FISHWAY STATUS REPORT

Date: 6/3/2013
Inspection Period: 5/26 to 6/1/2013

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: 21 / Comments			Temperature: 56.5 F / Secchi: 4.5 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	9.9		
Entrance weir N2		Closed	Bulkhead installed			
PUD Intake differential	0	≤ 0.5'				
EAST FISHWAY						
Exit differential	0	≤ 0.5'				
Removable weirs 154-157	2	Per forebay	Auto adjusts 1' increments.		156 weir out of criteria by 0.1'.	
Weir 158-159 differential	0	1.0' ± 0.1'				
Count station differential	0	≤ 0.3'	Picketed leads raked and window cleaned May 27.			
Weir crest depth	0	1.0' ± 0.1'	Depth over weir changed from 1.0' to 1.3' due to shad passage > 5000/day May 18.			
Junction pool weir JP6	0	depth (≥ 7')	Manually adjusted as needed.			
East entrance differential	0	1.0' - 2.0'	Average	1.5	Daily differentials & weir depths, see **AVGS** tab.	
Entrance weir E1	0	No criteria	Average	1.6	Manually adjusted.	
Entrance weir E2	0	depth (≥ 8')	Average	13.4		
Entrance weir E3	0	depth (≥ 8')	Average	13.3		
Collection channel velocity	0	1.5 - 4 fps	Average	2.8	See **Velocities** tab for more complete information.	
Transportation channel velocity	0	1.5 - 4 fps	Average	2.6		
North channel velocity	0	1.5 - 4 fps	Average	2.4		
South channel velocity	0	1.5 - 4 fps	Average	3.3		
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	9.8		
Entrance weir W3	0	No criteria	Average	0.3		
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	9.5	Manually adjusted.	
Entrance weir S2	0	depth (≥ 8')	Average	9.5		
JUVENILE PASSAGE						
Sluicegate operation	0	units 1,8,18				
Turbine trashrack drawdown	0	<1.5', wkly	Range	0.0' - 0.6'		
Spill volume	0	40%, 24hr				
Spill Pattern	0	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

OTHER ISSUES:

Birds/Sea lions:
Bird observation data collected twice daily. Primarily gulls, upstream and downstream of the bridge. Refer to map for details.
There were no sea lion sightings this week.

Operations:
Current Outages:
Main Unit 15, 16, and T8 forced out of service due to transformer oil issues. Return to service ~ Aug 8.
Main Unit 21 out of service Apr 29 to June 20 for five year overhaul, as builts, gen heat, heat exch and cavitation.
Main Unit 11 out of service May 13 to June 22 for digital governor installation and annual maintenance.
Gatewell drawdown completed on 5/26/13. All values were within the 1.5' criteria and ranged from 0.0' to 0.6'.
Calibration check completed on 5/23/13. All values within criteria.
East and north fishways, sluiceway, and spillways are in operation for fish passage in accordance to the Fish Passage Plan (FPP).

Maintenance:
Updating memo of understanding for PUD operation and maintenance. To be forwarded to District for approval.
ROV scheduled June 13 for inspection of intake trashracks Main Units 3, 8, 18 per Fish Passage Plan requirement and coordinated with BPA.
Work postponed on west entrance W2 weir wheel replacement due to budget constraints. All west entrance weirs remain operable.
PUD trashrack rake out of service for hydraulic line failure. Maintenance disassembling to assess repair cost. Mobile crane used in the meantime.
Oil Accountability and Leak Protocols on the fishway equipment being reviewed. Assessing leak/repair plans for several weirs gearboxes.

Studies:
PIT - Temporary Thin Wall PIT tag Antenna continues to work successfully. Plans to replace all aluminum paneling over north count station to correct the noticeable minor interference. Walls being constructed by Natural Resources around north PIT computer room to protect equipment.
EFL - Team evaluating if fishlock valve room rehab to be included with the main construction of the of the 10' intake pipe.
PUD - Freedom turbine planning underway. Project support as needed. Reviewing PUD/COE memo of understanding.
Lamprey - Collecting turbine cooling water strainer juvenile lamprey data as available when strainer is opened. No data this week.
Lamprey Improvements PDT developing weir orifice floor plating in lower ladders to improve lamprey passage through high velocity areas.

