

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 11/5/2022

Inspection Period: 10/30/2022 thru 11/5/2022



**US Army Corps
of Engineers**
Portland District

JD/WC Project-Fisheries
P.O. Box 823
Rufus, Oregon 97050
Phone: 541-506-7860

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: 59.2 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.)	9.2			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.47			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.0			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.3			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	next STS inspection- 10/24-10/27				
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 %		
Spill pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

Fisheries Related Operations

Smolt Monitoring Operations:

Sampling has concluded for the year and the SMF is running in bypass mode with full-flow PIT detections

Adult Ladder Operations:

Both ladders are operating within criteria.

Project Operations:

Current outages: MU4 (ETR: 11/2/23), MU7 (ETR: 12/31/25), MU8 (ETR: 12/15/22), MU10 (ETR: 12/1/22) MU13 (ETR: 11/22/22).
From Aug. 15 - Nov. 30, spillbay #2 will be open 1-stop (approximately 1.6 kcfs), during daylight hours, for NFL adult fish attraction.

Maintenance:

Calibration:

All gauges within the 0.3' criteria.

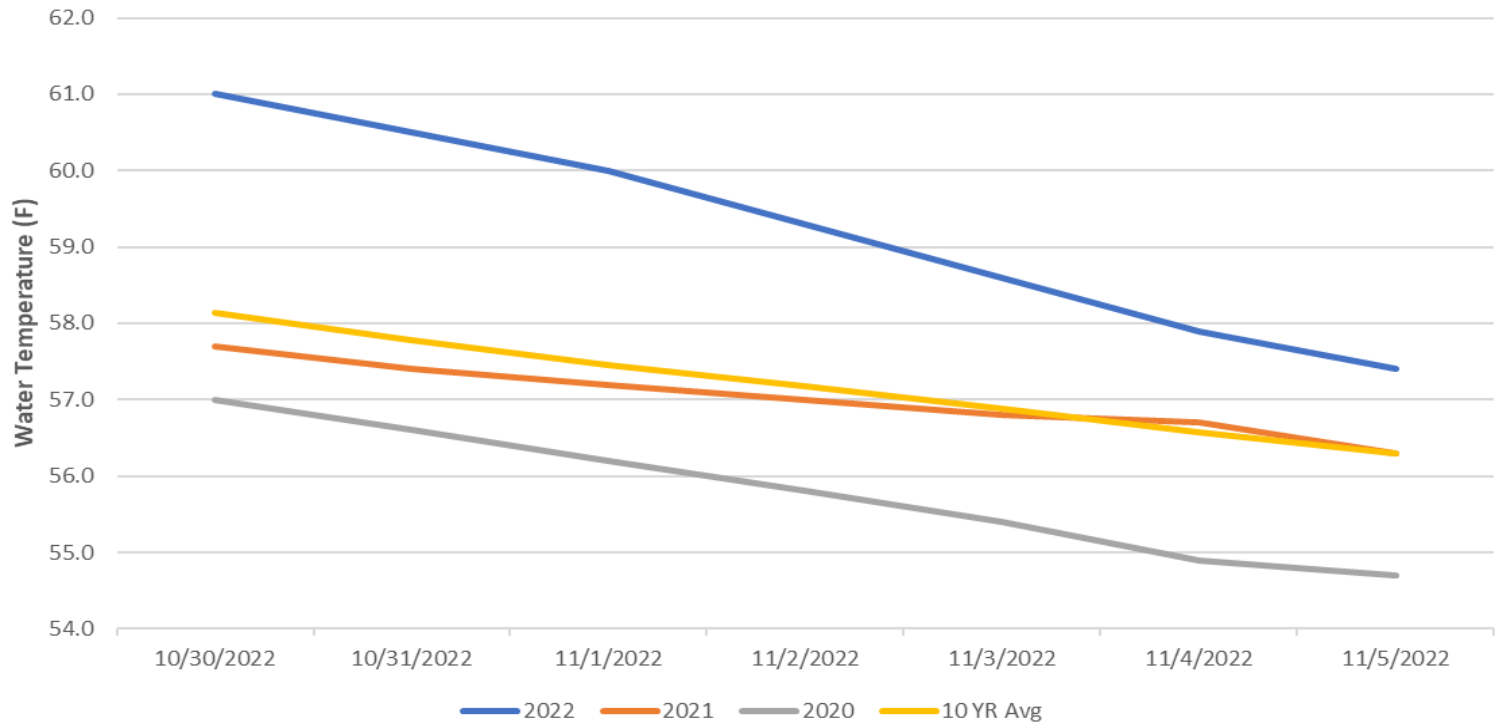
Bird Data:

