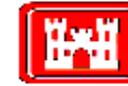


The Dalles Dam Fishway Status Report

Date: 10/21/2013
 Inspection Period: 10/13 to 10/19/2013

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 Out of Criteria	Criteria Limit	Total Number of Inspections: 20	Temperature: 59.2 F
			Comments	Secchi: in ' 5.6
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 1.2	
Entrance weir N1	0	depth (≥ 8')	Average 9.4	
Entrance weir N2		Closed	Bulkhead installed.	
PUD Intake differential	1	≤ 0.5'	Out of criteria at 0.6'.	
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'	Picketed leads raked daily due to high debris.	
Weir crest depth	0	1.0' ± 0.1'		
Junction pool weir JP6	2	depth (≥ 7')	Manually adjusted as needed. Out of criteria at 5.3', 6.2', due to low tailwater.	
East entrance differential	0	1.0' - 2.0'	Average 1.5	
Entrance weir E1	0	No criteria	Average 12.3	Manually adjusted.
Entrance weir E2	0	depth (≥ 8')	Average 11.9	
Entrance weir E3	0	depth (≥ 8')	Average 12.3	
Collection channel velocity	0	1.5 - 4 fps	Average 2.2	See Velocities tab for more complete information.
Transportation channel velocity	0	1.5 - 4 fps	Average 2.3	
North channel velocity	0	1.5 - 4 fps	Average 2.3	
South channel velocity	0	1.5 - 4 fps	Average 3.1	
West entrance differential	0	1.0' - 2.0'	Average 1.4	Daily differentials & weir depths, see AVGS tab.
Entrance weir W1	0	depth (≥ 8')	Average 8.2	
Entrance weir W2	0	depth (≥ 8')	Average 8.3	
Entrance weir W3	0	No criteria	Average closed	
South entrance differential	2	1.0' - 2.0'	Average 1.1	OOC at 0.9' (2), manually adjusted; Low tailwater.
Entrance weir S1	0	depth (≥ 8')	Average 8.2	
Entrance weir S2	0	depth (≥ 8')	Average 8.2	
JUVENILE PASSAGE				
Sluiceway operation	6	units 1,8,18	Main Unit 8 OOS 0630 10/7/2013 to 1640 10/15/2013.	
Turbine trashrack drawdown	0	<1.5', wkly	Range: 0.1' - 0.4'	
Spill volume	0	40%, 24hr	On seal.	
Spill Pattern	0	per FPP	On seal.	
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

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

Bird observation data collected twice daily. Gull and cormorant numbers increasing on rocks upstream of bridge. See avian zones map and distribution tabs. No sea lion sightings this week.

Operations:

Main unit 8 was scheduled out 1 day for AC upgrade, but was extended for other maintenance issues.

Gatewell drawdown completed 10/14. Values ranged from 0.1' - 0.4' (within criteria).

Current Outages:

Main Unit 15 out of service 9/17 to 10/31 for five year overhaul.

Station Service 01 out of service 10/15 to 11/29 for digital governor installation.

Maintenance:

Fishway PLC automation problems occurring at east fishway entrance. Maintenance notified, but not corrected due to budget constraint. Entrance has maintained criteria throughout the failure. Setpoint is adjusted to compensate for PLC inaccuracy.

Permanent oil boom to be purchased and installed at east fishway exit as funding allows. Will likely be same boom as Bonneville uses..

Fishway winter maintenance dewatering schedule; East fishway Dec 4 to mid Jan. North fishway Jan 28 through end of Feb.

Main jobs to be addressed; west entrance grating attachment upgrade, east exit weir upgrades, East exit water leak over electrical panel repair, west entrance wheel replacement, north ladder brush removal and fish lock back flushing operation.

Studies:

PIT - Temporary Thin Wall PIT tag Antenna continues to work successfully. Slight modification to north upstream antenna positioning planned.

EFL - Plan to run 10' pipe through dam directly to AWS conduit under east fishladder. Project was on hold through Government shutdown.

PUD - "Freedom" turbine proposal out for review. Modification of original FERC license underway.

Lamprey - A pre-construction meeting was held at Westrick on 10/9 for the east fish ladder lamprey modification. Plan is to install floor plating over diffuser grating at 14 weir orifices. This will improve lamprey passage through high velocity zones by allowing an attachment surface.

Research/Contractors:

Tribal lamprey trap collection at east count station completed for season. All equipment removed from project.

