

FISHWAY STATUS REPORT

Date: 5/20/12
Inspection Period:
 5/13 - 5/19/12

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. Additional daily monitoring done via automation system in fisheries office.

The Dalles Dam	Inspections	Criteria	Total Number of Inspections: 21		Temperature: 54.9 F	
	Out of Criteria	Limit	Comments		Secchi:	3.6 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 10.2			
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 daily.			
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			
Entrance weir E1	0	No criteria	Average 9.0	Manually adjusted.		
Entrance weir E2	0	depth (≥ 8')	Average 10.5			
Entrance weir E3	0	depth (≥ 8')	Average 10.5			
Collection channel velocity	0	1.5 - 4 fps	Average 2.7	See Velocities tab for more complete information.		
Transportation channel velocity	0	1.5 - 4 fps	Average 2.7			
North channel velocity	0	1.5 - 4 fps	Average 2.2			
South channel velocity	0	1.5 - 4 fps	Average 3.0			
West entrance differential	0	1.0' - 2.0'	Average 1.5			
Entrance weir W1	0	depth (≥ 8')	Average 10.4			
Entrance weir W2	0	depth (≥ 8')	Average 10.4			
Entrance weir W3	0	No criteria	Average 4.1			
South entrance differential	0	1.0' - 2.0'	Average 1.5	Daily differentials & weir depths, see AVGS tab.		
Entrance weir S1	0	depth (≥ 8')	Average 8.5	Manually adjusted.		
Entrance weir S2	0	depth (≥ 8')	Average 8.5			
JUVENILE PASSAGE						
Sluiceway operation	0	units 1,8,18				
Turbine trashrack drawdown	0	<1.5', wkly	Range: 0.3' - 1.0'			
Spill volume	15	40%, 24hr	Average 34.1	Gas cap and flood control conditions.		
Spill Pattern	0	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

OTHER ISSUES:

THE DALLES

Birds:

Gull predation increasing substantially downstream of the bridge. Eight hour daily USDA hazing not sufficient. USDA planning additional daylight coverage starting June. Project fisheries collecting gull density data, to be entered into shared database when established.

Operations:

Gatewell drawdown completed May14. All differentials less than 1.5' criteria limit.

No weir/stillwell calibration checks completed this week. All calibrations to date have shown to be accurate.

Backup ROV repair planning underway. Purchase request in progress.

Fish Unit 1 forced out of service to repair an oil leak in the turbine pit May14 AM. Repairs were made and turbine returned to service in 2 hours.

Fish unit 2 was run to maximum during the outage, however entrances were short of criteria differential. Fish count 65% decrease was observed at east count station during the outage. Memo was provided to district and fish managers.

Maintenance:

Main unit 16 out for digital governor install. ETR Jun 7

Future May Unit Outages: MU-15 out 5/21 to 6/28 for digital governor install; MU-9 out 5/21 to 6/28 for five year overhaul.

Main unit 15 out May 21 to Jun 28 for digital governor install.

The forebay bulkhead for fishlock was removed to return irrigation supply to Patterson park. Estimate 3 - 10 cfs valve leakage depending on flowing into culdesace. To be monitored to assure no false attraction for adult salmonids to this area.

Studies:

Project Fisheries continues to support adult PIT tag and east fishway backup water district study teams as needed.

NWP/NWW Avian Predation Management Work Group meeting to occur May 22 at Westrick building.

Research/Contractors:

PSMFC conducting weekly juvenile sampling of Wasco County PUD intake structure April - July. Sample numbers provided in PSMFC weekly report.

Yakama Nation sturgeon brood stock collection from culdesac to occur in June. Coordination underway.

WDFW pikeminnow removal dam angling: effort 59.7 hours, total catch 12.

ODFW Electro-fishing: no electro-fishing for this week.

ODFW bass diet analysis via dam angling started May 9 with a team of 5 anglers. Catch rates low.

University of Idaho half-duplex PIT tag monitor for lamprey coordination underway. Downloading to start soon.

USFWS adult lamprey passage monitor via underwater video and DIDSON sonar to start Jun 1.

