

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 12/2/2023

Inspection Period: 11/26/2023 thru 12/2/2023



**US Army Corps
of Engineers**
Portland District

JD/WC Project-Fisheries
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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: 12			Temperature:	49.6 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.)	1.6			
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.)	1.5			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.5			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.63			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.7			
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 11/27-11/30				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.2', wkly					
Spill volume	0	per FPP	Avg (kcfs)	1.3	Avg (%)	1.1	
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), 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: 98.2

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:

Foraging gull numbers have slightly decreased this week (~29/inspection), foraging grebes decreased this week (~3/inspection), and foraging cormorants remained steady this week (~4/inspection).

There are 5 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).

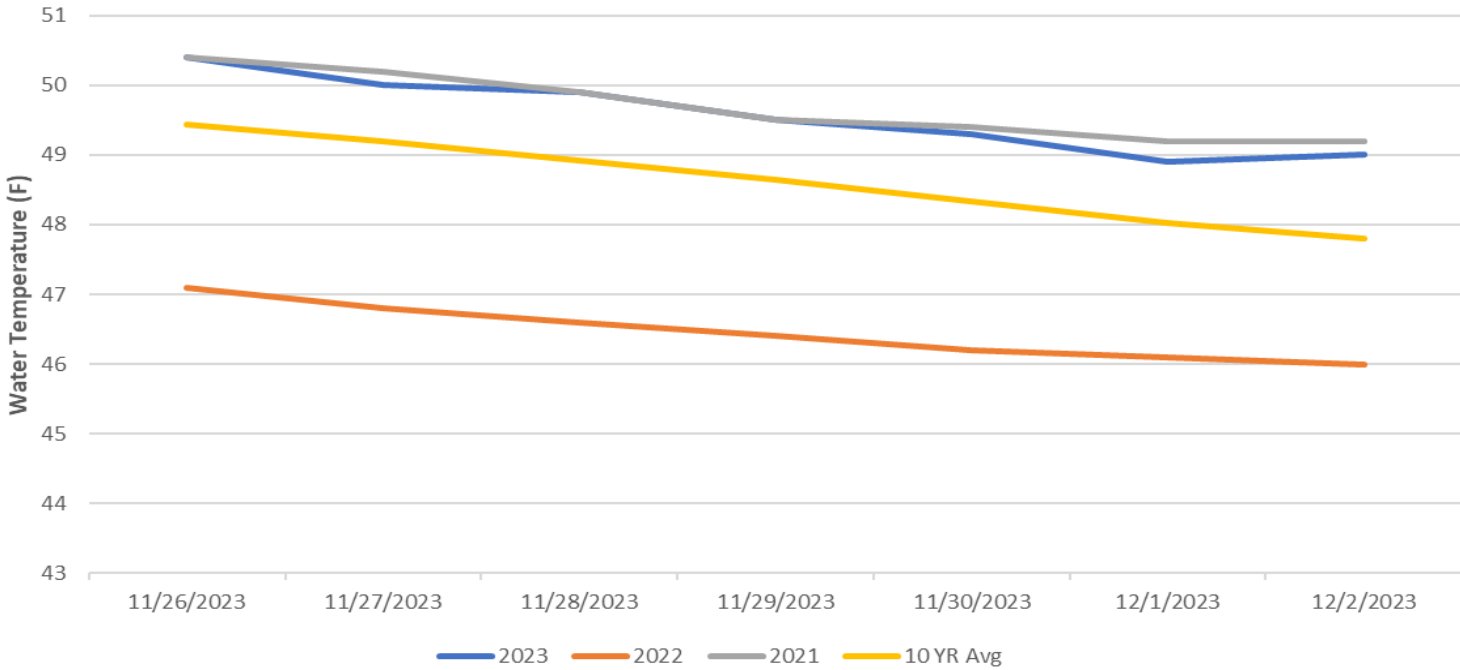
PSMFC smolt condition monitoring ended 9/15/23.

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)
11/27/2023	Unit 4	2.74	55,55,0	160.6
11/27/2023	Unit 12	2.62	55,55,0	160.6
11/28/2023	Unit 4	2.66	55,55,0	160.8
11/28/2023	Unit 12	2.56	55,55,0	160.8
11/29/2023	Unit 4	2.62	55,55,0	160.5
11/29/2023	Unit 12	2.57	55,55,0	160.5

