

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/28/2023

Inspection Period: 10/22/2023 thru 10/28/2023



**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:	61.8 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.)	1.4			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.5			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.56			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.2			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.2			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	next inspection 10/23-10/26				
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 (%)	2.0	
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: 11/2/23), MU7 (ETR: 7/31/28), MU8 (ETR TBD) MU10 (ETR: 11/15/23), MU15 (ETR: 11/30/23)

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: 99.16

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 greatly increased this week (~195/inspection), foraging grebes decreased this week (~26/inspection), and foraging cormorants stayed steady this week (~3/inspection).

There are ~7 pelicans hanging around Preacher's Island

20 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).

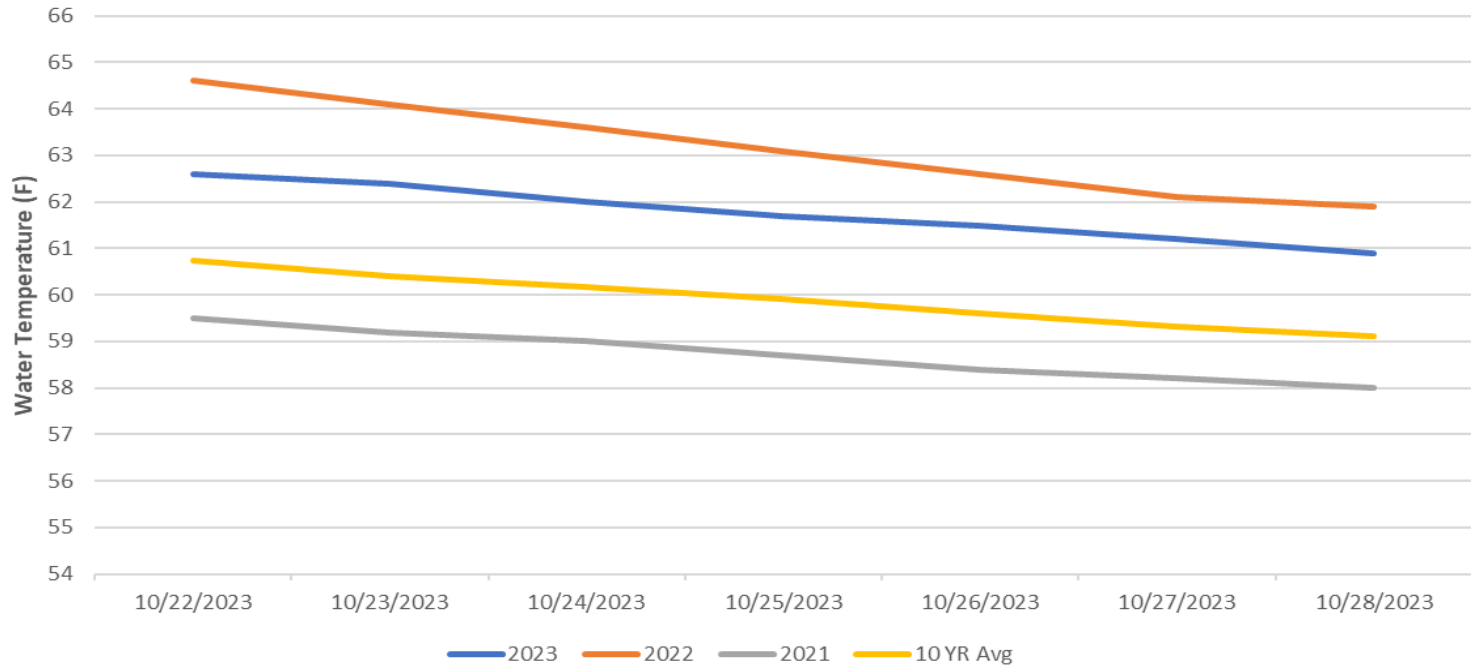
PSMFC smolt condition monitoring ended 9/15/23.

