

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 11/11/2023

Inspection Period: 11/5/2023 thru 11/11/2023



**US Army Corps
of Engineers**
Portland District

JD/WC Project-Fisheries
P.O. Box 823
Rufus, Oregon 97050
Phone: 541-739-1061

All JD Fishways are inspected twice per day during fish passage season, Mar. 1 - Nov. 30.
Additional and frequent monitoring, of the PLC displays in SMF Fisheries Office, as necessary.

John Day Dam	Inspection OOC	Criteria Limit	Total Number of Inspections: 14			Temperature:	56.1 F
						Secchi:	6.0 Ft.
NORTH FISHWAY							
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	High setting					
Count station differential	0	≤ 0.3'					
Entrance differential	0	1.0' - 2.0'	AVG (Ft.)	1.5			
SOUTH FISHWAY							
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	Mid setting					
Count station differential	0	≤ 0.3'					
Weir crest depth (US gauge)	0	1.0' ± 0.1'					
South entrance differential	0	1.0' - 2.0'	AVG (Ft.)	1.3			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.7			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.58			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.7			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.7			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	next inspection 11/20-11/23				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.2', wkly					
Spill volume	0	per FPP	Avg (kcfs)	1.6	Avg (%)	1.5	
Spill pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

Fisheries Related Operations

Smolt Monitoring Operations:

Smolt Monitoring Facility concluded the 2023 sampling season on September 15th.

Adult Ladder Operations:

NFL is operating in criteria.

SFL turbine #2 RTS 3/20 @ reduced RPMs (55 RPMs) to prolong the repairs. SFL turbine #3 OOS (Philadelphia gear inspected on 2/22 and recommended FOOS - See 23JDA03) - Funding awarded (RTS-Unknown). FOG's removed

Project Operations:

Current outages: MU4 (ETR: 1/1/24), MU7 (ETR: 7/31/28), MU8 (ETR 12/1/23), MU10 (ETR: 11/22/23), MU15 (ETR: 12/6/23)

Spillbay Outages: #1-missing brake/motor (ETR Unknown), #6 and #10-operates in manual/local mode only (ETR: Unknown)

From Aug. 15 - Nov. 30, spillbay #2 will be open 1-stop (approximately 1.6 kcfs), during daylight hours, for NFL adult fish attraction.

Weekly Average Tailwater TDG: 99.9

Maintenance:

NFL AWS pump #4 is OOS with an unknown RTS date (see 21JDA02). NFL AWS pump #2 has a failed RTD sensor that keeps it from reading an accurate temperature on the lower bearing (occurred 4/22/23). Therefore, there is no overheat fail safe and it is being run as a last on first off pump (the pump will need to be unstacked to repair the sensor). The repair date is unknown.

Calibration: All gauges within the 0.3' criteria.

Bird Data:

No pelicans foraging within the tailrace this week, foraging gull numbers have slightly decreased this week (~102/inspection), foraging grebes increased this week (~75/inspection), and foraging cormorants stayed steady this week (~4/inspection).

There are no pelicans hanging around Preacher's Island this week

21 of 125 avian lines down

Research:

Four Peaks started ladder counts on 3/1/23 and will be performing year-round counts for 2023 (Day video 11/1/23 - 2/29/24).

