

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 11/18/2023

Inspection Period: 11/12/2023 thru 11/18/2023



**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:	53.5 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.)	8.9			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.64			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.9			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.9			
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 (%)	1.3	
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 increased this week (~126/inspection), foraging grebes increased this week (~110/inspection), and foraging cormorants slightly increased this week (~6/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).

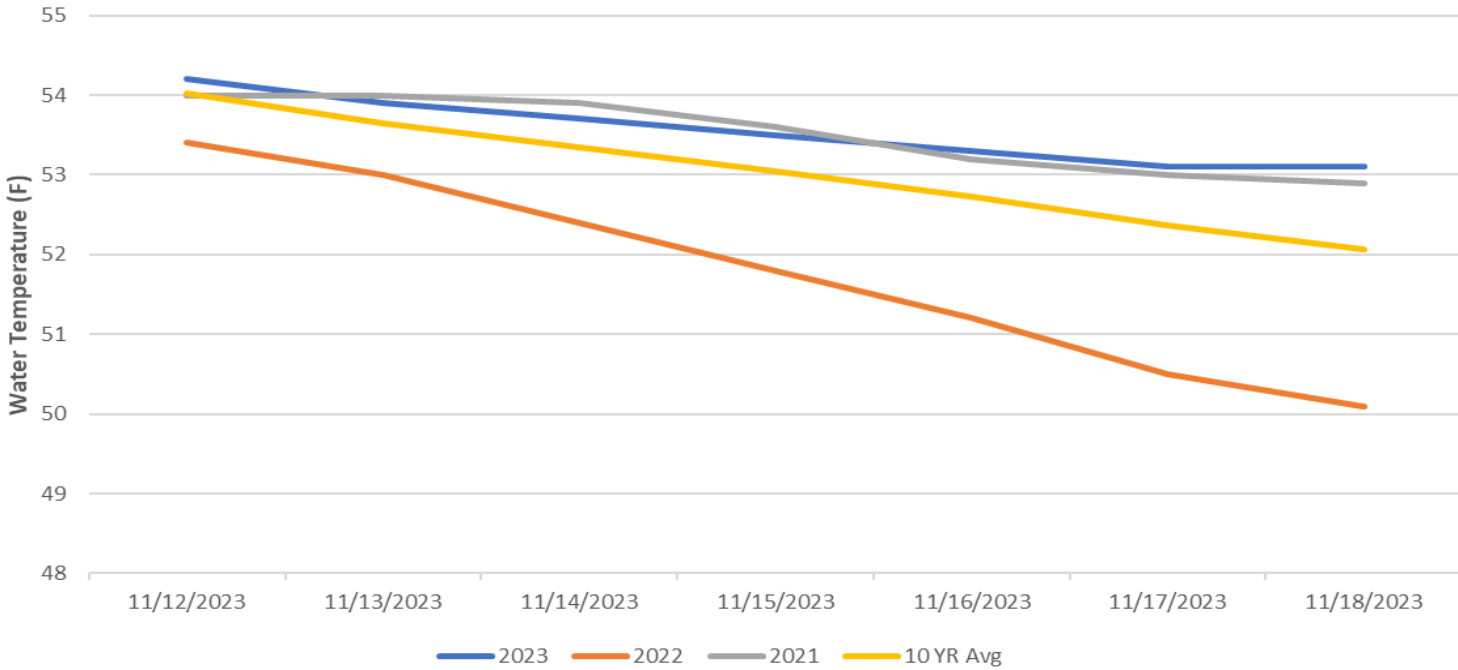
PSMFC smolt condition monitoring ended 9/15/23.