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

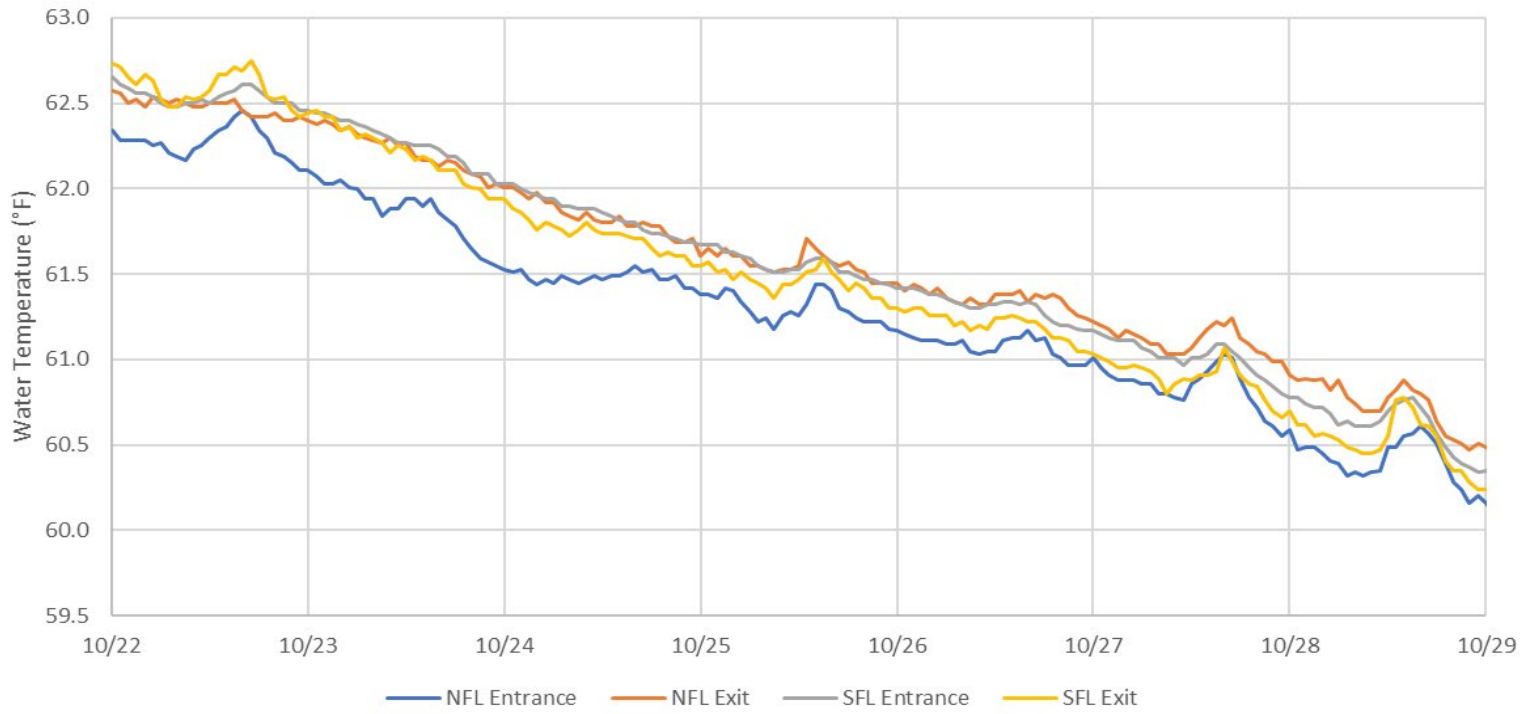
WDFW performing NPMP dam angling started 5/8/23 and ended 10/12/23.

CRITFC translocation ended on 9/6/23.

