

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/29/2022

Inspection Period: 10/23/2022 thru 10/29/2022



**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: 13			Temperature: 62.7 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.)	1.4			
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.)	9.1			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.40			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	8.9			
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)	1.7	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.

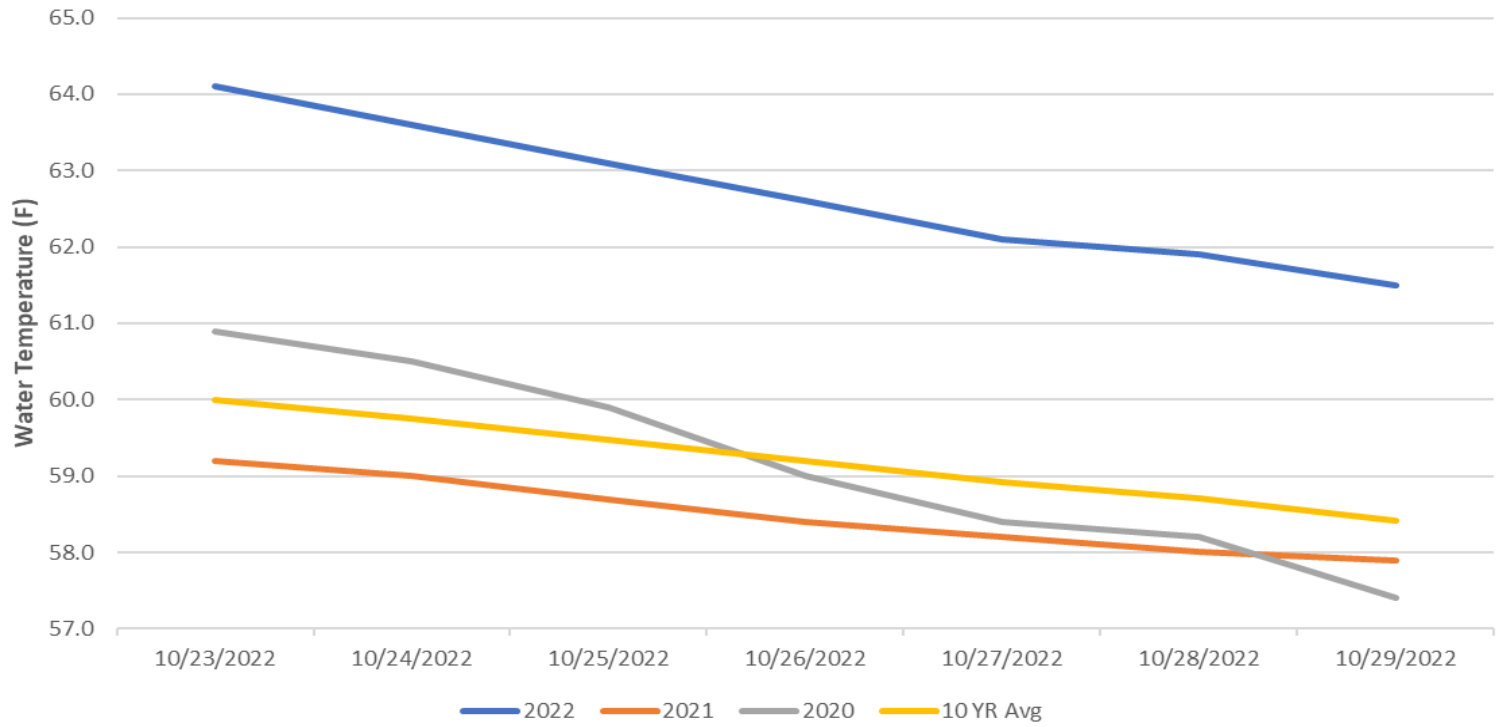
Bird Data:

Gull numbers are holding steady. Cormorant and Grebe numbers are steadily increasing. There are approximately 10-pelicans hanging around Preacher's Island with very few foraging observations in JDA bird counting zones.
11 of 125 avian lines down.