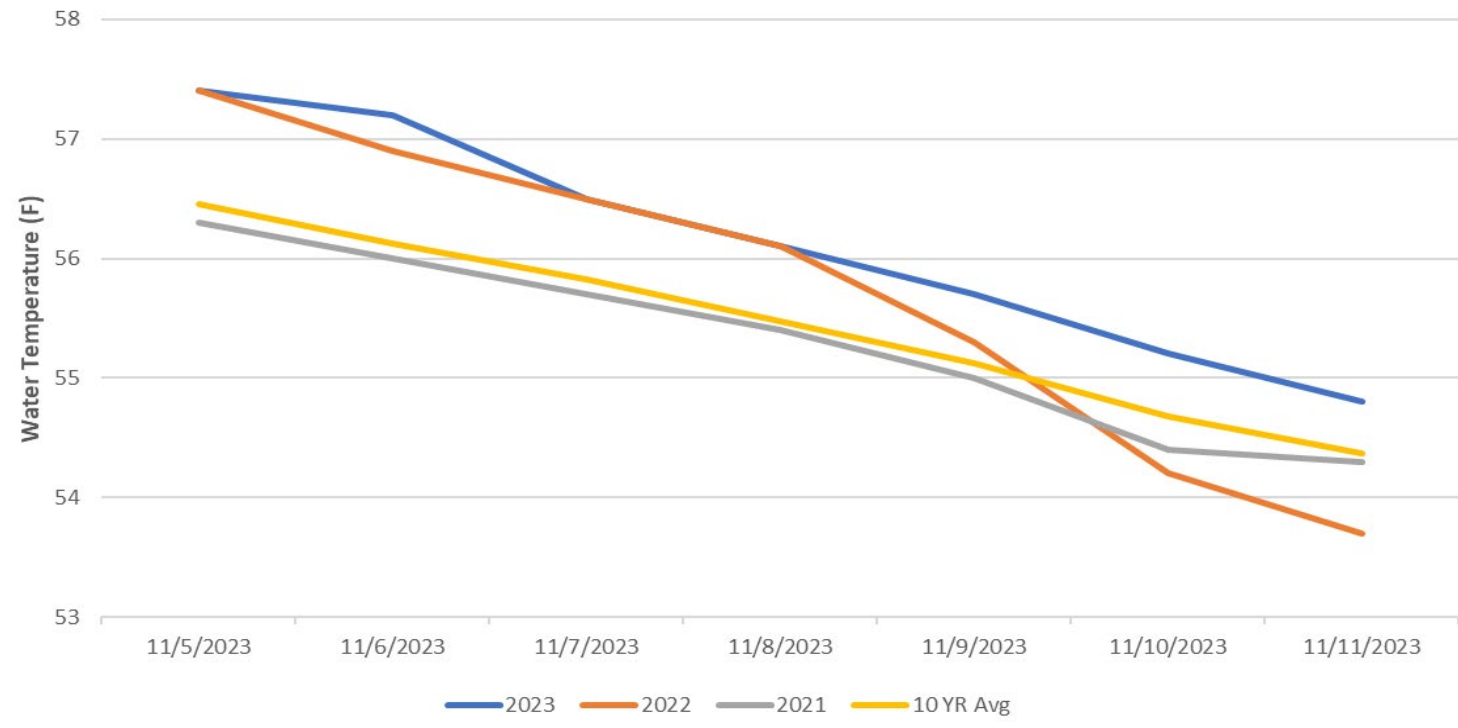
PSMFC smolt condition monitoring ended 9/15/23.

USDA hazing started on 04/16/23 and ended 07/31/23.

WDFW performing NPMP dam angling started 5/8/23 and ended 10/12/23.

CRITFC translocation ended on 9/6/23.

John Day Dam Water Temperature (F)



JDA Collection Channel Velocity

FPP Criteria: 1.5–4.0 feet per second (2 fps optimum)

Date	Measurement Location	Speed (ft/sec)	SFL Turbine RPMs (1,2,3)	Bay 19 TW (ft)
11/6/2023	Unit 4	2.62	55,55,0	159.7
11/6/2023	Unit 12	2.50	55,55,0	159.7
11/8/2023	Unit 4	2.58	55,55,0	160.1
11/8/2023	Unit 12	2.58	55,55,0	160.1
11/11/2023	Unit 4	2.64	55,55,0	159.6
11/11/2023	Unit 12	2.56	55,55,0	159.6