Research/Contractors:
CRITFIC member tribes are planning on trapping adult lamprey for radio translocation, telemetry research, and/or brood stock at the project. Unlike last year the Nez Perce are planning to join the CTUIR and Yakama Nation with trap operation as well.
ODFW and Pacific States Marine Fisheries Commission collecting gut samples of pikeminnow from dam anglers through August.
Columbia River Northern Pikeminnow Management Program WDFW Dam Angling: Effort hours - 57.3, total NPM - 119, NPM ≥ 230 mm - 119, adult salmonids - 1, sturgeon - 2, game fish - 4, non-game fish - 1.
Fish counting continues with Normandeau staff. Spring Chinook passage steadily decreasing. Shad numbers substantially increasing with numbers higher (230K) than seen this time past several years.
Normandeau digital video fish counting at count stations to occur June 15 - Sept 30 from 2000 hrs to 0400 hrs.
Pacific States Marine Fisheries Commission fish sampling of the PUD juvenile bypass. Refer to PSMFC weekly report #13-8 for results.
Project maintenance to remove I-beams at forebay pier noses. Date to be determined. Awaiting CRFM funding.
University of Idaho adult radio telemetry new antennas both fish ladders completed and operating. Two new electrical outlets to be installed by project.

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

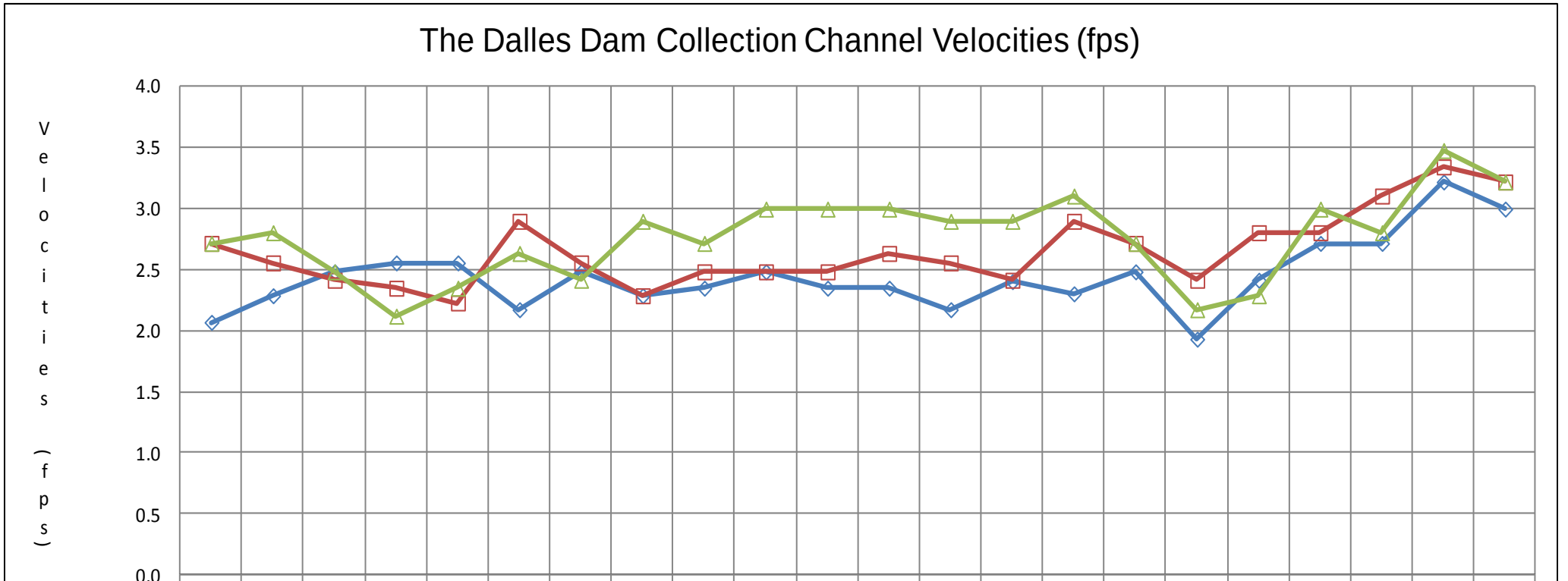
DART The Dalles Adult Ladders Daily Usage with Spill Percent and Outflow