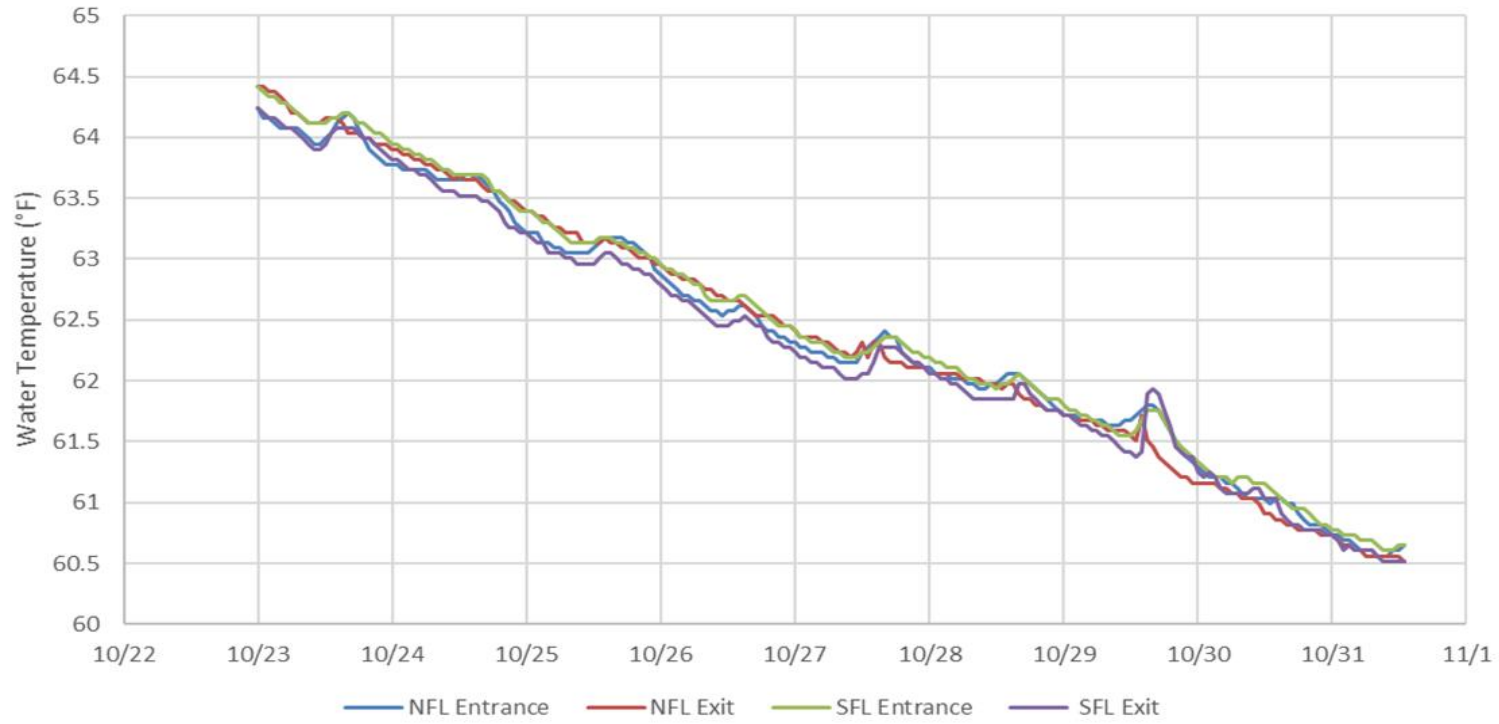
Research:

Daytime adult fish counting started April 1 (runs through October) and night video counts concluded on 9/30.

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)
10/24/2022	Unit 4	2.34	0,68,68	159.4
10/24/2022	Unit 12	2.38	0,68,68	159.4
10/26/2022	Unit 4	2.36	0,68,68	159.4
10/26/2022	Unit 12	2.41	0,68,68	159.4
10/28/2022	Unit 4	2.39	0,68,68	160.1
10/28/2022	Unit 12	2.52	0,68,68	160.1