WDFW Columbia River Northern Pike minnow Management Program Dam Angling completed end of Sept.

Derelect USGS I-beams on pier noses removed by project maintenance. Plans to remove remaining pier nose antennas this winter by dive.

USFWS plans to remove all of their old equipment this winter dewatering and maintenance period from the fish ladders.

Normandeau fish counters performing video counting through 9/30 and visual counting to 10/31. No winter time counting this year.

One more set of derelect Vertical Barrier Screens (VBS) from 90's research remains in MU 12 gatewell slot. To be removed as time/funding allows.

University of Idaho adult RT new antennas both fish ladders completed and operating. Plans to clean up unused antennas this winter.

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

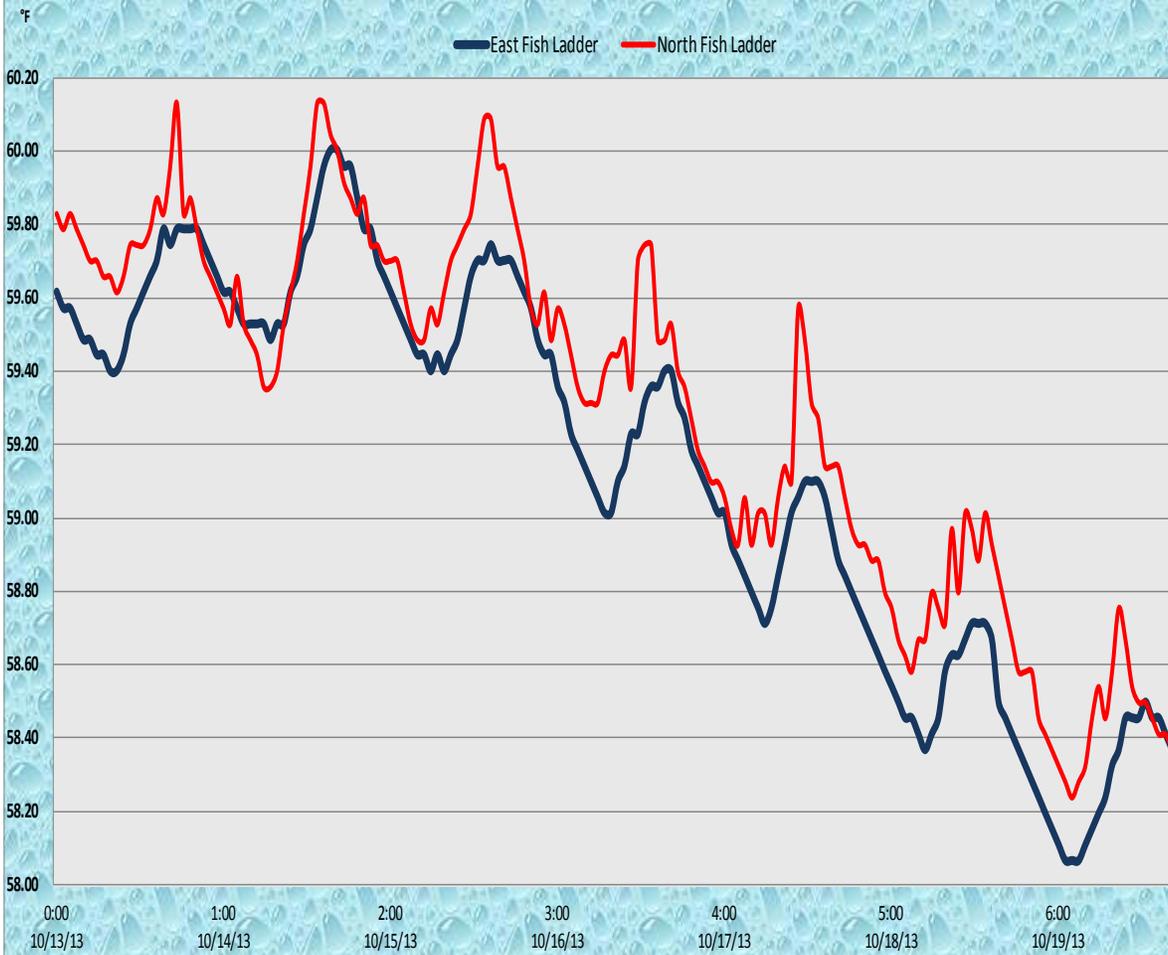
Running Sum Adult Fish Counts

The Dalles 10/13/2013 - 10/20/2013

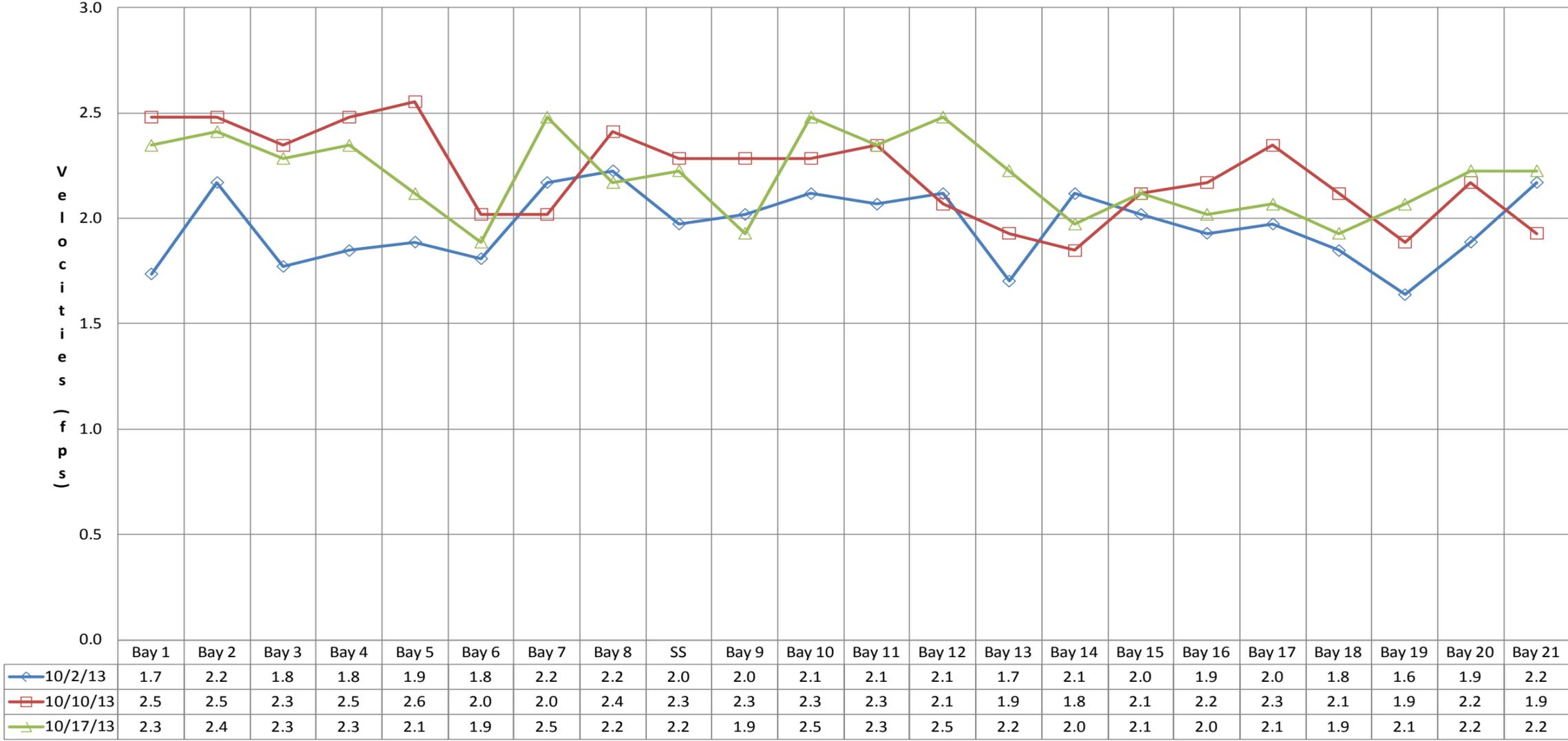
Date	All Chinook		Adult Chinook		Jack Chinook	
	daily	sum	daily	sum	daily	sum
10/13/2013	3750	3750	3375	3375	375	375
10/14/2013	3087	6837	2581	5956	506	881
10/15/2013	2870	9707	2558	8514	312	1193
10/16/2013	3134	12841	2664	11178	470	1663
10/17/2013	1887	14728	1669	12847	218	1881
	daily	sum	daily	sum	daily	sum
Date	All Coho		Adult Coho		Jack Coho	
	daily	sum	daily	sum	daily	sum
10/13/2013	119	119	90	90	29	29
10/14/2013	126	245	114	204	12	41
10/15/2013	59	304	51	255	8	49
10/16/2013	154	458	144	399	10	59
10/17/2013	50	508	46	445	4	63