Date	Chinook				Jack Chinook				Steelhead				Steelhead Wild				Sockeye				Coho				Jack Coho				Lamprey				Spill Pct [Right]	Outflow (kcfs)
	Left Ladder		Right Ladder		Left Ladder		Right Ladder		Left Ladder		Right Ladder		Left Ladder		Right Ladder		Left Ladder		Right Ladder		Left Ladder		Right Ladder		Left Ladder		Right Ladder		Left Ladder		Right Ladder			
	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#		
5/23/13	85	834	15	143	98	593	2.1	13	100	10	0	0		0		0		0		0		0		0		0		0		0		0	40.0	296.9
5/24/13	79	625	21	170	98	454	1.7	8	100	10	0	0		0		0		0		0		0		0		0		0		0		0	39.9	277.1
5/25/13	69	526	31	241	97	377	2.6	10	100	7	0	0		-1		0		0		0		0		0		0		0		0		0	40.2	273.8
5/26/13	76	754	24	244	96	304	4.1	13	100	8	0	0	100	1	0	0		0		0		0		0		0		0		0		0	40.0	282.5
5/27/13	74	587	26	204	100	311	0	0	100	5	0	0	100	1	0	0	100	1	0	0		0		0		0		0		0		0	39.9	281.3
5/28/13	69	404	31	181	97	283	3.4	10	100	9	0	0	100	1	0	0	100	2	0	0		0		0		0		0		0		0	39.6	276.1
5/29/13	55	492	45	409	91	268	8.8	26	91	10	9.1	1	100	4	0	0	100	5	0	0		0		0		0		0		0		0	39.9	257.8
Weekly total		4222		1592		2590		80		59		1		6		0		8		0		0		0		0		0		0		0		

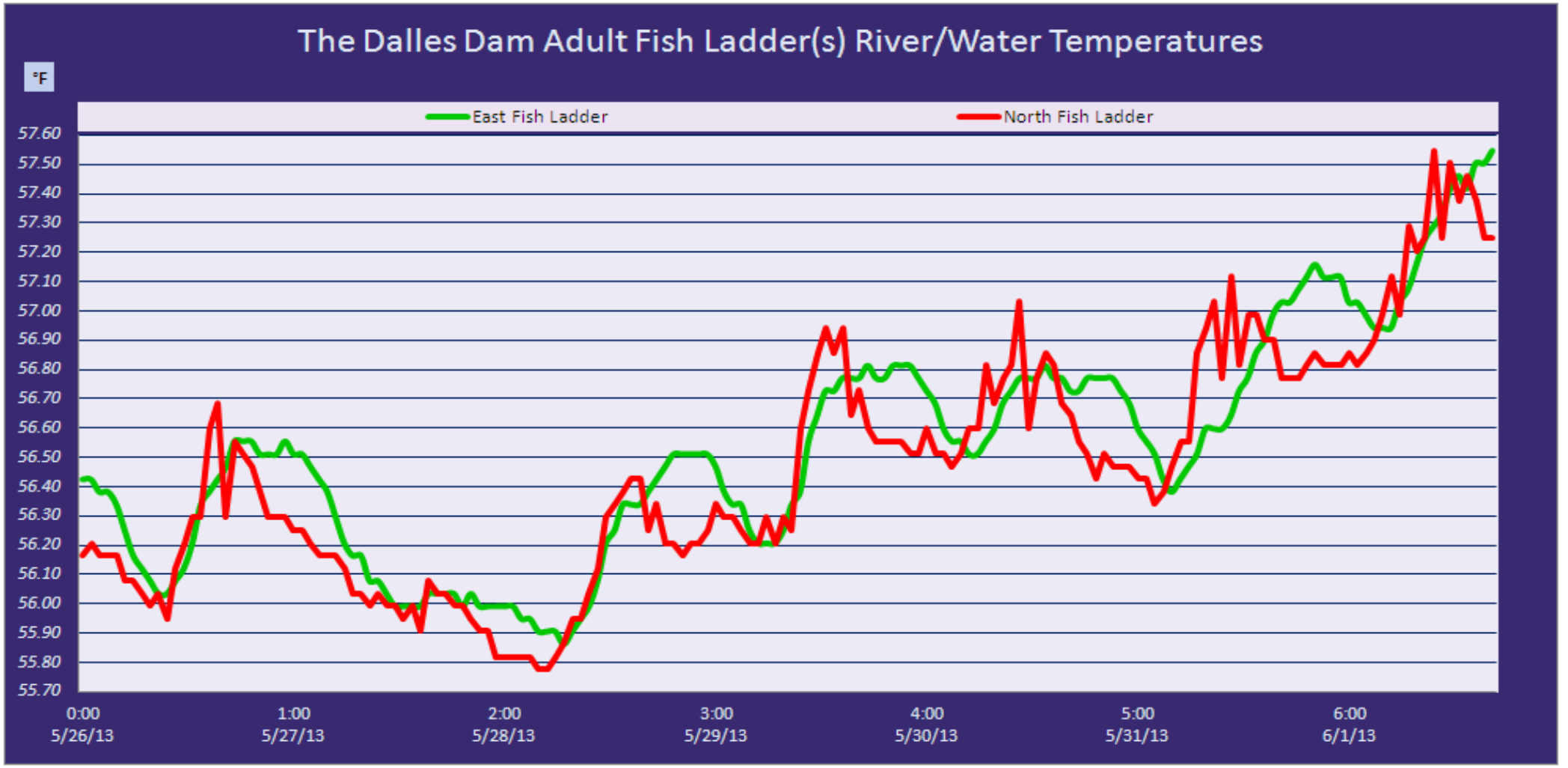
Date	Chinook		Jack Chinook		Steelhead		Steelhead Wild		Sockeye		Coho		Jack Coho		Lamprey		Spill Pct	Outflow
YTD	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct		
	72.6	27.4	97	3	98.3	1.7	100	0	100	0	0	0	0	0	0	0		