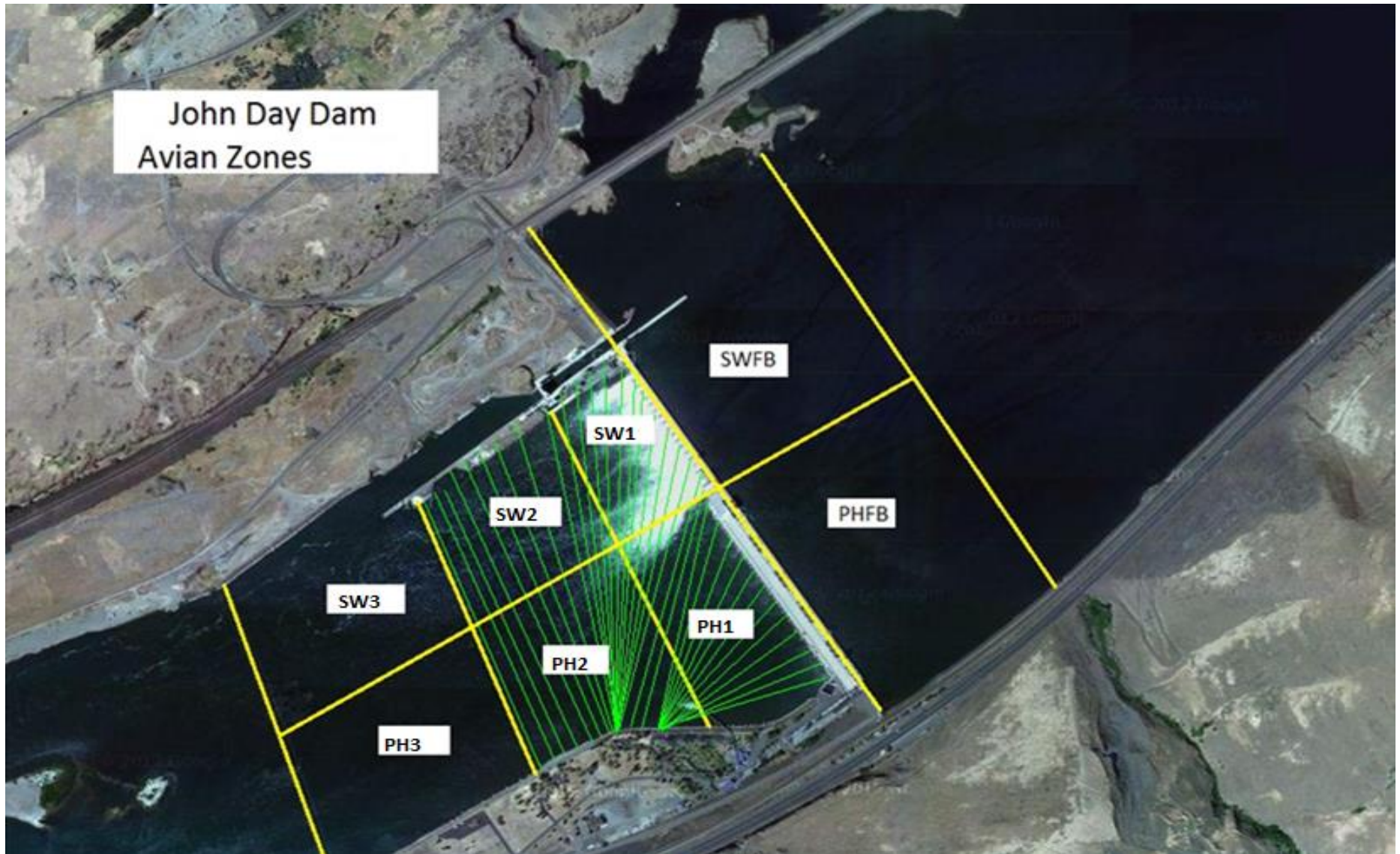
Average Weekly Velocity (ft/sec)	2.40
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JOHN DAY WEEKLY AVERAGES

	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	9.3	1.4	9.1	9.4	1.7	1.4	4.5	1.6	1
Sunday	9.2	1.1	9.1	9.4	1.4	1.5	4.6	1.6	1
Monday	9.1	1.3	9.0	9.3	1.6	1.5	4.6	1.6	1
Monday	8.8	1.3	8.6	8.9	1.7	1.0	4.5	1.6	1
Tuesday	9.3	1.4	9.2	9.5	1.6	1.5	4.6	1.6	1
Tuesday									1
Wednesday	8.8	1.3	8.5	8.8	1.9	1.5	5.0	1.6	1
Wednesday	8.5	1.4	8.3	8.6	1.3	1.6	4.5	1.8	1
Thursday	8.9	1.3	8.9	9.3	1.7	1.6	4.6	1.8	1
Thursday	8.9	1.2	9.0	9.3	1.3	1.5	4.5	1.8	1
Friday	9.3	1.3	9.1	9.4	1.7	1.4	4.6	1.8	1
Friday	9.4	1.2	9.1	9.5	1.7	1.4	4.5	1.8	1
Saturday	9.4	1.2	9.2	9.6	1.7	1.5	4.7	1.9	1
Saturday	9.4	1.3	9.2	9.6	1.6	1.4	4.5	1.9	1
AVG:	9.1	1.3	8.9	9.3	1.6	1.4	4.6	1.7	1.0