Date	All Steelhead		Clipped Steelhead		Unclipped Steelhead	
	daily	sum	daily	sum	daily	sum
10/13/2013	467	467	307	307	160	160
10/14/2013	427	894	271	578	156	316
10/15/2013	327	1221	218	796	109	425
10/16/2013	346	1567	241	1037	105	530
10/17/2013	251	1818	168	1205	83	613
	daily	sum	daily	sum	daily	sum
Date	Sockeye		Chum		Pink	
	daily	sum	daily	sum	daily	sum
10/13/2013	0	0	0	0	0	0
10/14/2013	0	0	0	0	0	0
10/15/2013	0	0	0	0	0	0
10/16/2013	0	0	0	0	1	1
10/17/2013	0	0	0	0	-1	0

The Dalles Dam Adult Fish Ladder River/Water Temperatures



The Dalles Dam Collection Channel Velocities (In criteria 1.5 - 4.0 fps)



The Dalles Dam Avian Zones

Washington Shore

FB1

PH-T1

PH-T2

SW-T1

PH-T3

SW-T3

SW-T2

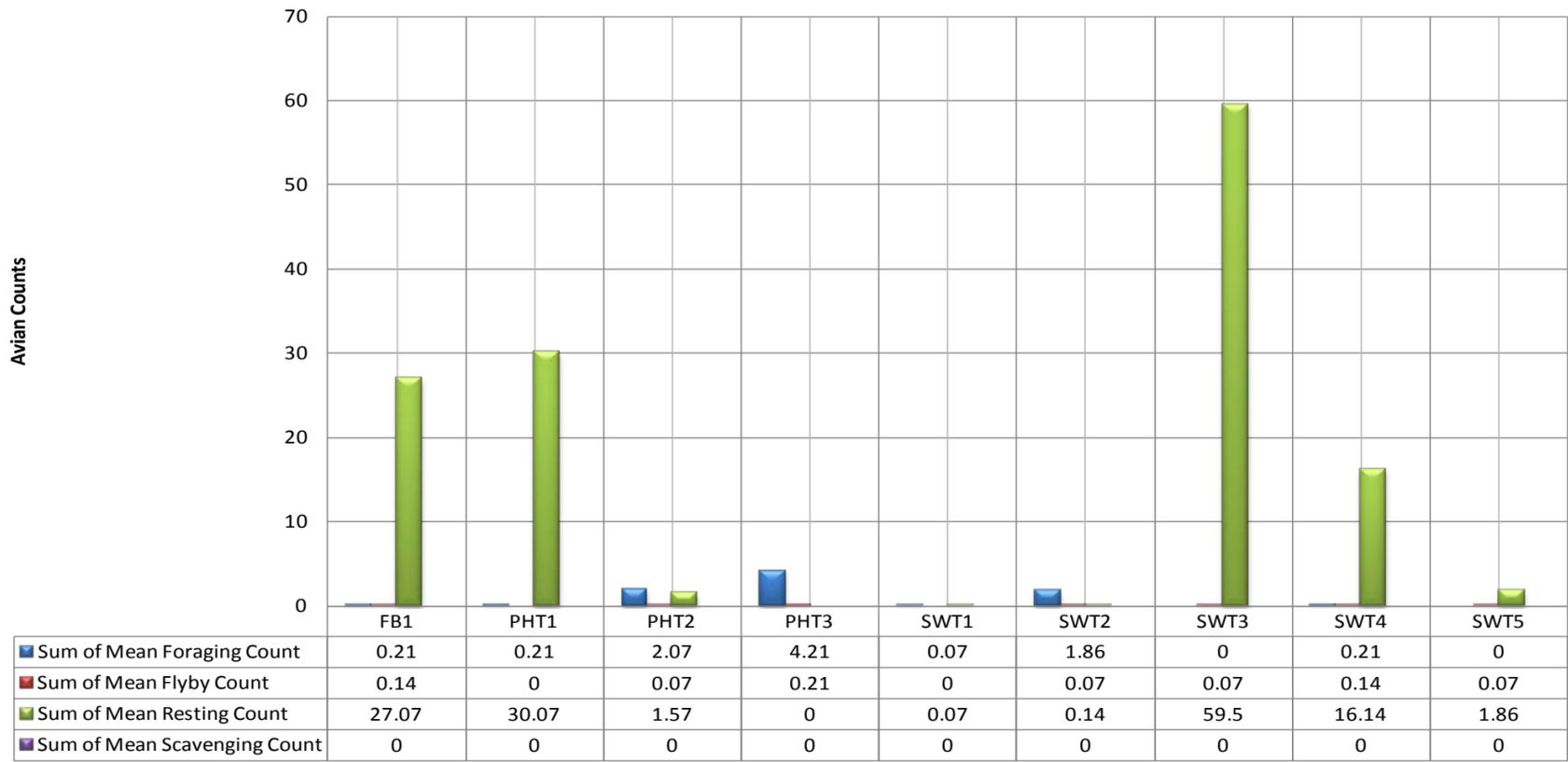
SW-T4

SW-T5

Oregon Shore

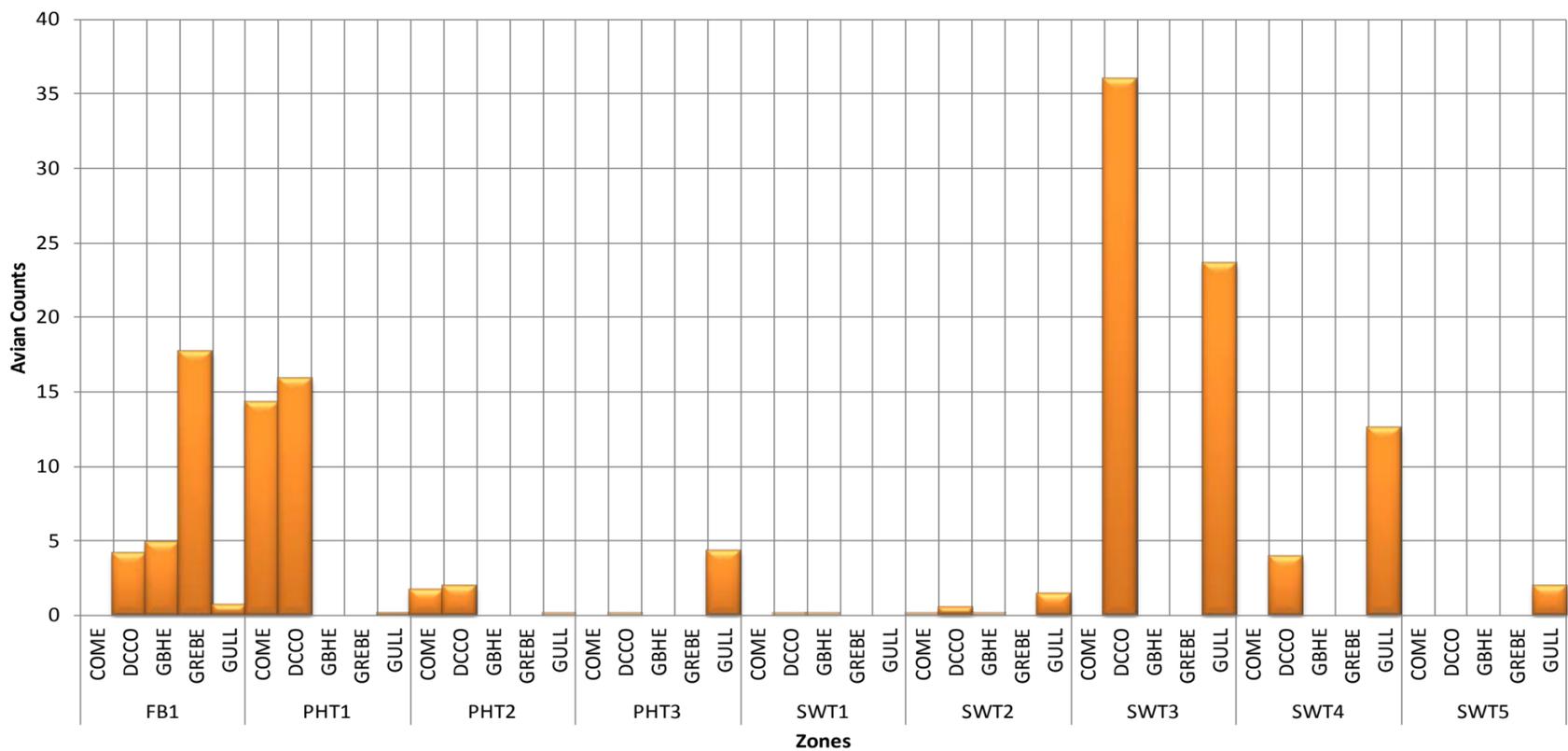


Mean Avian Counts by Behavior



AWPE - American White Pelican; BAEA - Bald Eagle; CATE - Caspian Tern; COME - Common Merganser; DCCO - double crested cormorant; GBHE - Great Blue Heron; GREBE - Grebe; Gull- Gull (all species); OSPR - Osprey