John Day Dam Water Temperature (F)



JDA Ladder Temperatures



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)
10/23/2023	Unit 4	2.50	55,55,0	160.0
10/23/2023	Unit 12	2.46	55,55,0	160.0
10/25/2023	Unit 4	2.64	55,55,0	159.9
10/25/2023	Unit 12	2.61	55,55,0	159.9
10/28/2023	Unit 4	2.57	55,55,0	159.3
10/28/2023	Unit 12	2.57	55,55,0	159.3

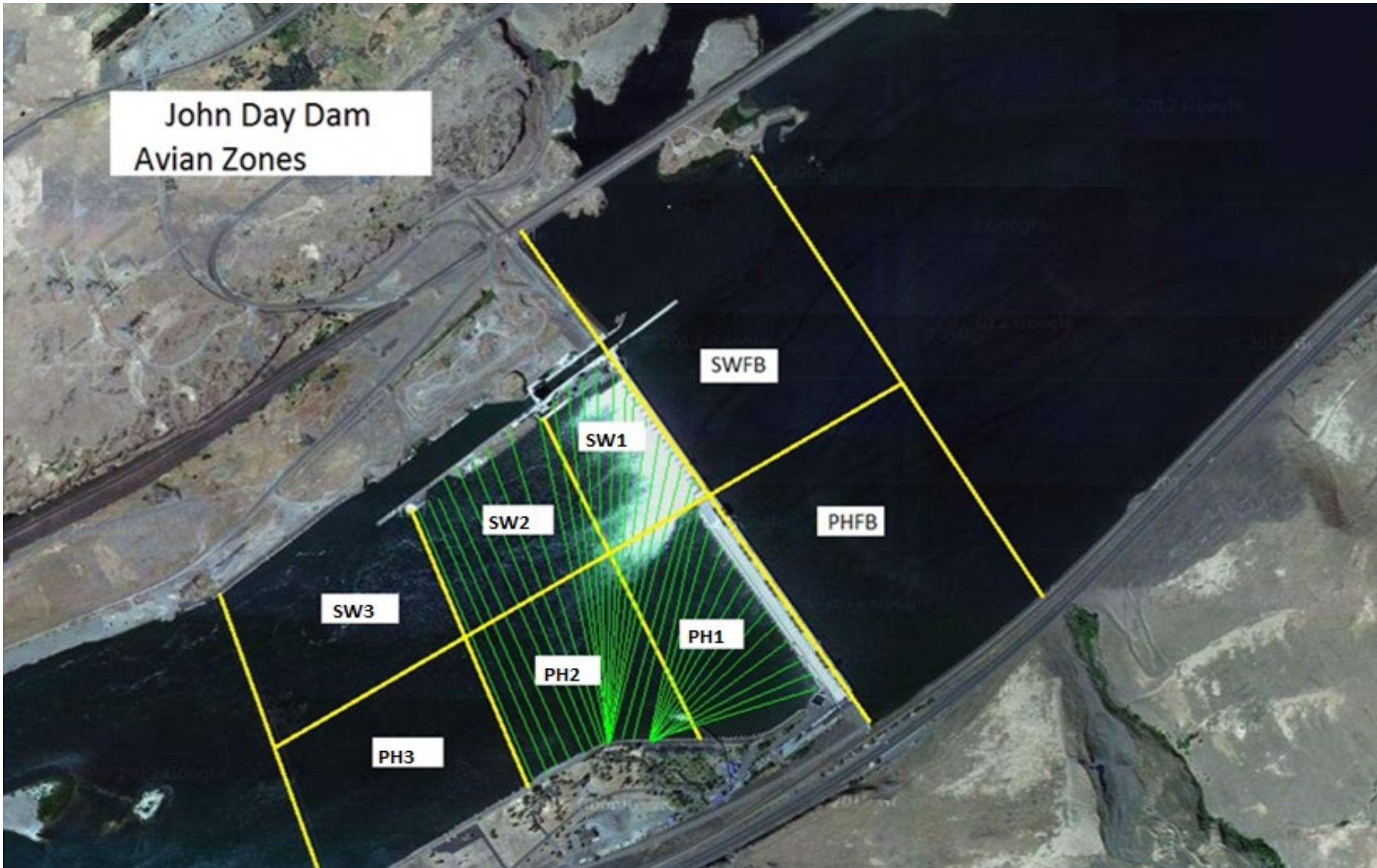
Average Weekly Velocity (ft/sec)	2.56
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JOHN DAY WEEKLY AVERAGES