Gull numbers are holding steady. Cormorant and Grebe numbers are steadily increasing. There are approximately 5 pelicans hanging around Preacher's Island with very few foraging observations in JDA bird counting zones.
11 of 125 avian lines down.

Research:

Four Peaks Fish Counting concluded on 10/31.

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)
10/31/2022	Unit 4	2.36	0,68,68	159.7
10/31/2022	Unit 12	2.46	0,68,68	159.7
11/2/2022	Unit 4	2.50	0,68,68	159.8
11/2/2022	Unit 12	2.51	0,68,68	159.8
11/5/2022	Unit 4	2.47	0,68,68	159.9
11/5/2022	Unit 12	2.50	0,68,68	159.9

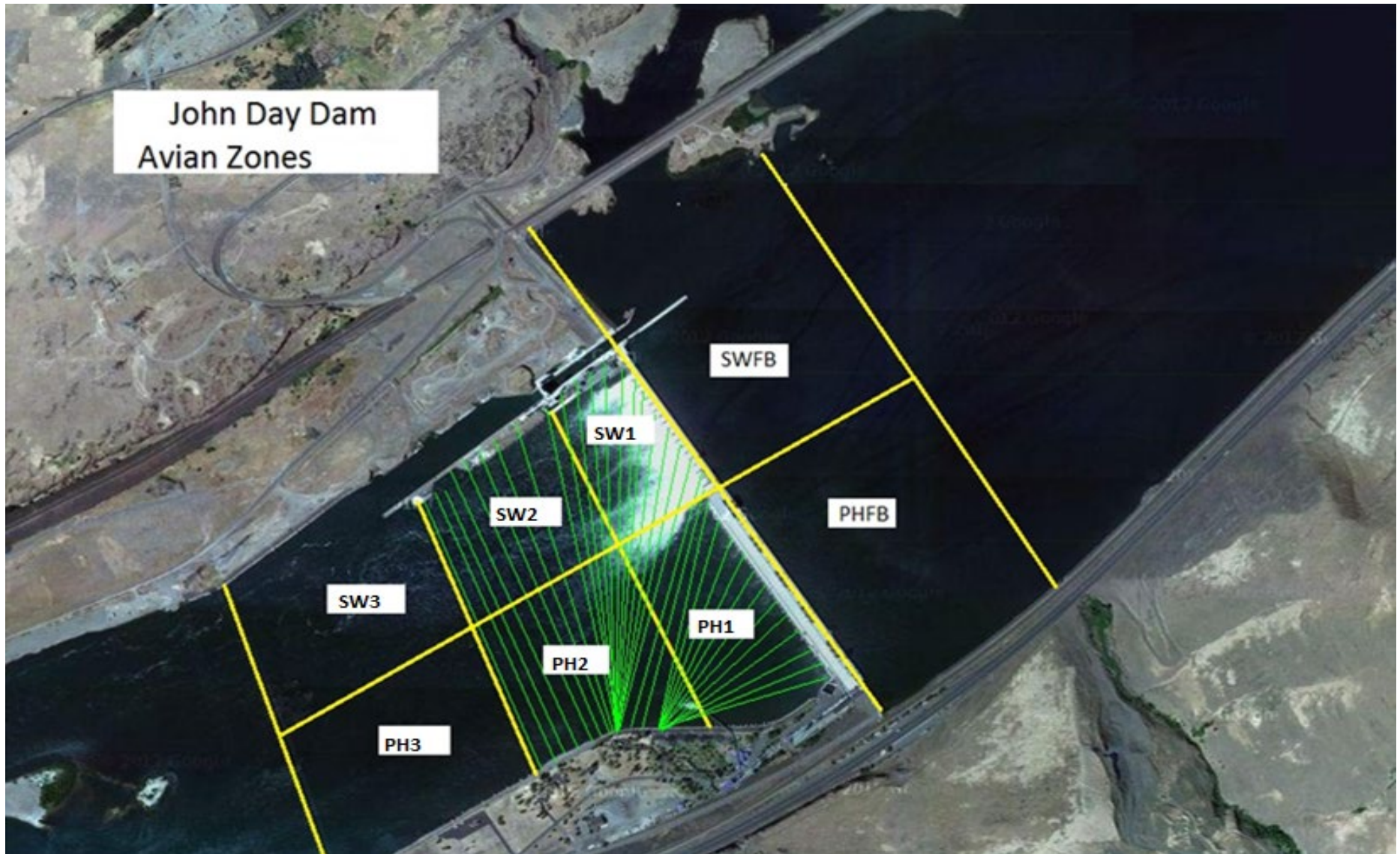
Average Weekly Velocity (ft/sec)	2.47
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JOHN DAY WEEKLY AVERAGES