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)
11/13/2023	Unit 4	2.60	55,55,0	159.8
11/13/2023	Unit 12	2.55	55,55,0	159.8
11/15/2023	Unit 4	2.65	55,55,0	159.9
11/15/2023	Unit 12	2.62	55,55,0	159.9
11/18/2023	Unit 4	2.72	55,55,0	160.6
11/18/2023	Unit 12	2.67	55,55,0	160.6

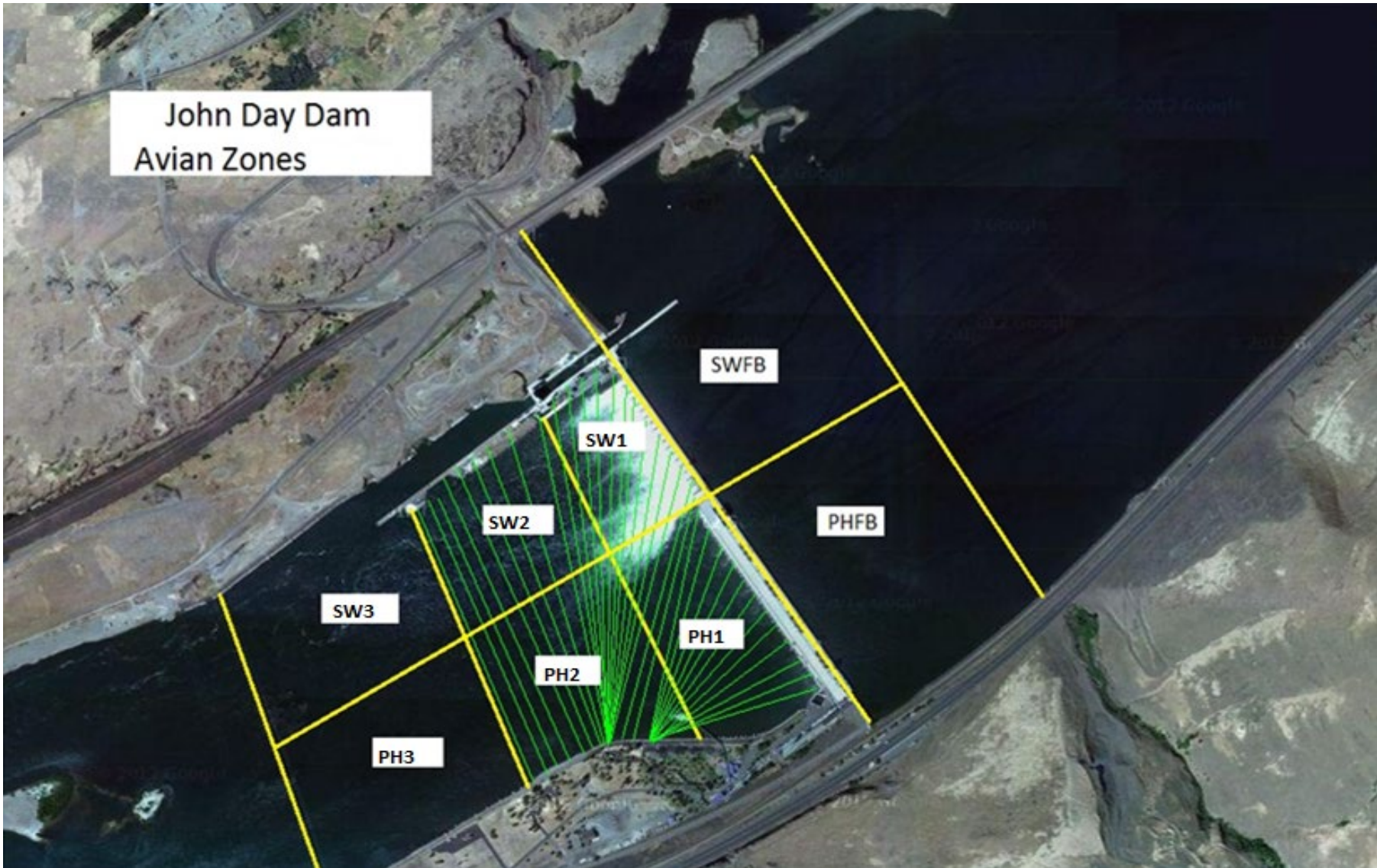
Average Weekly Velocity (ft/sec)	2.64
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JOHN DAY WEEKLY AVERAGES