PNNL acoustic telemetry downloads continue for steelhead Kelt passage. Juvenile passage summer performance testing resumes early June.

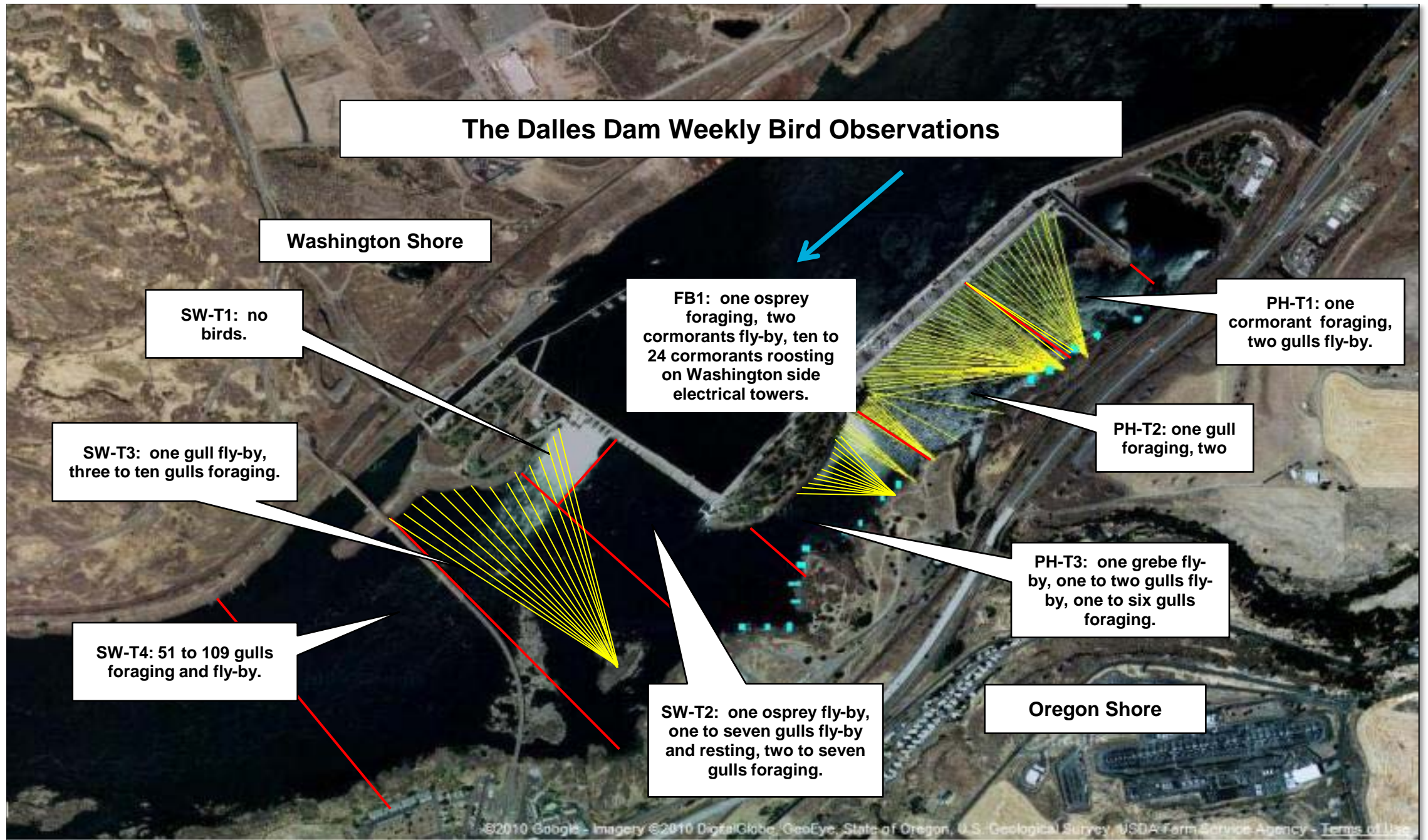
Umatilla Tribe to start lamprey brood stock trapping inside count station pickets early June. Coordination underway. Access issues resolved.