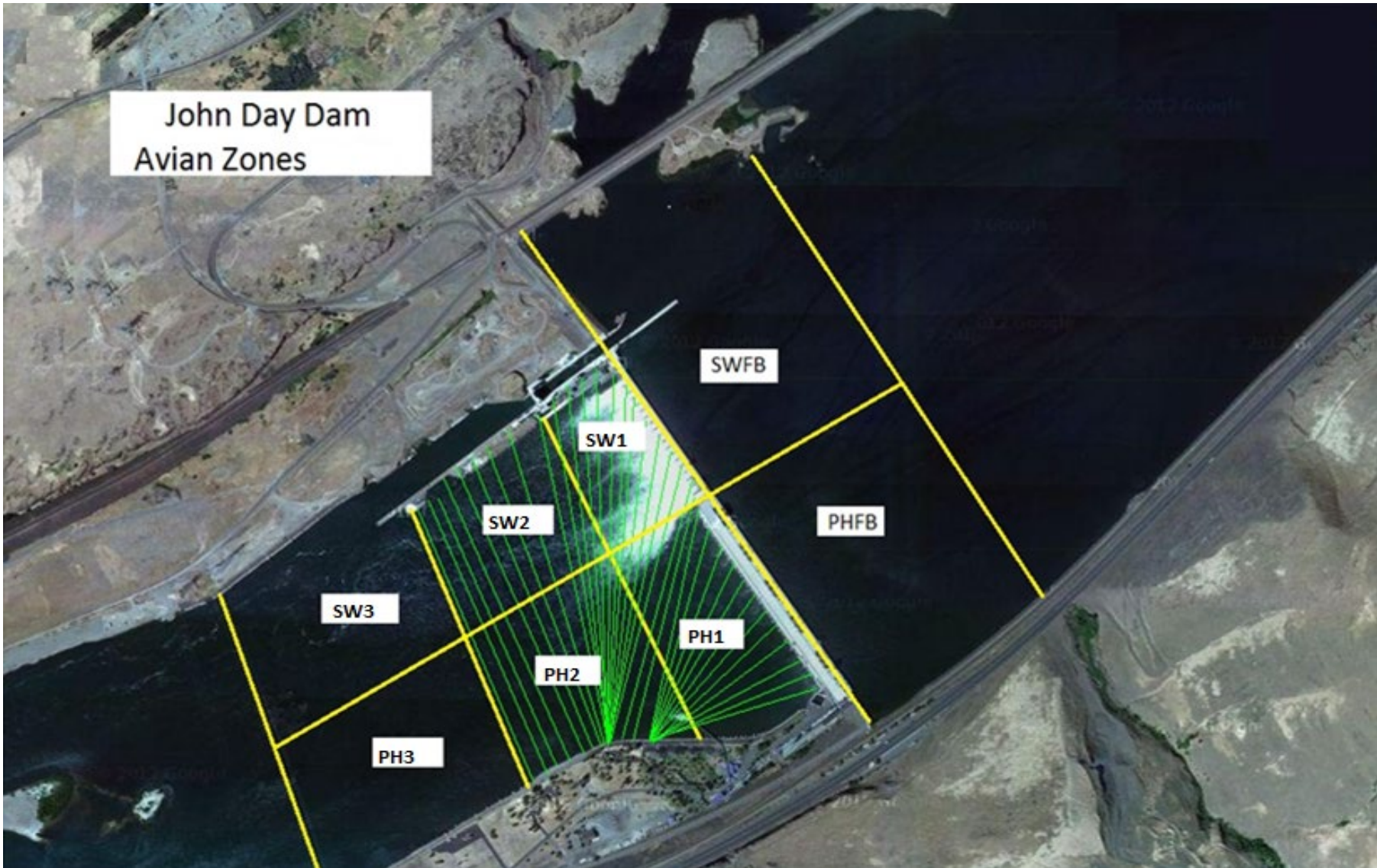
Average Weekly Velocity (ft/sec)	2.58
----------------------------------	------