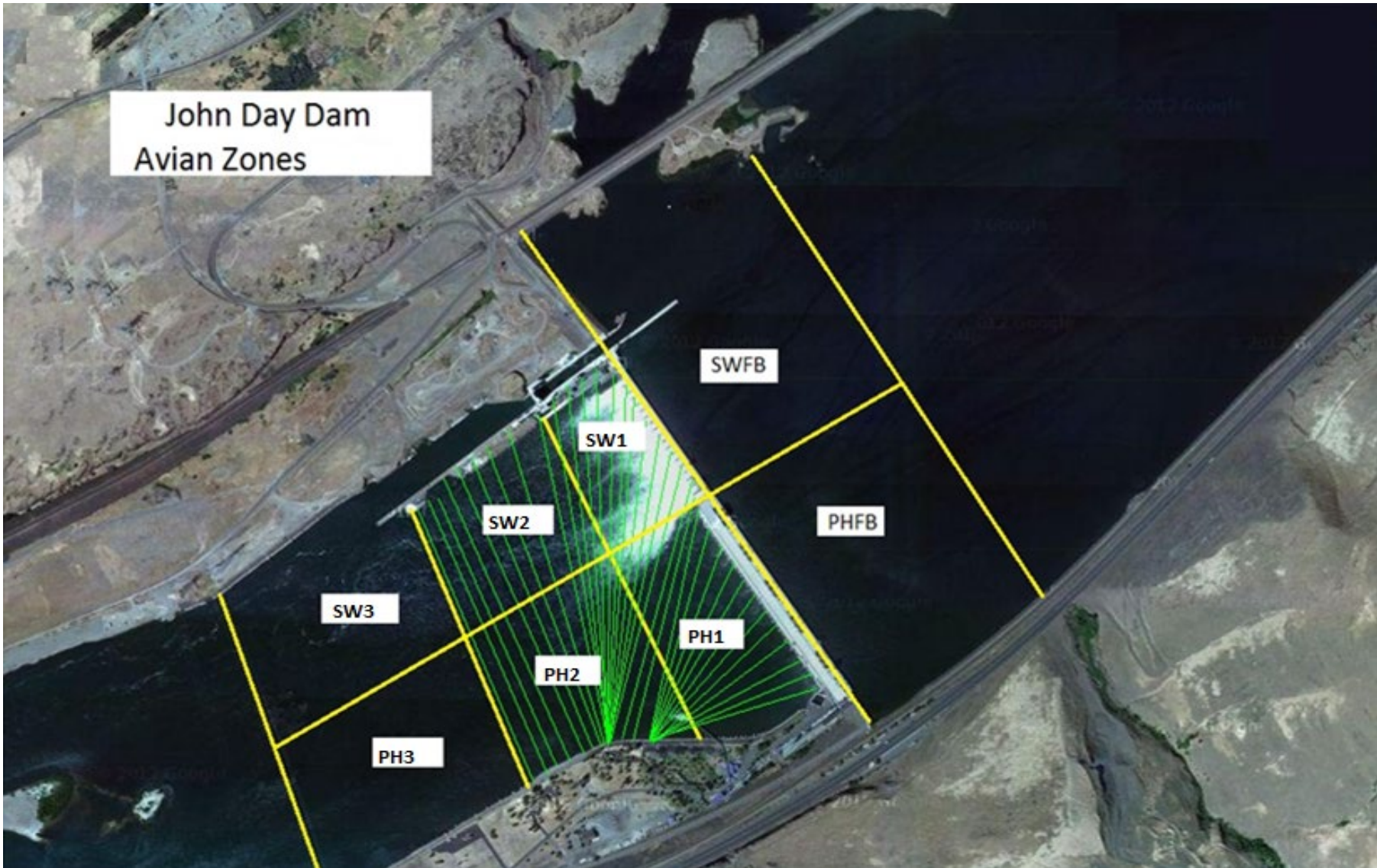
Average Weekly Velocity (ft/sec)	2.63
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JOHN DAY WEEKLY AVERAGES

	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	8.4	1.7	9.6	9.6	1.8	1.5	4.6	1.6	1.1	1
Sunday	8.3	1.7	9.5	9.4	1.7	1.6	4.5	1.6	1.4	1
Monday	8.6	1.5	10.3	10.3	1.8	1.6	4.6	1.6	1.1	1
Monday	8.4	1.6	9.9	9.9	1.9	1.6	4.6	1.6	1.1	1
Tuesday	8.8	1.4	10.5	10.5	1.8	1.6	4.7	1.6	1.1	1
Tuesday	8.2	1.6	9.7	9.7	1.8	1.6	4.4	1.6	1.8	1
Wednesday	8.7	1.4	10.1	10.1	1.8	1.5	4.7	1.6	1.0	1
Wednesday	8.5	1.2	10.0	10.0	1.7	1.5	4.7	1.6	1.3	1
Thursday	8.7	1.3	9.6	9.6	1.7	1.6	4.7	1.6	1.2	1
Thursday	8.4	1.3	9.5	9.5	1.4	1.6	4.7	1.6	1.6	1
Friday	OOS	OOS	OOS	OOS	OOS	1.6	4.5	0.0	0.0	0
Saturday	OOS	OOS	OOS	OOS	OOS	1.5	4.5	0.0	0.0	0
AVG:	8.5	1.5	9.9	9.9	1.7	1.6	4.6	1.3	1.1	0.8

	Temp (F)	Secchi (Ft)	Notes
Sunday	50.4	6.0	Starting 12/01/23 one inspection per day, SFL Fish Turbines shut off for ladder dewater on 12/4
Monday	50.0	6.0	
Tuesday	49.9	6.0	
Wednesday	49.5	6.0	
Thursday	49.3	6.0	
Friday	48.9	6.0	
Saturday	49.0	6.0	
AVG	49.6	6.0	