	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	8.9	1.4	9.6	9.6	1.5	1.6	4.5	1.6	1.3	1
Sunday	9.1	1.3	9.6	9.6	1.5	1.6	4.6	1.6	1.3	1
Monday	9.6	1.2	10.2	10.2	1.6	1.5	4.5	1.6	1.6	1
Monday	8.0	1.4	9.4	9.4	1.6	1.6	4.6	1.6	1.8	1
Tuesday	8.8	1.5	10.2	10.2	1.6	1.4	4.6	1.6	1.4	1
Tuesday	8.0	1.3	9.6	9.6	1.5	1.6	4.5	1.6	1.5	1
Wednesday	9.2	1.2	10.0	10.0	1.3	1.4	4.6	1.6	1.1	1
Wednesday	9.2	1.1	9.6	9.6	1.5	1.4	4.6	1.6	1.3	1
Thursday	9.5	1.1	10.2	10.2	1.5	1.5	4.6	1.6	1.1	1
Thursday	9.1	1.2	10.0	10.0	1.4	1.5	4.5	1.6	1.4	1
Friday	9.0	1.3	10.0	10.0	1.7	1.6	4.6	1.6	1.1	1
Friday	8.6	1.2	9.7	9.7	1.5	1.6	4.6	1.6	1.4	1
Saturday	9.1	1.5	10.0	10.0	1.9	1.5	4.6	1.6	1.1	1
Saturday	8.9	1.4	10.0	10.0	1.7	1.5	4.4	1.6	1.4	1
AVG:	8.9	1.3	9.9	9.9	1.6	1.5	4.6	1.6	1.3	1.0

	Temp (F)	Secchi (Ft)	Notes
Sunday	54.2	6.0	
Monday	53.9	6.0	
Tuesday	53.7	6.0	
Wednesday	53.5	6.0	
Thursday	53.3	6.0	
Friday	53.1	6.0	
Saturday	53.1	6.0	
AVG	53.5	6.0	

John Day Dam
Avian Zones



JDA Bird Counts: 11/12/23 to 11/18/23

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)	
12-Nov	PHFB	0	0	425	500	0	0	3	0	0	0	0	0	0	0	0	0	207	215	0	0	1350
12-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Nov	PH1	15	120	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140
12-Nov	PH2	75	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125
12-Nov	PH3	25	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
12-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Nov	SW2	0	0	0	0	0	0	56	78	0	0	0	0	0	0	0	0	0	0	0	0	134
12-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		160		463		3		69		0		0		0		0		211		0		905
13-Nov	PHFB	0	0	385	252	0	0	7	0	0	0	0	0	0	0	0	135	127	0	0	906	
13-Nov	SWFB	0	0	0	143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	143
13-Nov	PH1	5	27	17	20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
13-Nov	PH2	52	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97
13-Nov	PH3	26	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
13-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Nov	SW2	0	0	0	0	0	0	72	0	0	0	0	0	0	0	0	0	0	0	0	0	72
13-Nov	SW3	0	0	0	0	0	0	0	69	0	0	0	0	0	0	0	0	0	0	0	0	69
Avg/Survey		85		409		1		74		0		0		0		0		131		0		699
14-Nov	PHFB	0	0	400	300	0	0	0	0	0	0	0	0	0	0	0	111	70	0	0	881	
14-Nov	SWFB	0	0	78	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	233
14-Nov	PH1	15	175	0	49	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	241
14-Nov	PH2	100	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	155
14-Nov	PH3	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
14-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Nov	SW2	0	0	0	0	0	0	72	71	0	0	0	0	0	0	0	0	0	0	0	0	143
14-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		183		491		1		72		0		0		0		0		91		0		837
15-Nov	PHFB	0	0	315	400	0	0	21	21	0	0	0	0	0	0	0	105	82	0	0	944	
15-Nov	SWFB	0	0	130	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183
15-Nov	PH1	43	55	20	0	11	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	138
15-Nov	PH2	50	85	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	138
15-Nov	PH3	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
15-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Nov	SW2	0	0	0	0	0	0	45	64	0	0	7	0	0	0	0	0	0	0	0	0	116
15-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		123		459		12		76		0		4		0		0		94		0		766