	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	1.4	8.6	8.6	1.8	1.5	4.5	1.6	2.3	1
Sunday	8.8	1.5	9.0	9.0	1.8	1.4	4.5	1.6	2.2	1
Monday	9.0	1.5	9.6	9.6	1.7	1.4	4.4	1.6	2.4	1
Monday	8.2	1.6	9.5	9.5	1.7	1.4	4.5	1.6	2.3	1
Tuesday	8.1	1.4	9.3	9.3	1.7	1.5	4.6	1.6	2.1	1
Tuesday	8.2	1.3	9.3	9.3	1.7	1.5	4.4	1.6	2.0	1
Wednesday	8.7	1.4	9.7	9.7	1.7	1.5	4.8	1.6	2.1	1
Wednesday	8.3	1.5	9.5	9.6	1.6	1.5	4.6	1.6	2.1	1
Thursday	8.8	1.3	9.2	9.2	1.5	1.5	4.6	1.6	1.4	1
Thursday	9.6	1.3	8.9	8.9	1.5	1.5	4.6	1.6	1.1	1
Friday	8.6	1.3	9.5	9.5	1.5	1.6	4.6	1.6	1.7	1
Friday	8.0	1.2	8.9	9.0	1.3	1.6	4.6	1.6	2.2	1
Saturday	8.1	1.4	8.9	8.9	1.7	1.6	4.6	1.6	1.8	1
Saturday	8.2	1.3	9.0	9.0	1.6	1.6	4.6	1.6	2.1	1
AVG:	8.5	1.4	9.2	9.2	1.6	1.5	4.6	1.6	2.0	1.0

	Temp (F)	Secchi (Ft)	Notes
Sunday	62.6	6.0	
Monday	62.4	6.0	
Tuesday	62.0	6.0	
Wednesday	61.7	6.0	
Thursday	61.5	6.0	
Friday	61.2	6.0	
Saturday	60.9	6.0	
AVG	61.8	6.0	

John Day Dam
Avian Zones



JDA Bird Counts: 10/22/23 to 10/28/23

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)		
22-Oct	PHFB	0	0	150	311	0	0	3	2	0	0	0	0	0	0	0	0	19	55	0	0	540	
22-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Oct	PH1	1	10	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
22-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
22-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
22-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
22-Oct	SW2	0	0	0	0	0	0	50	52	0	0	0	0	0	0	0	0	0	0	0	0	102	
22-Oct	SW3	0	0	0	0	0	0	40	30	0	0	0	0	0	0	0	0	0	0	0	0	70	
Avg/Survey		6		231		3		89		0		0		0		0		37		0		364	
23-Oct	PHFB	0	0	250	462	0	0	0	0	0	0	0	0	0	0	0	10	12	0	0	734		
23-Oct	SWFB	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
23-Oct	PH1	198	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	203	
23-Oct	PH2	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	
23-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23-Oct	SW2	0	0	0	0	0	0	50	35	0	0	0	0	0	0	0	0	0	0	0	0	85	
23-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avg/Survey		114		366		3		43		0		0		0		0		11		0		536	
24-Oct	PHFB	0	0	306	210	0	0	0	0	0	0	0	0	0	0	0	57	52	0	0	625		
24-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
24-Oct	PH1	125	92	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	222	
24-Oct	PH2	30	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	
24-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
24-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
24-Oct	SW2	0	0	0	0	0	10	31	30	0	0	0	0	0	0	0	0	0	0	0	0	71	
24-Oct	SW3	0	0	0	0	0	0	16	42	0	0	0	0	0	0	0	0	0	0	0	0	58	
Avg/Survey		142		258		8		60		0		0		0		0		55		0		522	
25-Oct	PHFB	0	0	0	183	0	0	0	0	0	0	0	0	0	0	0	52	26	0	0	261		
25-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25-Oct	PH1	205	125	0	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	341	
25-Oct	PH2	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	
25-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25-Oct	SW2	0	0	0	0	0	0	41	55	0	0	0	0	0	0	0	0	0	0	0	0	96	
25-Oct	SW3	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
Avg/Survey		211		92		6		61		0		0		0		0		39		0		408	

