

FISHWAY STATUS REPORT

Date: 4/28/2013
 Inspection Period: 4/21 -4/27/2013

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:	20	Temperature:	#DIV/0! F
	Out of Criteria	Limit	Comments		Secchi:	4.7 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	1.3	Daily differentials & weir depths, see AVGS tab.	
Entrance weir N1	0	depth (≥ 8')	Average	9.8		
Entrance weir N2		Closed	Bulkhead installed			
PUD Intake differential	0	≤ 0.5'		0.6		
EAST FISHWAY						
Exit differential	0	≤ 0.5'				
Removable weirs 154-157	1	Per forebay	Auto adjusts 1' increments. Weir 156 OOC by 0.1'.			
Weir 158-159 differential	0	1.0' ± 0.1'				
Count station differential	0	≤ 0.3'				
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	1.6	Daily differentials & weir depths, see AVGS tab.	
Entrance weir E1	0	No criteria	Average	2.0	Manually adjusted.	
Entrance weir E2	0	depth (≥ 8')	Average	13.6		
Entrance weir E3	0	depth (≥ 8')	Average	13.6		
Collection channel velocity	0	1.5 - 4 fps	Average	2.3	See Velocities tab for more complete information.	
Transportation channel velocity	0	1.5 - 4 fps	Average	2.1		
North channel velocity	0	1.5 - 4 fps	Average	2.3		
South channel velocity	0	1.5 - 4 fps	Average	2.8		
West entrance differential	0	1.0' - 2.0'	Average	1.5	Out at 0.8'.	
Entrance weir W1		Closed	Average	closed	Bulkhead installed for weir repair.	
Entrance weir W2	0	depth (≥ 8')	Average	8.6		
Entrance weir W3	0	depth (≥ 8")	Average	8.6		
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	8.4	Manually adjusted.	
Entrance weir S2	0	depth (≥ 8')	Average	8.4		
JUVENILE PASSAGE						
Sluiceway operation	0	MU 1, 8, 18	MU 18 was out of service from 4/22-4/25. Sluiceways for MU 19 were open instead.			
Turbine trashrack drawdown	0	<1.5', wkly	Range 0.2'-0.7'.			
Spill volume	4	40%, 24hr	Average	38.9	Out of criteria due to the gas cap.	
Spill Pattern	0	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

OTHER ISSUES:**THE DALLES*****Birds/Sea lions:***

Bird observation data collected twice daily. Gull numbers high below spillway. See Avian tab for details. USDA started hazing operations Apr 16. Six sea lion sightings; all near the west entrance. USDA hazed the sealion with rubber bullets.

Operations:

The North and East fishway, and Ice/Trash sluiceway is operational and in accordance with Fish Passage Plan.

MU15, MU16, and T8 out of service due to transformer oil issues. RTS ~8/8/2013

MU5 OOS 0600 4/1/2013 to 1700 5/9/2013 for Digital Governor install/ Annual Maintenance

MU6 OOS 0600 4/22/2013 to 1700 5/30/2013 for Digital Governor install/Annual Maintenance

Maintenance

Main Unit 21 to be taken out of service for overhaul Apr 29. Tailwater bulkhead sill for MU21 is in close proximity of the east fishway entrance flow. resulting in debris on bulkhead sill and leakage. Fish unit output to be reduced when M21 bulkhead is installed per coordination with fish managers.

Calibration check completed Apr 24; all values were within criteria except the east entrance which was out of criteria by 0.1'.

Gateway drawdown completed Apr 26. The criteria for the difference between the forebay and gateway is 1.5'. Values ranged from 0.2' to 0.7'.

Entrance weir W1 removed for wheel replacement. Repair underway with new plastic composite wheels. Plan to install and test through remainder of passage season. If successful, these will be used on remaining weirs to reduce guide wear.

North auxiliary water (PUD) intake rake crane out for hydraulic repair. Return unknown, pending budget status. Raked by mobile crane as needed.

A small herd of goats have been placed via contractor at the north fish ladder to reduce vegetation. Grazing dates from 4/25-5/3/2013.

Studies:

PIT - Temporary Thin Wall PIT tag Antenna continues to work successfully. Permanent PIT DDR continues.

EFL - ladder backup water supply study continues. Selected alternative is a single 10' pipe through monolith near fish lock for 1400 cfs.