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

The Dalles Dam Fish Counts

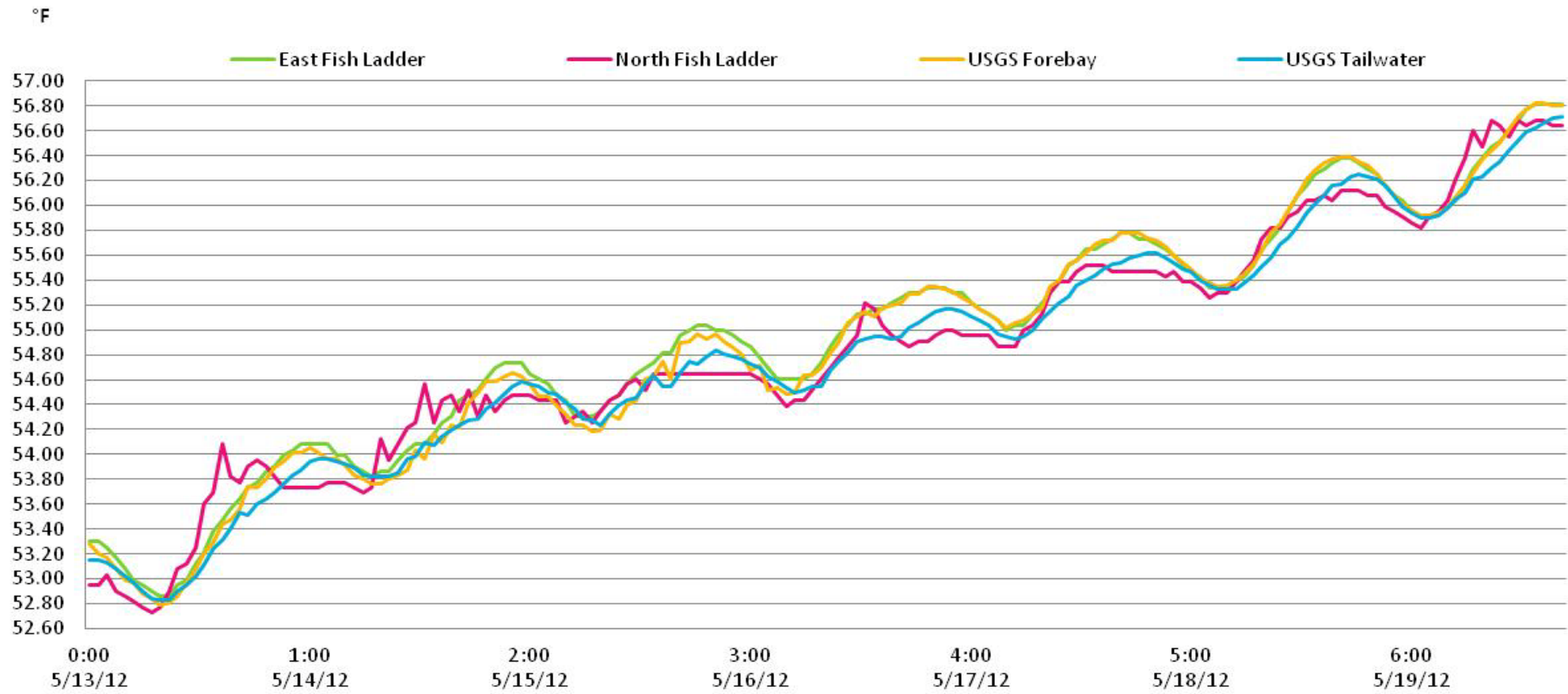
Date	East	North	East	North	Total	Total	East	North					East	North			East	North	Spill	
	Chinook	Chinook	Chinook	Chinook	East	North	Unclipped	Unclipped	East	North	East	North	Coho	Coho	East	North	East	North	Volume	
	Adult	Adult	Jack	Jack	Sthd	Sthd	Sthd	Sthd	Sock	Sock	Coho	Coho	Jack	Jack	Lamprey	Lamprey	Pink	Pink	KCFS	
13-May	2536	3283	216	100	4	3	0	1	0	0	0	0	0	0	0	0	0	0	0	99.3
14-May	2578	3744	259	38	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	98
15-May	3689	3763	371	164	15	5	4	1	0	0	0	0	0	0	0	0	0	0	0	94.7
16-May	3707	2242	496	114	12	2	1	0	0	0	0	0	0	0	0	0	0	0	0	95.8
17-May	3120	1729	455	78	14	0	2	0	0	0	0	0	0	0	0	0	0	0	0	96
18-May	3238	1429	451	30	-1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	119
19-May	1242	1540	252	29	8	1	2	0	0	0	0	0	0	0	0	0	0	0	0	135.8
Wkly Tot	20110	17730	2500	553	56	17	10	2	0	0	0	0	0	0	0	0	0	0	0	
% Split	53.1%	46.9%	81.9%	18.1%	76.7%	23.3%	83.3%	16.7%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