1. The species passage percent is not calculated for either ladder on a day, if either the Ri

2. Ladder orientations reference the side of the river w



	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
5/14/2013	2.1	2.3	2.5	2.6	2.6	2.2	2.5	2.3	2.3	2.5	2.3	2.3	2.2	2.4	2.3	2.5	1.9	2.4	2.7	2.7	3.2	3.0
5/22/2013	2.71	2.55	2.41	2.35	2.23	2.89	2.55	2.28	2.48	2.48	2.48	2.63	2.55	2.41	2.89	2.71	2.41	2.80	2.80	3.10	3.34	3.21
5/31/2013	2.71	2.80	2.48	2.12	2.35	2.63	2.41	2.89	2.71	2.99	2.99	2.99	2.89	2.89	3.10	2.71	2.17	2.28	2.99	2.80	3.47	3.21


The Dalles Dam Adult Fish Ladder(s) River/Water Temperatures
°F
East Fish Ladder
North Fish Ladder
57.60
57.50
57.40
57.30
57.20
57.10
57.00
56.90
56.80
56.70
56.60
56.50
56.40
56.30
56.20
56.10
56.00
55.90
55.80
55.70
0:00
5/26/13
1:00
5/27/13
2:00
5/28/13
3:00
5/29/13
4:00
5/30/13
5:00
5/31/13
6:00
6/1/13