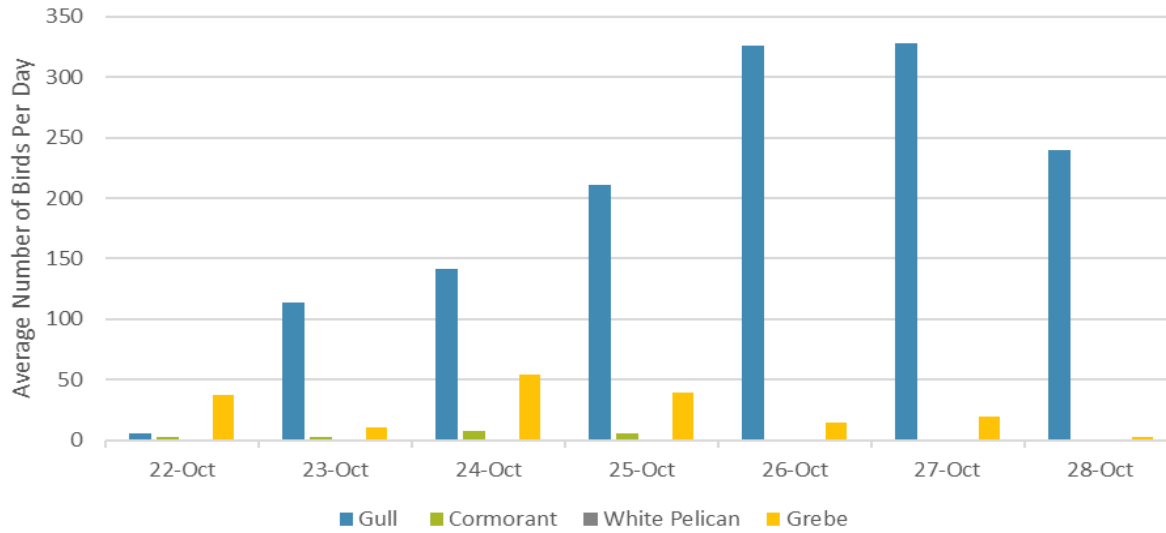
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Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
26-Oct	PHFB	0	0	101	0	0	0	0	0	0	0	0	0	0	0	0	29	0	0	0	130	
26-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
26-Oct	PH1	255	236	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	538	
26-Oct	PH2	0	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83	
26-Oct	PH3	40	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	
26-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
26-Oct	SW2	0	0	0	0	0	0	52	53	0	0	0	0	0	0	0	0	0	0	0	105	
26-Oct	SW3	15	0	0	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	
Avg/Survey		326		121		0		53		0		0		0		0		15		0		514
27-Oct	PHFB	0	0	130	73	0	0	0	0	0	0	0	0	0	0	0	14	26	0	0	243	
27-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
27-Oct	PH1	215	175	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	420	
27-Oct	PH2	0	0	0	0	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	47	
27-Oct	PH3	150	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231	
27-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
27-Oct	SW2	0	0	0	0	0	0	0	63	0	0	0	0	0	0	0	0	0	0	0	63	
27-Oct	SW3	35	0	270	305	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	625	
Avg/Survey		328		404		0		63		0		0		0		0		20		0		815
28-Oct	PHFB	0	0	210	125	0	0	2	0	0	0	0	0	0	0	0	6	0	0	0	343	
28-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28-Oct	PH1	150	103	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	328	
28-Oct	PH2	102	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132	
28-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28-Oct	SW2	0	0	0	0	0	0	75	50	0	0	0	0	0	0	0	0	0	0	0	125	
28-Oct	SW3	95	0	205	211	0	0	75	10	0	0	0	0	0	0	0	0	0	0	0	596	
Avg/Survey		240		413		0		106		0		0		0		0		3		0		762

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	F	NF			
Weekly Total	2733	3767	36	945	0	0	0	0	0	0	0	0	0	0	0	358	0	0	0	0	7839
Avg/Survey	195	269	3	68	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	560

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