Avian Mean Counts by Species



Temp:			Secchi:	
	59.7	SUN		5.5
	59.7	MON		5.5
	59.7	TUES		5.5
	59.3	WED		6.0
	59	THUR		5.5
	58.6	FRI		5.5
	58.3	SAT		5.5
AVG:	59.2	AVG:		5.6

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

= out of criteria

Date:	North Fish Ladder		East Fish Ladder					East Fish Ladder			South Entrance			KCFS	
	North Entrance		East Entrance					West Entrance			South Entrance			% Spill	
	Differential	N1 Depth	Differential	E1Depth	E2 Depth	E3 Depth	JP 6	Differential	W1Depth	W2 Depth	W3 Depth	Differential	S1 Depth	S2 Depth	
13-Oct-13	1.4	9.2	1.4	13.3	11.3	13.5	7.8	1.5	8.2	8.1		1.2	8.1	8.2	O n s e a l
13-Oct-13	1.3	9.4	1.4	13.0	12.0	12.9	8.0	1.6	8.1	8.1		1.2	8.1	8.2	
13-Oct-13			1.7	13.2	12.5	13.4		1.6	8.2	8.1		1.2	8.3	8.3	
14-Oct-13	1.2	9.3	1.3	13.1	12.4	13.1	7.4	1.4	8.3	8.3		1.1	8.4	8.4	
14-Oct-13	1.3	9.4	1.4	11.9	11.9	12.0	7.7	1.4	8.3	8.3		1.2	8.1	8.2	
14-Oct-13			1.4	12.9	12.2	13.1		1.5	8.2	8.2		1.1	8.3	8.2	
15-Oct-13	1.2	9.3	1.7	12.0	11.6	11.9	7.6	1.5	8.2	8.1		1.3	8.2	8.1	
15-Oct-13	1.2	9.4	1.5	11.9	11.8	11.8	7.2	1.5	8.2	8.2		1.1	8.2	8.2	
15-Oct-13			1.6	12.2		12.2		1.2	8.5	8.6		0.9	8.5	8.4	
16-Oct-13	1.2	9.4	1.6	11.8	11.6	11.7	7.8	1.4	8.3	8.3		1.2	8.2	8.2	
16-Oct-13	1.3	9.3	1.6	12.1	12.1	12.0	7.3	1.4	8.2	8.2		1.1	8.2	8.2	
16-Oct-13			1.7	12.2		12.0		1.3	8.3	8.3		1.1	8.2	8.2	
17-Oct-13	1.3	9.2	1.7	12.5	10.0	12.5	7.5	1.7	8.0	8.1		1.4	8.1	8.1	
17-Oct-13	1.3	9.5	1.6	12.9	12.7	12.9	8.2	1.5	8.6	8.9		1.3	8.2	8.2	
17-Oct-13															
18-Oct-13	1.2	9.4	1.5	12.0	12.0	12.1	8.0	1.5	8.0	8.0		1.3	8.0	8.1	
18-Oct-13	1.3	9.3	1.5	12.0	12.6	12.1	7.1	1.4	8.2	8.2		1.1	8.2	8.1	
18-Oct-13			1.4	13.1	13.1	13.1		1.3	8.5	8.9		0.9	8.2	8.3	
19-Oct-13	1.0	9.4	1.4	11.0	10.8	11.4	5.3	1.3	8.1	8.1		1.0	8.2	8.1	
19-Oct-13	1.1	9.4	1.4	11.0	11.7	11.1	6.2	1.3	8.1	8.2		1.2	8.0	8.1	
19-Oct-13			1.4	11.0		11.4		1.2	8.2	8.2		1.0	8.1	8.2	
AVG:	1.2	9.4	1.5	12.3	11.9	12.3	7.4	1.4	8.2	8.3	closed	1.1	8.2	8.2	

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