The Dalles Dam Avian Zone Map
Washington Shore
FB1
PH-T1
PH-T2
PH-T3
SW-T1
SW-T2
SW-T3
SW-T4
SW-T5
Oregon Shore
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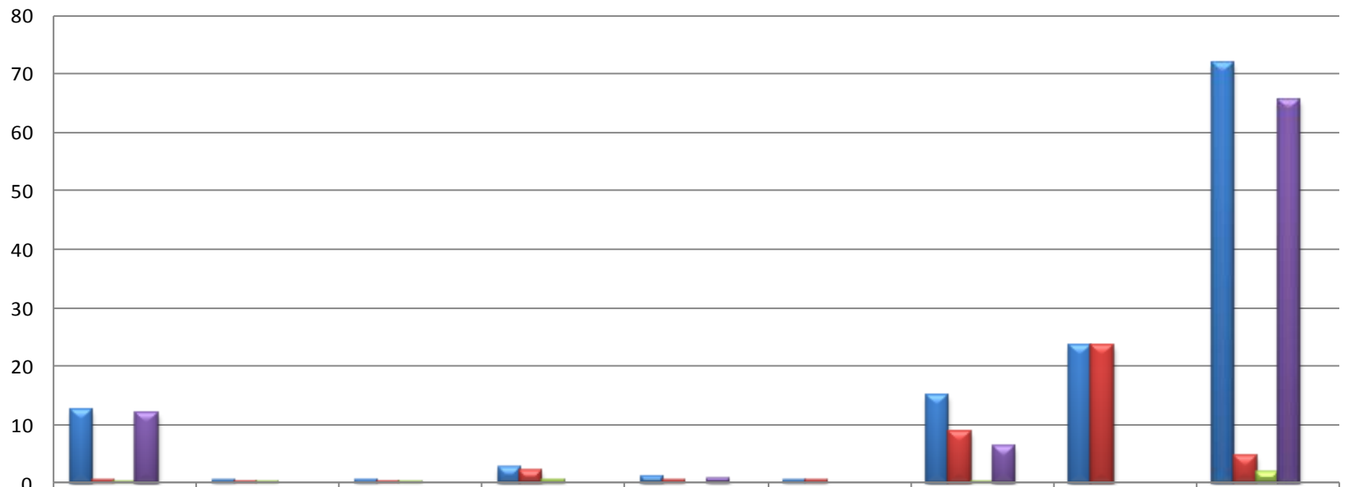
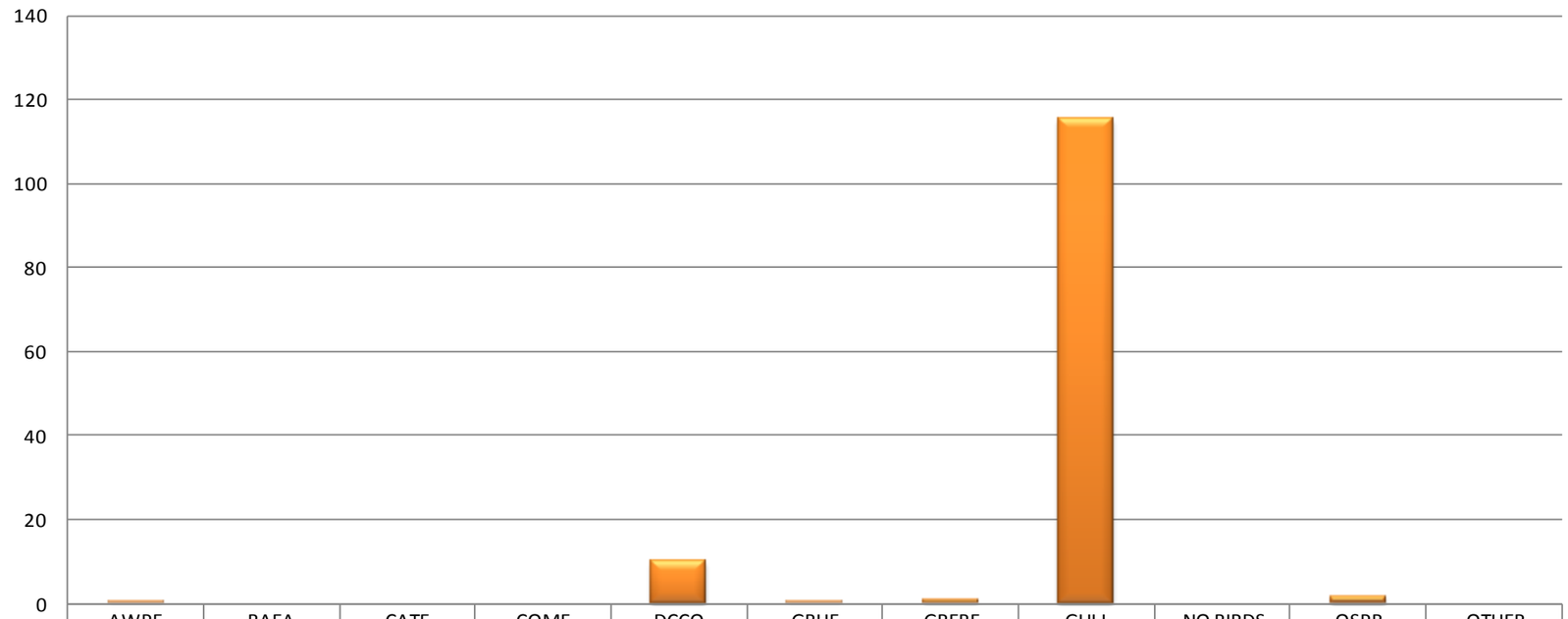
Mean Avian Counts by Behavior