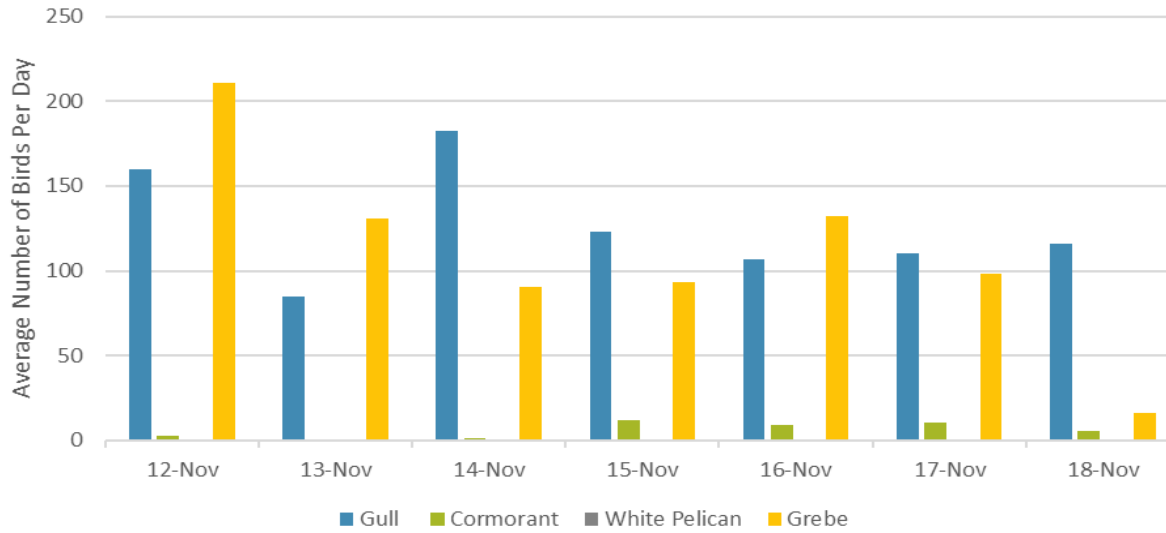
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		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
16-Nov	PHFB	0	0	341	391	0	0	11	0	0	0	0	0	0	0	0	0	132	133	0	0	1008
16-Nov	SWFB	0	0	145	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	204
16-Nov	PH1	31	105	117	130	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	401	
16-Nov	PH2	35	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	
16-Nov	PH3	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
16-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16-Nov	SW2	0	0	0	0	0	0	11	53	0	0	0	0	0	0	0	0	0	0	0	64	
16-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avg/Survey		107		592		9		38		0		0		0		0		133		0	878	
17-Nov	PHFB	0	0	460	257	0	0	0	0	0	0	0	0	0	0	0	101	95	0	0	913	
17-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17-Nov	PH1	81	20	48	60	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	230	
17-Nov	PH2	63	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106	
17-Nov	PH3	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	
17-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17-Nov	SW2	0	0	0	0	0	0	15	51	0	0	0	0	0	0	0	0	0	0	0	66	
17-Nov	SW3	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	
Avg/Survey		111		413		11		35		0		0		0		0		98		0	667	
18-Nov	PHFB	0	0	510	250	0	0	0	0	0	0	0	0	0	0	0	20	12	0	0	792	
18-Nov	SWFB	0	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200	
18-Nov	PH1	28	75	20	0	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	134	
18-Nov	PH2	52	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	129	
18-Nov	PH3	0	0	0	210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	
18-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18-Nov	SW2	0	0	0	0	0	0	75	81	0	0	0	0	0	0	0	0	0	0	0	156	
18-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avg/Survey		116		595		6		78		0		0		0		0		16		0	811	

Totals	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
	F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total	1768		6840		81		880		0		7		0		0		1545		0		11121
Avg/Survey	126		489		6		63		0		1		0		0		110		0		794

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