	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)	# Spillbays
Sunday	9.0	1.3	8.8	9.1	1.7	1.7	4.5	1.5	1
Sunday	9.0	1.2	8.9	9.2	1.6	1.6	4.6	1.5	1
Monday	8.8	1.4	8.7	9.0	1.5	1.6	4.6	1.6	1
Monday	9.0	1.2	8.9	9.2	1.6	1.6	4.5	1.6	1
Tuesday	8.8	1.4	8.8	9.2	1.6	1.5	4.6	1.5	1
Tuesday	8.9	1.3	8.8	9.1	1.4	1.5	4.6	1.5	1
Wednesday	9.0	1.2	9.1	9.4	1.4	1.4	4.6	1.6	1
Wednesday	9.2	1.4	8.9	9.2	1.7	1.5	4.5	1.6	1
Thursday	9.5	1.4	9.1	9.4	1.9	1.5	4.6	1.6	1
Thursday	9.1	1.2	8.9	9.2	1.8	1.5	4.6	1.6	1
Friday	9.2	1.2	9.1	9.4	1.5	1.5	4.6	1.6	1
Friday	9.8	1.4	9.6	9.9	1.6	1.5	4.6	1.6	1
Saturday	9.5	1.2	9.3	9.6	1.4	1.6	4.6	1.6	1
Saturday	9.3	1.4	9.4	9.7	1.5	1.6	4.6	1.6	1
AVG:	9.2	1.3	9.0	9.3	1.6	1.5	4.6	1.6	1.0

	Temp (F)	Secchi (Ft)	Notes
Sunday	61.0	6.0	
Monday	60.5	6.0	
Tuesday	60.0	6.0	
Wednesday	59.3	6.0	
Thursday	58.6	6.0	
Friday	57.9	6.0	
Saturday	57.4	6.0	
AVG	59.2	6.0	