	FB1	PHT1	PHT2	PHT3	SWT1	SWT2	SWT3	SWT4	SWT5
Sum of Mean Total Count	12.5	0.5	0.64	2.64	1.21	0.5	14.93	23.5	71.79
Sum of Mean Foraging Count	0.5	0.36	0.36	2.07	0.5	0.5	8.71	23.5	4.5
Sum of Mean Flyby Count	0.07	0.14	0.29	0.57	0	0	0.07	0	1.86
Sum of Mean Resting Count	11.93	0	0	0	0.71	0	6.14	0	65.43
Sum of Mean Scavenging Count	0	0	0	0	0	0	0	0	0

Mean Avian Counts by Species



	AWPE	BAEA	CATE	COME	DCCO	GBHE	GREBE	GULL	NO BIRDS	OSPR	OTHER
Total	0.07	0	0	0	10.21	0.28	0.79	115.36	0	1.5	0

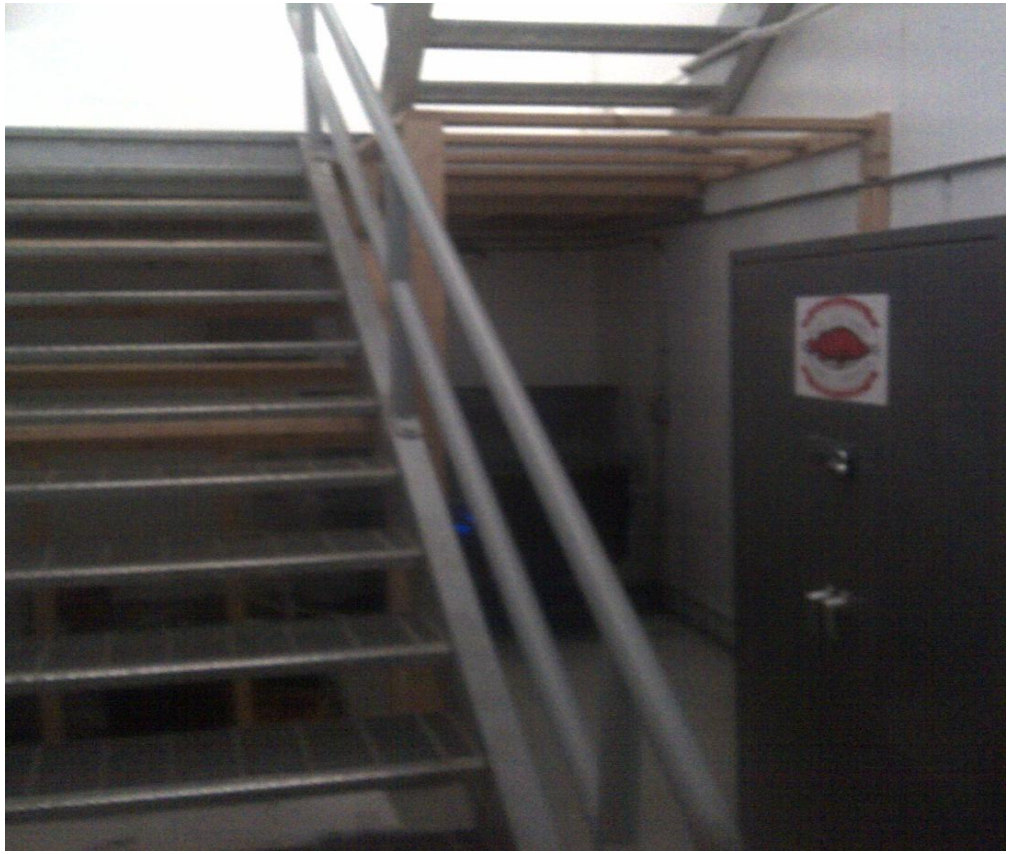
AWPE - American White Pelican; BAEA - Bald Eagle; CATE - Caspian Tern; COME - Common Merganser; DCCO - double crested cormorant; GBHE - Great Blue Heron; GREBE - Grebe; Gull- Gull (all species); OSPR - Osprey