Spill range: 94.7 - 135.8 KCFS; note that when spill volume is under ~100 KCFS, north ladder passage for adult Chinook increases.



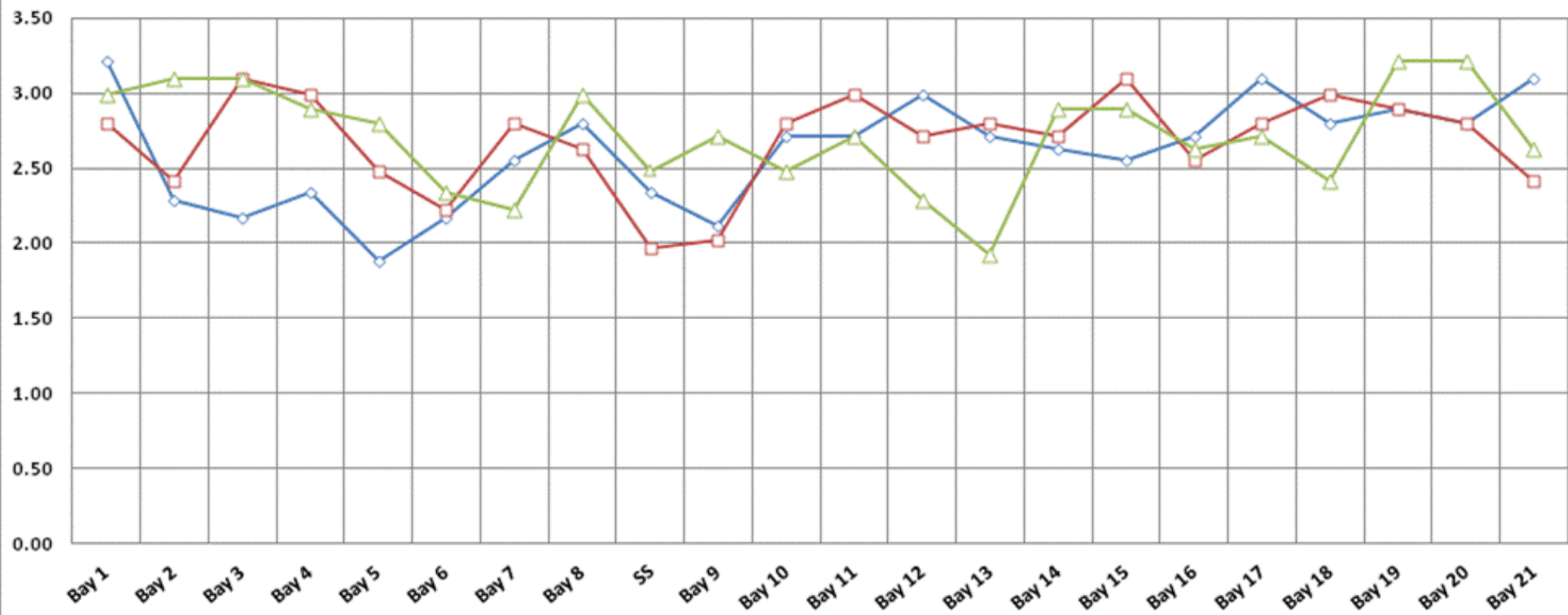
SW-T4 zone, downstream 197 bridge is most problematic gull predation area. Hazing efforts to be increased 8hr to 14 hrs daily.