John Day Dam
Avian Zones



JDA Bird Counts: 10/30/22 to 11/5/22

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

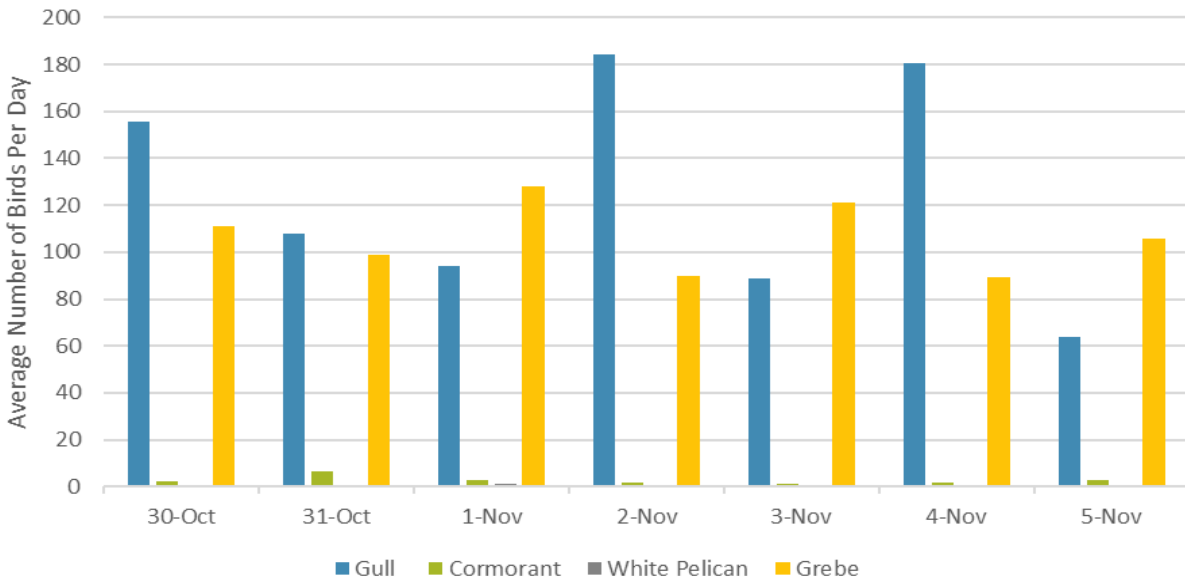
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
30-Oct	PHFB	0	0	229	0	0	0	0	0	0	0	0	0	0	0	0	0	130	92	0	0	451
30-Oct	SWFB	0	0	353	266	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	619
30-Oct	PH1	30	15	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
30-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Oct	PH3	141	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	266
30-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Oct	SW2	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	38
30-Oct	SW3	0	0	0	0	0	0	47	14	0	0	0	0	0	0	2	0	0	0	0	0	63
Total/Survey		156		424		2		50		0		0		0		1		111		0		743
31-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	117	0	0	198
31-Oct	SWFB	0	0	425	213	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	638
31-Oct	PH1	105	10	0	0	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	126
31-Oct	PH2	31	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
31-Oct	PH3	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
31-Oct	SW1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
31-Oct	SW2	0	0	0	0	0	0	6	38	0	0	0	0	0	0	0	0	0	0	0	0	44
31-Oct	SW3	0	0	0	0	0	0	16	17	0	0	0	0	0	0	5	0	0	0	0	0	38
Total/Survey		108		319		7		39		0		0		0		3		99		0		574
1-Nov	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130	126	0	0	256
1-Nov	SWFB	0	0	333	612	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	945
1-Nov	PH1	22	40	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68
1-Nov	PH2	4	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
1-Nov	PH3	77	34	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	113
1-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Nov	SW2	0	0	0	0	0	0	7	34	0	0	0	0	0	0	0	0	0	0	0	0	41
1-Nov	SW3	0	0	0	0	0	0	35	28	0	0	0	0	0	0	2	6	0	0	0	0	71
Total/Survey		94		473		3		52		0		0		1		4		128		0		755
2-Nov	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180	0	0	0	180
2-Nov	SWFB	0	0	212	526	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	738
2-Nov	PH1	103	103	21	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	230
2-Nov	PH2	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
2-Nov	PH3	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140
2-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Nov	SW2	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
2-Nov	SW3	0	0	0	0	0	0	21	60	0	0	0	0	0	0	0	0	0	0	0	0	81
Total/Survey		185		380		2		49		0		0		0		0		90		0		705