Project requested to include replacement of fishlock 42" valve as best cost benefit and to include removal of all old unneeded fish lock equipment.

Follow up meeting to discuss projects requested item week of May 6.

PUD freedom turbine planning underway. Project support as needed. Relocation of osprey platform planned for next fall.

Lamprey - Collecting turbine cooling water strainer juvenile lamprey data as available when strainer is opened. No data this week.

Research/Contractors:

Yakama and Umatilla tribes to collect lamprey via traps from count stations mid summer. Lamprey used in restocking efforts. Coordination underway.

USDA started avian hazing Apr 16. Primarily from downstream navlock peninsula to cover spillway. Also occasion pinned hazing at west entrance.

WDFW Pikeminnow Dam Angling to start May 1. Coordination underway. The 2012 results report pending.

PSMFC fish sampling of the PUD juvenile bypass continues. Refer to PSMFC weekly report for results.

ODFW Northern Pikeminnow Management Program evaluation had no sampling this week.

Project maintenance to remove 45' I-beams at forebay pier noses. Date to be determined. Requires CRFM funding.

University of Idaho adult radio telemetry new antennas both fish ladders completed and operating.

Normandeau fish counters continuing 16hr daily fish counting at north and east count stations.

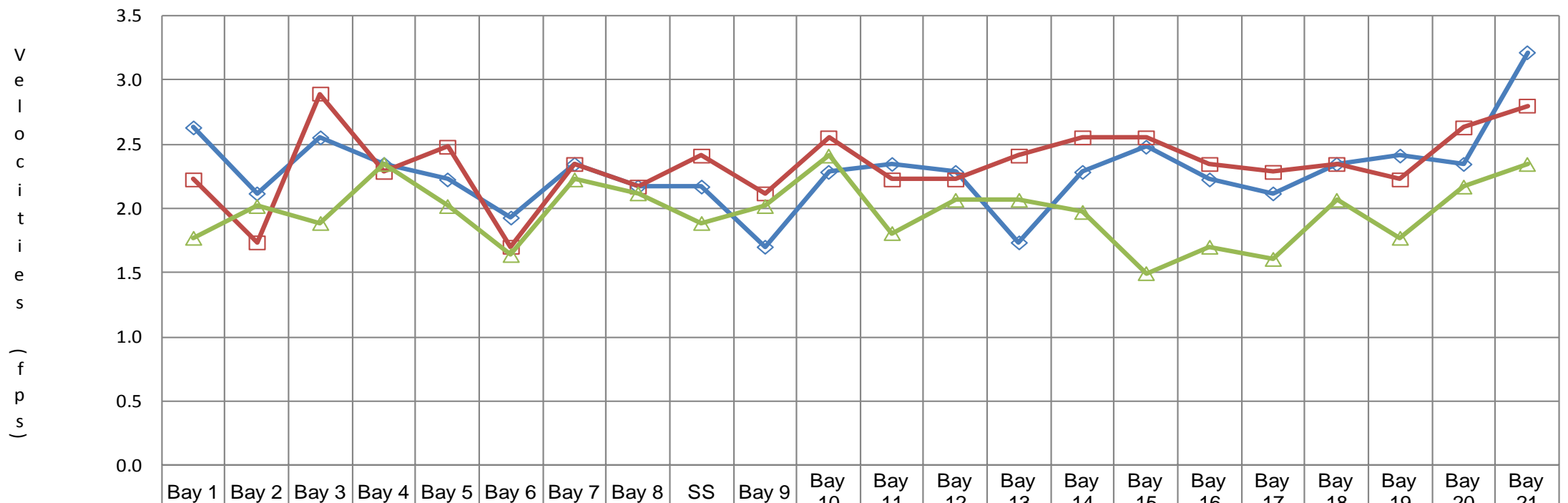
Approved by;
Ron D. Twiner
Operation Project Manager
The Dalles Dam