	Temp:		Secchi:
	56.3	SUN	4.0
	56.1	MON	5.0
	56.1	TUES	5.0
	56.5	WED	4.0
	56.7	THUR	4.5
	56.7	FRI	5.0
	57.1	SAT	4.3
AVG:	56.5	AVG:	4.5

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***			KCFS
Date:	Differential	N1 Depth	Differential	E1Depth	E2 Depth	E3 Depth	JP 6	Differential	W1Depth	W2 Depth	W3 Depth	Differential	S1 Depth	S2 Depth	% Spill
5/26/13	1.4	9.8	1.6	3.1	13.5	13.6	14.3	1.5	10.7	10.4	1.4	1.5	9.7	9.7	39.6
5/26/13	1.4	9.8	1.6	2.9	13.4	13.5	14.0	1.6	10.6	10.3	1.1	1.5	9.7	9.7	40.0
5/26/13			1.5	3.0	13.6	13.5		1.5	10.4	10.1	1.3	1.5	9.8	9.8	
5/27/13	1.4	9.7	1.4	3.0	13.6	13.5	14.5	1.6	10.7	10.5	1.5	1.5	9.8	9.7	39.2
5/27/13	1.3	9.9	1.5	3.0	13.4	13.5	14.1	1.5	10.6	10.4	1.2	1.5	9.8	9.7	39.8
5/27/13			1.4	3.0	13.6	13.5		1.4	10.6	10.4	1.2	1.5	9.8	9.7	
5/28/13	1.4	9.9	1.4	4.9	13.4	13.4	13.1	1.4	9.9	10.0	0.4	1.4	9.8	9.7	39.3
5/28/13	1.4	9.8	1.5	4.0	13.6	13.5	13.1	1.6	9.5	9.4	0.8	1.6	9.0	9.1	39.7
5/28/13			1.6	3.1	13.5	13.6		1.4	10.5	10.4	0.0	1.4	9.8	9.7	
5/29/13	1.3	9.9	1.5	1.0	13.6	13.5	13.5	1.5	10.0	10.0	0.6	1.5	9.9	9.9	39.5
5/29/13	1.4	9.9	1.6	1.1	13.4	13.5	13.1	1.4	10.1	10.1	0.0	1.4	10.0	10.0	39.3
5/29/13			1.4	1.0	13.4	13.5		1.6	9.5	9.5	0.0	1.6	8.9	8.9	
5/30/13	1.3	9.9	1.5	-0.1	13.0	13.0	12.5	1.6	9.5	9.6	-0.3	1.5	9.2	9.2	40.0
5/30/13	1.3	9.9	1.6	0.0	13.4	13.4	13.1	1.6	9.6	9.5	0.4	1.5	9.5	9.5	39.9
5/30/13			1.5	0.2	12.6	12.7		1.6	8.6	8.6	0.0	1.6	8.7	8.7	
5/31/13	1.4	9.8	1.6	0.0	13.1	12.9	12.7	1.6	9.6	9.5	-0.1	1.5	9.5	9.6	40.0
5/31/13	1.3	9.9	1.4	0.0	13.5	13.4	12.9	1.5	9.9	10.0	-0.4	1.6	9.4	9.5	40.1
5/31/13			1.5	0.0	13.4	13.4		1.5	9.4	9.5	0.0	1.5	9.4	9.5	
6/1/13	1.2	9.9	1.5	0.0	13.1	12.9	11.5	1.4	9.4	9.5	-1.2	1.5	9.5	9.5	39.8
6/1/13	1.3	9.9	1.5	0.0	13.0	12.9	11.7	1.5	9.0	8.9	-1.0	1.5	9.6	9.6	39.6
6/1/13			1.4	0.0	13.4	13.4		1.3	10.0	9.9	0.0	1.5	9.4	9.4	
AVG:	1.3	9.9	1.5	1.6	13.4	13.3	13.2	1.5	9.9	9.8	0.3	1.5	9.5	9.5	39.7

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



Project resource maintenance starting installation of enclosure to protect north count station PIT antenna equipment.