JOHN DAY WEEKLY AVERAGES

	South Fish Ladder					NFL	JBS	Spill		
	SE1 (Ft)	S.Ent (Ft)	NE1 (Ft)	NE2 (Ft)	Bay19 (Ft)	N.Ent (Ft)	JBS Diff (Ft)	Spill Vol. (kcfs)	Spill (%)	# Spillbays
Sunday	8.4	1.3	9.4	9.4	1.6	1.5	4.7	1.6	1.5	1
Sunday	8.3	1.4	9.2	9.2	1.7	1.6	4.6	1.6	1.6	1
Monday	8.9	1.5	9.4	9.4	1.7	1.5	4.7	1.6	1.4	1
Monday	8.7	1.4	9.2	9.2	1.6	1.6	4.5	1.6	1.7	1
Tuesday	8.6	1.3	9.6	9.6	1.7	1.6	4.6	1.6	1.7	1
Tuesday	8.6	1.3	9.6	9.6	1.5	1.5	4.6	1.6	1.9	1
Wednesday	8.3	1.3	9.8	9.8	1.7	1.5	4.5	1.6	1.6	1
Wednesday	8.2	1.2	9.8	9.8	1.6	1.5	4.6	1.6	1.6	1
Thursday	9.1	1.2	10.2	10.2	1.6	1.5	4.6	1.6	1.1	1
Thursday	8.7	1.2	10.0	10.0	1.3	1.5	4.6	1.6	1.3	1
Friday	9.0	1.4	10.0	10.0	1.7	1.5	4.6	1.6	1.2	1
Friday	8.7	1.3	9.6	9.7	1.5	1.5	4.6	1.6	1.3	1
Saturday	8.7	1.3	9.3	9.3	1.7	1.5	4.5	1.6	1.4	1
Saturday	9.4	1.5	10.0	10.0	1.7	1.4	4.5	1.6	1.5	1
AVG:	8.7	1.3	9.7	9.7	1.6	1.5	4.6	1.6	1.5	1.0

	Temp (F)	Secchi (Ft)	Notes
Sunday	57.4	6.0	
Monday	57.2	6.0	
Tuesday	56.5	6.0	
Wednesday	56.1	6.0	
Thursday	55.7	6.0	
Friday	55.2	6.0	
Saturday	54.8	6.0	
AVG	56.1	6.0	

John Day Dam
Avian Zones



JDA Bird Counts: 11/5/23 to 11/11/23

F(1): Forage AM survey F(2): Forage PM Survey NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total	
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)		
5-Nov	PHFB	0	0	213	310	0	0	12	0	0	0	0	0	0	0	0	0	34	20	0	0	589	
5-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Nov	PH1	21	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96
5-Nov	PH2	29	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
5-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Nov	SW1	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
5-Nov	SW2	0	0	0	0	0	0	75	76	0	0	0	0	0	0	0	0	0	0	0	0	0	151
5-Nov	SW3	0	0	0	0	0	0	5	25	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Avg/Survey		88		265		0		100		0		0		0		0		27		0			479
6-Nov	PHFB	0	0	325	300	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	627
6-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Nov	PH1	25	20	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
6-Nov	PH2	52	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
6-Nov	PH3	0	0	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95
6-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Nov	SW2	0	0	0	0	0	0	75	60	0	0	0	0	0	0	0	0	0	0	0	0	0	135
6-Nov	SW3	0	0	0	0	0	0	25	30	0	0	0	0	0	0	0	0	0	0	0	0	0	55
Avg/Survey		59		366		0		95		0		0		0		0		1		0			521
7-Nov	PHFB	0	0	323	600	0	0	0	0	0	0	0	0	0	0	0	0	44	82	0	0	0	1049
7-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Nov	PH1	7	50	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
7-Nov	PH2	70	60	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132
7-Nov	PH3	55	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
7-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Nov	SW2	0	0	0	0	0	0	70	42	0	0	0	0	0	0	0	0	0	0	0	0	0	112
7-Nov	SW3	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Avg/Survey		134		462		3		70		0		0		0		0		63		0			730
8-Nov	PHFB	0	0	400	385	0	0	0	0	0	0	0	0	0	0	0	0	220	125	0	0	0	1130
8-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Nov	PH1	12	35	16	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
8-Nov	PH2	5	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
8-Nov	PH3	15	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
8-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Nov	SW2	0	0	0	0	0	0	75	67	0	0	0	0	0	0	0	0	0	0	0	0	0	142
8-Nov	SW3	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Avg/Survey		49		401		3		76		0		0		0		0		173		0			701