JDA Bird Counts: 10/30/22 to 11/5/22

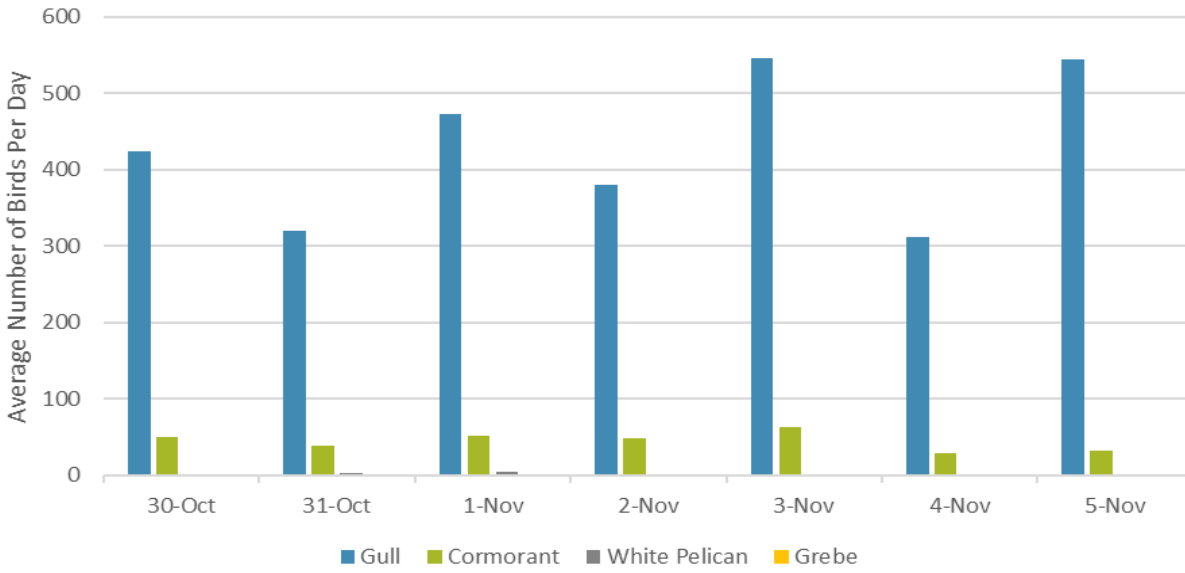
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Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
3-Nov	PHFB	0	0	18	0	0	0	20	0	0	0	0	0	0	0	0	0	102	140	0	0	280
3-Nov	SWFB	0	0	527	521	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1048
3-Nov	PH1	97	30	0	25	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154
3-Nov	PH2	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
3-Nov	PH3	0	0	0	0	0	0	35	25	0	0	0	0	0	0	0	0	0	0	0	0	60
3-Nov	SW1	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19
3-Nov	SW2	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	25
3-Nov	SW3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	3
Total/Survey		89		546		1		63		0		0		0		1		121		0		820
4-Nov	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	112	0	0	179
4-Nov	SWFB	0	0	601	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	611
4-Nov	PH1	80	92	12	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	187
4-Nov	PH2	88	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98
4-Nov	PH3	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91
4-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Nov	SW2	0	0	0	0	0	0	23	25	0	0	0	0	0	0	0	0	0	0	0	0	48
4-Nov	SW3	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Total/Survey		181		312		2		28		0		0		0		0		90		0		611
5-Nov	PHFB	0	0	45	400	0	0	0	0	0	0	0	0	0	0	0	0	95	117	0	0	657
5-Nov	SWFB	0	0	353	290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	643
5-Nov	PH1	9	14	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
5-Nov	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Nov	PH3	94	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	105
5-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Nov	SW2	0	0	0	0	0	0	29	36	0	0	0	0	0	0	0	0	0	0	0	0	65
5-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		64		544		3		33		0		0		0		0		106		0		749
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		1750		5992		36		624		0		0		2		17		1489		0		4955
Avg/Survey		125		428		3		45		0		0		0		1		106		0		708

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds





A small group (~10) of Horned Grebes have been sighted for the past week in the forebay mixed with a large group (100+) of Western Grebes