John Day Dam
Avian Zones



JDA Bird Counts: 11/26/23 to 12/2/23

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)	
26-Nov	PHFB	0	0	100	225	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	327
26-Nov	SWFB	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26-Nov	PH1	20	15	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65
26-Nov	PH2	20	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
26-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Nov	SW2	0	0	0	0	0	0	50	60	0	0	0	0	0	0	0	0	0	0	0	0	110
26-Nov	SW3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Avg/Survey		44		190		0		56		0		0		0		0		1		0		290
27-Nov	PHFB	0	0	10	25	0	0	0	0	0	0	0	0	0	0	0	10	5	0	0	0	50
27-Nov	SWFB	0	0	46	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96
27-Nov	PH1	20	20	30	15	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95
27-Nov	PH2	20	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
27-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Nov	SW1	0	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	42
27-Nov	SW2	0	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	42
27-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		41		88		5		42		0		0		0		0		8		0		184
28-Nov	PHFB	0	0	20	20	2	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	48
28-Nov	SWFB	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
28-Nov	PH1	10	20	20	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
28-Nov	PH2	25	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
28-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Nov	SW2	0	0	0	0	0	0	25	42	0	0	0	0	0	0	0	0	0	0	0	0	67
28-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		43		40		4		34		0		0		0		0		2		0		121
29-Nov	PHFB	0	0	52	75	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	133
29-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Nov	PH1	15	20	0	15	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
29-Nov	PH2	15	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
29-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Nov	SW2	0	0	0	0	0	0	35	5	0	0	0	0	0	0	0	0	0	0	0	0	40
29-Nov	SW3	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Avg/Survey		28		71		2		33		0		0		0		0		3		0		136

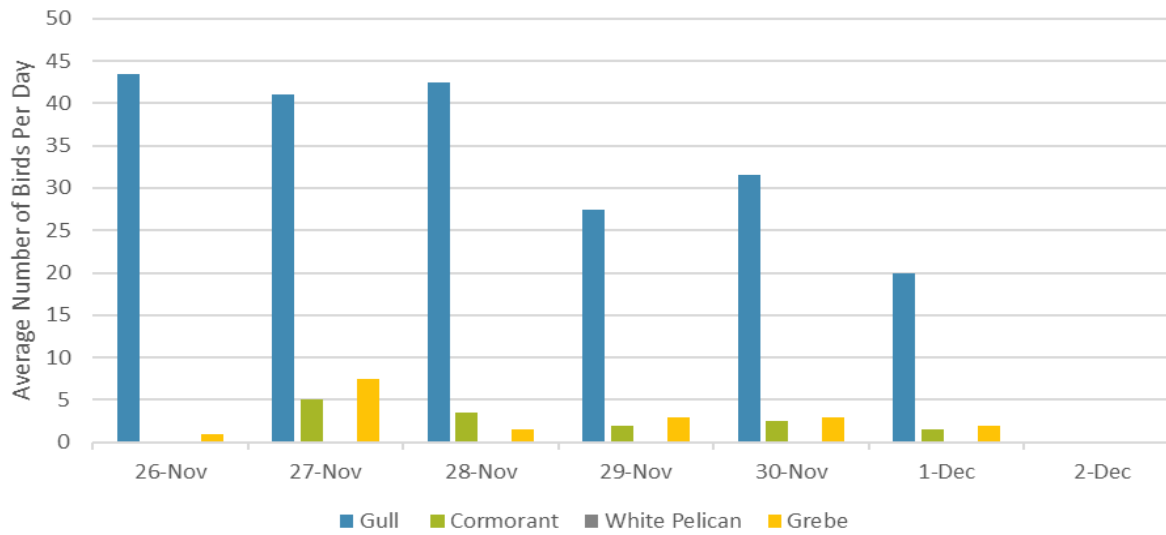
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		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)		
30-Nov	PHFB	0	0	75	75	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	156	
30-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Nov	PH1	20	15	15	23	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	
30-Nov	PH2	5	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	
30-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30-Nov	SW2	0	0	0	0	0	0	5	41	0	0	0	0	0	0	0	0	0	0	0	0	46	
30-Nov	SW3	0	0	0	0	0	0	25	7	0	0	0	0	0	0	0	0	0	0	0	0	32	
Avg/Survey		32		94		3		39		0		0		0		0		3		0		170	
1-Dec	PHFB	0	0	97	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	101	
1-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1-Dec	PH1	33	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	
1-Dec	PH2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
1-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1-Dec	SW2	0	0	0	0	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	47	
1-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avg/Survey		20		49		2		24		0		0		0		0		2		0		96	
2-Dec	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-Dec	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avg/Survey		0		0		0		0		0		0		0		0		0		0		0	

Totals	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF					
Weekly Total	412	1063	29	452	0	0	0	0	0	0	36	0	1992								
Avg/Survey	29	76	2	32	0	0	0	0	3	0	142										

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