The Dalles Dam Fish Counts

Date	East	North	East	North	Total	Total	East	North					East	North						
	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	
4/14/13	216	20	5	0	7	0	6	0	0	0	0	0	0	0	0	0	0	0	0	217.5
4/15/13	233	26	10	0	8	0	1	0	0	0	0	0	0	0	0	0	0	0	0	231.9
4/16/13	355	24	10	2	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	201.4
4/17/13	516	62	18	0	10	1	4	1	0	0	0	0	0	0	0	0	0	0	0	198.2
4/18/13	779	175	31	1	10	0	4	0	0	0	0	0	0	0	0	0	0	0	0	195.5
4/19/13	1428	324	55	7	7	1	6	1	0	0	0	0	0	0	0	0	0	0	0	162.6
4/20/13													0	0	0	0	0	0	0	
total	3527	631	129	10	45	2	22	2	0	0	0	0	0	0	0	0	0	0	0	201.2
% Split	84.8%	15.2%	92.8%	7.2%	95.7%	4.3%	91.7%	8.3%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

Percent spill ranged from 39.9-40.1%

The Dalles Dam Collection Channel Velocities (fps)



	Bay 1	Bay 2	Bay 3	Bay 4	Bay 5	Bay 6	Bay 7	Bay 8	SS	Bay 9	Bay 10	Bay 11	Bay 12	Bay 13	Bay 14	Bay 15	Bay 16	Bay 17	Bay 18	Bay 19	Bay 20	Bay 21
4/10/2013	2.6	2.1	2.6	2.3	2.2	1.9	2.3	2.2	2.2	1.7	2.3	2.3	2.3	1.7	2.3	2.5	2.2	2.1	2.3	2.4	2.3	3.2
4/16/2013	2.2	1.7	2.9	2.3	2.5	1.7	2.3	2.2	2.4	2.1	2.6	2.2	2.2	2.4	2.6	2.6	2.3	2.3	2.3	2.2	2.6	2.8
4/23/2013	1.8	2.0	1.9	2.3	2.0	1.6	2.2	2.1	1.9	2.0	2.4	1.8	2.1	2.1	2.0	1.5	1.7	1.6	2.1	1.8	2.2	2.3