The Dalles River/Water Temperature



The Dalles Dam Collection Channel Velocities (fps)

5/2/2012 5/8/2012 5/15/2012



Temp:		Secchi:	
	53.3	SUN	4.0
	54.1	MON	3.5
	54.6	TUES	4.0
	54.8	WED	3.5
	55.3	THUR	3.5
	55.7	FRI	3.5
	56.3	SAT	3.5
AVG:	54.9	AVG:	3.6

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	
5/13/12	1.4	10.2	1.5	7.1	11.0	11.1	9.3	1.5	10.5	10.6	0.7	1.6	8.6	8.5	33.2	
5/13/12	1.4	10.1	1.3	7.0	11.1	11.0	8.3	1.3	10.5	10.4		1.5	8.4	8.6	34.1	
5/13/12			1.6	7.1	11.1	11.1	8.5	1.5	10.5	10.6		1.5	8.6	8.5		
5/14/12	1.4	10.2	1.2	7.1	9.9	10.0	7.3	1.4	9.8	9.7		1.3	8.5	8.4	37.4	
5/14/12	1.3	10.1	1.5	6.1	10.1	10.1	13.4	1.5	9.0	9.0		1.5	8.2	8.1	31.6	
5/14/12			1.3	7.1	10.0	10.0		1.2	10.2	10.1		1.3	8.6	8.5		
5/15/12	1.3	10.3	1.6	10.0	10.0	10.0	16.1	1.6	10.5	10.5		2.9	1.5	9.0	8.9	27.8
5/15/12	1.3	10.2	1.3	10.0	10.1	10.0		1.6	10.0	10.1		2.7	1.6	8.2	8.2	27.8
5/15/12			1.2	9.9	9.9	9.8		1.3	11.0	11.1		1.2	8.9	8.9		
5/16/12	1.4	10.2	1.5	10.0	10.1	10.1		1.5	12.1	12.0		2.2	1.3	8.6	8.7	31.3
5/16/12	1.4	10.2	1.6	10.0	10.0	10.0		1.6	9.0	8.9		1.8	1.6	8.0	8.0	39.1
5/16/12			1.3	9.0	9.9	10.0		1.4	10.9	10.9		1.3	8.2	8.2		
5/17/12	1.4	10.2	1.6	10.1	10.1	10.1		1.9	8.9	8.9		2.9	1.6	8.2	8.3	31.1
5/17/12	1.5	10.3	1.5	8.0	11.1	11.1		1.4	10.1	10.0		2.4	1.5	8.1	8.2	48.3
5/17/12			1.6	10.0	10.0	9.9		1.4	12.0	12.0		3.1	1.4	9.9	9.9	
5/18/12	1.4	10.1	1.4	10.1	11.0	11.1		1.5	11.0	10.9		8.0	1.3	8.1	8.1	31.5
5/18/12	1.4	10.2	1.6	10.0	11.0	11.0		1.5	11.1	11.1	8.0	1.0	8.4	8.3	30.8	
5/18/12			1.8	12.0	12.1	12.1		1.7	10.0	10.5	1.5	9.0	9.1			
5/19/12	1.4	10.1	1.5	9.9	11.0	10.9		1.4	10.9	10.9	8.0	1.4	8.1	8.2	36.9	
5/19/12	1.4	10.2	1.5	10.1	11.0	11.1		1.4	11.0	10.9	8.0	1.4	8.1	8.2	37.1	
5/19/12			1.4	8.0	10.9	10.9		1.4	9.9	9.9	2.0	1.5	8.0	8.0		
AVG:	1.4	10.2	1.5	9.0	10.5	10.5	10.5	1.5	10.4	10.4	4.1	1.4	8.5	8.5	34.1	

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



Updated and newly deployed dreissenid mussels traps installed at both adult ladder count stations