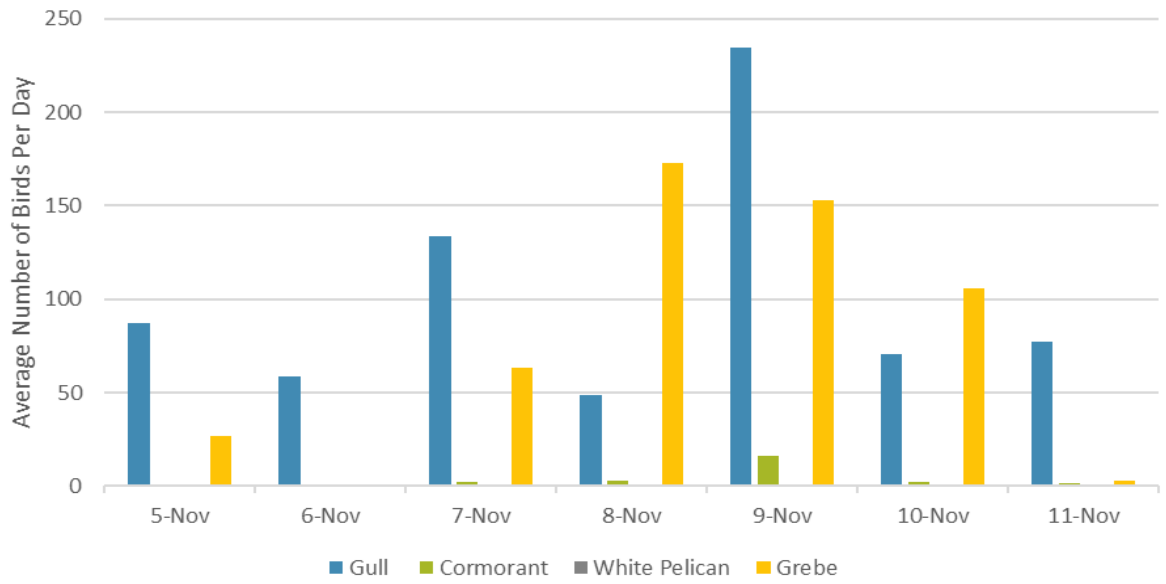
JDA Bird Counts: 11/5/23 to 11/11/23

F(1): Forage AM survey F(2): Forage PM Survey NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
9-Nov	PHFB	0	0	147	231	0	1	24	0	0	0	0	0	0	0	0	0	141	165	0	0	709
9-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Nov	PH1	253	117	48	0	28	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	450
9-Nov	PH2	15	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
9-Nov	PH3	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
9-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Nov	SW2	0	0	0	0	0	0	30	49	0	0	0	0	0	0	0	0	0	0	0	0	79
9-Nov	SW3	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Avg/Survey		235		213		17		52		0		0		0		0		153		0		669
10-Nov	PHFB	0	0	485	211	0	1	7	0	0	0	0	0	0	0	0	111	101	0	0	916	
10-Nov	SWFB	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
10-Nov	PH1	7	33	16	15	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
10-Nov	PH2	17	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
10-Nov	PH3	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
10-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Nov	SW2	0	0	0	0	0	0	53	53	0	0	0	0	0	0	0	0	0	0	0	0	106
10-Nov	SW3	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Avg/Survey		71		386		3		60		0		0		0		0		106		0		625
11-Nov	PHFB	0	0	310	316	0	0	1	0	0	0	0	0	0	0	0	0	6	0	0	0	633
11-Nov	SWFB	0	0	75	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125
11-Nov	PH1	50	30	20	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	103
11-Nov	PH2	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
11-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Nov	SW1	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
11-Nov	SW2	0	0	0	0	0	0	50	30	0	0	0	0	0	0	0	0	0	0	0	0	80
11-Nov	SW3	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Avg/Survey		78		401		2		41		0		0		0		0		3		0		523

Totals	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
	F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total	1422		4984		52		984		0		0		0		0		1051		0		8493
Avg/Survey	102		356		4		70		0		0		0		0		75		0		607

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