The Dalles Dam Avian Zone Map

Washington Shore

FB1

PH-T1

PH-T2

SW-T1

PH-T3

SW-T3

SW-T2

SW-T4

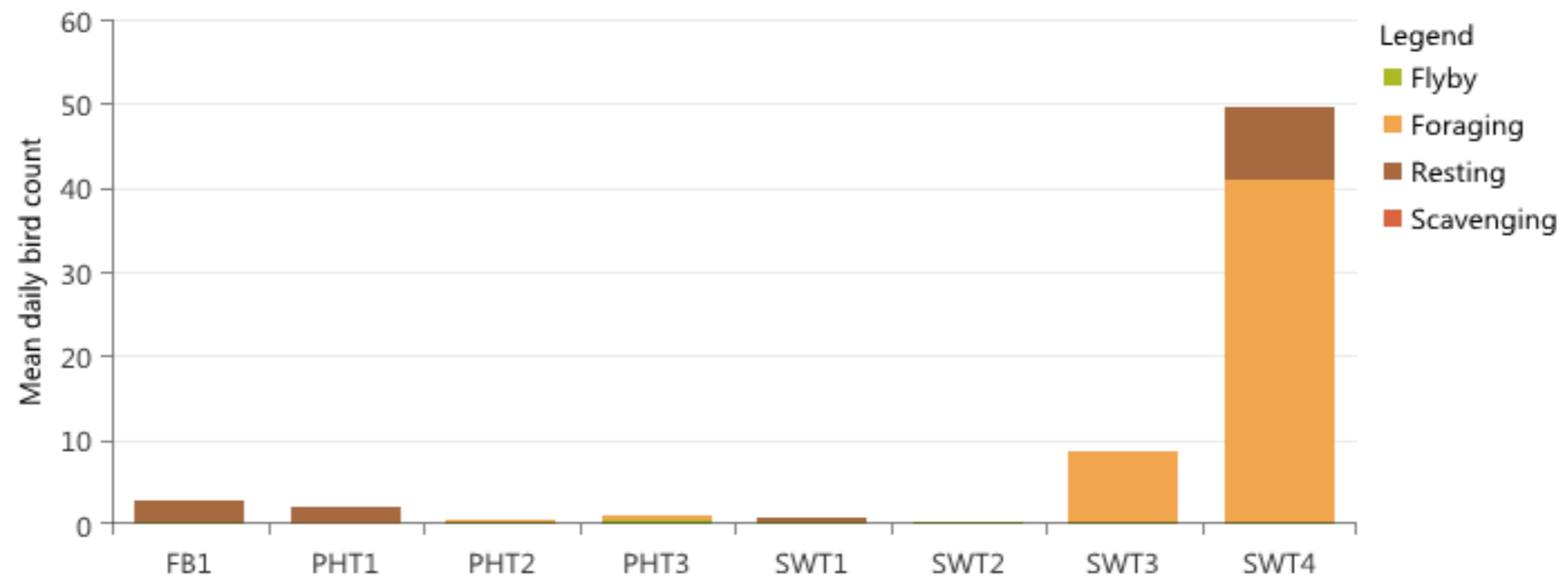
Oregon Shore



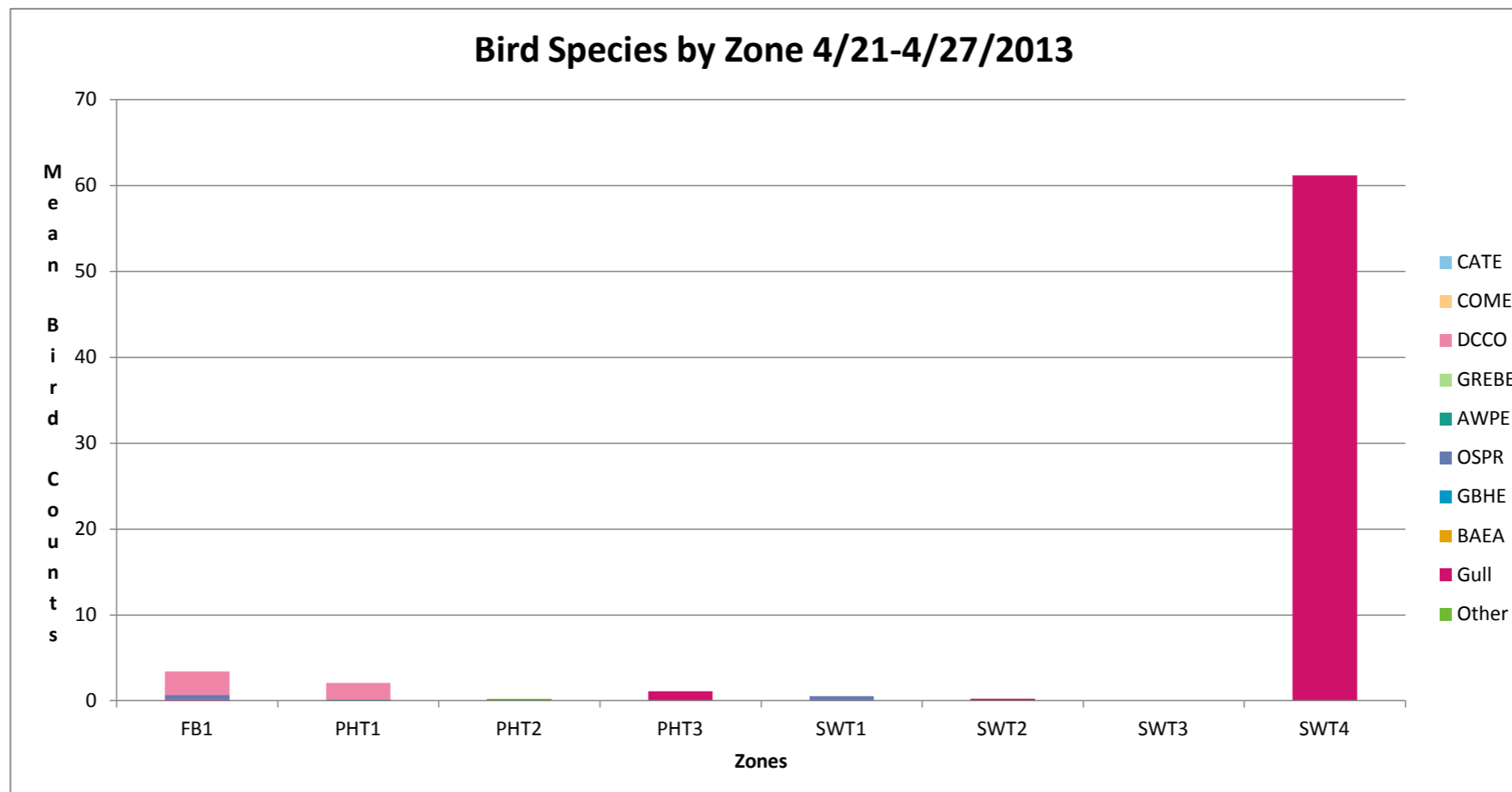
MEAN COUNTS BY BEHAVIOR

4/22/2013-4/29/2013

The Dalles -



Bird Species by Zone 4/21-4/27/2013



American White Pelican - (AWPE); Bald Eagle - (BAEA); Caspian Tern - (CATE); Common Merganser - (COME)

