2011 1:00 5/23/2011 2:00 5/24/2011 3:00 5/25/2011 4:00 5/26/2011 5:00 5/27/2011 6:00 5/28/2011



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

The Dalles Dam Collection Channel Velocities (fps)

5/23/2011 5/25/2011 5/26/2011



Temp:			Secchi:	
	54.33	SUN		1.5
	54.34	MON		2.0
	54.10	TUES		2.0
	53.74	WED		1.2
	53.46	THUR		2.0
	53.61	FRI		2.0
	54.13	SAT		2.0
AVG:	53.96	AVG:		1.8

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
5/22/11	1.4	10.2	1.4	12.5	12.5	10.6	11.5	1.5	9.1	9.1	9.8	1.8	9.4	9.4	42.9
5/22/11	1.4	10.0	1.4	10.6	12.5	11.5		1.6	9.0	8.8	8.5	1.7	9.5	9.5	42.6
5/23/11	1.4	10.1	1.5	10.4	12.4	11.3	11.3	1.5	11.1	10.0	7.9	1.5	9.6	9.7	46.3
5/23/11	1.4	10.1	1.2	11.1	12.9	12.0	12	1.5	10.4	10.3	8.2	1.6	9.9	9.8	45.1
5/24/11	1.5	9.9	1.3	11.0	12.8	11.9	17.4	1.5	10.4	10.3	8.2	1.7	9.6	9.5	44.5
5/24/11	1.4	10.1	1.2	13.4	12.2	12.4	17.5	1.5	10.4	10.3	8.2	1.7	9.7	9.6	44.5
5/25/11	1.5	10.0	1.2	12.0	12.1	12.0		1.2	10.9	10.8	8.7	1.6	10.0	9.9	45.6
5/25/11	1.4	10.1	1.1	12.8	12.7	12.8	17.8	1.4	10.8	10.7	8.6	1.6	10.0	9.9	44.5
5/26/11	1.4	10.0	1.5	11.4	11.5	11.5		1.6	10.0	10.1	7.9	1.7	9.5	9.4	43.6
5/26/11	1.4	10.2	1.6	10.8	10.9	10.9	16.3	1.6	9.9	9.9	7.4	1.8	9.3	9.2	45.2
5/27/11	1.5	10.0	1.3	12.7	11.8	12.7	12.3	1.3	10.9	10.9	9.9	1.7	9.9	10.4	47.1
5/27/11	1.4	10.0	1.3	12.0	11.5	12.3	12	1.4	9.4	9.4	8.4	1.7	9.6	10.1	47.3
5/28/11	1.4	10.0	1.3	11.9	11.4	12.1	11.9	1.4	10.2	10.2	8.2	1.7	9.7	10.0	47.8
5/28/11	1.5	10.1	1.1	12.4	11.9	12.6	12.4	1.4	9.7	9.7	8.7	1.5	10.0	10.5	48.9
AVG:	1.4	10.1	1.3	11.8	12.1	11.9	13.9	1.5	10.2	10.0	8.5	1.7	9.7	9.8	45.4

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



Did we mention high river flow? Over 200 KCFS spill. Spillwall is still standing. High recirculation flow south of wall.