Double Crested Cormorant - (DCCO); Great Blue Heron - (GBHE); Grebe - (GREBE);

Gull - all species (GULL); Osprey (Ospr)

USGS Temperatures			Secchi:
Forebay	Tailwater		
		SUN	5.0
		MON	5.0
		TUES	5.0
		WED	5.0
		THUR	5.0
		FRI	4.0
		SAT	4.0
#DIV/0!	#DIV/0!	AVGS:	4.7

<h2>The Dalles Dam Daily Readings and Averages for Temperatures, Secchi, Entrances, and Spill</h2>
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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	
4/21/13	1.3	9.9	1.5	0.1	14.0	14.0	11.6	1.4	closed	9.1	9.1	1.4	8.4	8.3	39.9
4/21/13	1.3	10.0	1.5	0.1	14.0	14.0	11.4	1.4		9.1	9.1	1.5	8.2	8.3	40.0
4/21/13	SCADA INSPECTION		1.5	0.2	13.7	13.7	10.9	1.4		8.5	8.5	1.4	8.2	8.2	
4/22/13	1.3	9.8	1.6	5.0	14.1	14.1	12.7	1.5		9.6	9.6	1.4	8.4	8.4	40.1
4/22/13	1.3	9.9	1.5	8.1	14.0	14.0	15.3	1.6		9.9	10.0	1.4	8.4	8.3	39.5
4/22/13	SCADA INSPECTION														
4/23/13	1.3	9.8	1.5	3.1	13.4	13.5	11.6	1.5		9.0	9.1	1.4	8.4	8.3	39.8
4/23/13	1.4	9.9	1.3	2.5	13.5	13.5	10.4	1.3		8.6	8.6	1.4	8.2	8.4	38.0
4/23/13	SCADA INSPECTION		1.5	5.1	13.0	13.1	11.6	1.5		9.0	9.0	1.5	8.3	8.4	
4/24/13	1.3	9.8	1.5	1.0	13.5	13.5	10.1	1.4		8.2	8.2	1.4	8.3	8.4	39.9
4/24/13	1.3	9.9	1.6	0.9	13.4	13.4	9.8	1.5		8.0	8.0	1.4	8.3	8.2	40.0
4/24/13	SCADA INSPECTION		1.5	1.0	13.5	13.5	10.1	1.1		8.5	8.5	1.4	8.3	8.4	
4/25/13	1.3	9.5	1.6	1.2	13.7	13.7	10.2	1.6		8.2	8.2	1.5	8.3	8.3	39.7
4/25/13	1.3	9.8	1.6	1.0	13.6	13.5	10.8	1.6		8.0	8.0	1.5	8.3	8.3	39.3
4/25/13	SCADA INSPECTION		1.6	1.0	13.5	13.5	9.8	1.5		8.1	8.1	1.4	8.3	8.3	
4/26/13	1.3	9.9	1.7	1.1	13.6	13.6	9.8	1.5		8.3	8.3	1.2	8.6	8.6	38.2
4/26/13	1.3	9.8	1.7	1.1	13.6	13.6	9.9	1.5		8.3	8.3	1.2	8.6	8.6	37.2
4/26/13	SCADA INSPECTION		1.7	1.1	13.6	13.6	9.9	1.5		8.3	8.3	1.2	8.6	8.6	
4/27/13	1.3	9.9	1.7	1.4	13.7	13.7	10.3	1.5		8.4	8.2	1.3	8.3	8.3	36.1
4/27/13	1.4	9.8	1.8	4.8	13.7	13.7	12.2	1.7		8.9	8.9	1.5	8.2	8.3	36.4
4/27/13	SCADA INSPECTION		1.7	1.1	13.6	13.6	9.9	1.5		8.3	8.3	1.2	8.6	8.6	
AVG:	1.3	9.8	1.6	2.0	13.6	13.6	10.9	1.5	closed	8.6	8.6	1.4	8.4	8.4	38.9

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