	Temp (F)	Secchi (Ft)	Notes
Sunday	64.1	6.0	
Monday	63.6	6.0	
Tuesday	63.1	6.0	
Wednesday	62.6	6.0	
Thursday	62.1	6.0	
Friday	61.9	6.0	
Saturday	61.5	6.0	
AVG	62.7	6.0	

John Day Dam
Avian Zones



JDA Bird Counts: 10/23/22 to 10/29/22

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

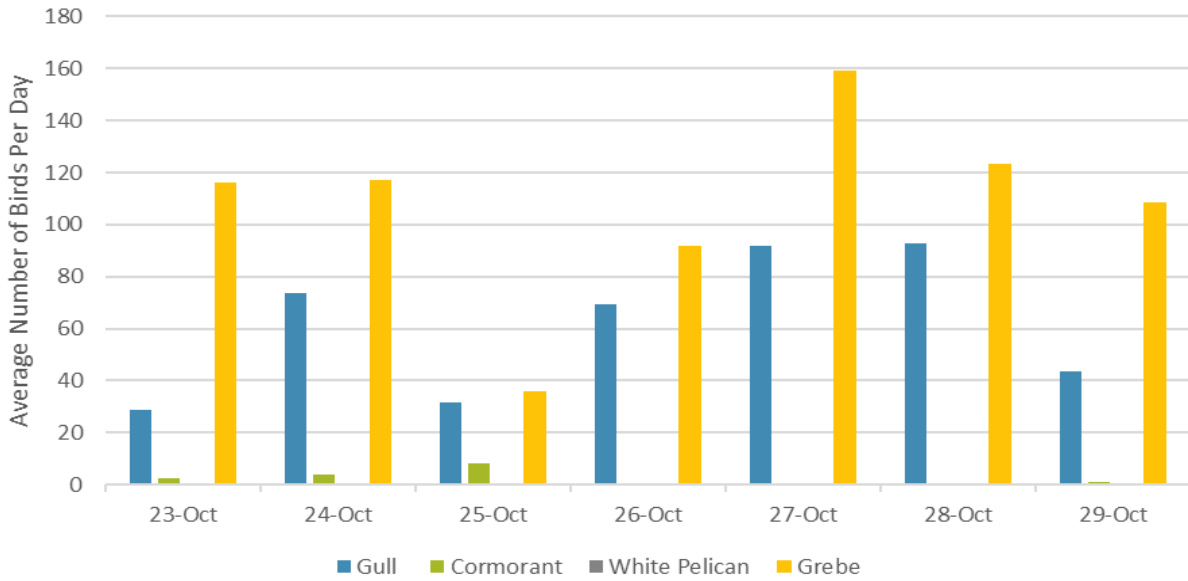
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
23-Oct	PHFB	0	0	0	273	0	0	0	0	0	0	0	0	0	0	0	0	114	118	0	0	505
23-Oct	SWFB	0	0	611	361	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	972
23-Oct	PH1	15	15	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
23-Oct	PH2	2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
23-Oct	PH3	13	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
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	44	47	0	0	0	0	0	0	0	0	0	0	0	0	91
23-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
Total/Survey		29		623		3		46		0		0		0		2		116		0		818
24-Oct	PHFB	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	108	126	0	0	245
24-Oct	SWFB	0	0	250	211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	461
24-Oct	PH1	80	47	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	131
24-Oct	PH2	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
24-Oct	PH3	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
24-Oct	SW1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
24-Oct	SW2	0	0	0	0	0	0	8	41	0	0	0	0	0	0	0	0	0	0	0	0	49
24-Oct	SW3	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	4	0	0	0	0	22
Total/Survey		74		231		4		39		0		0		0		2		117		0		466
25-Oct	PHFB	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	72	0	0	0	74
25-Oct	SWFB	0	0	255	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	255
25-Oct	PH1	45	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56
25-Oct	PH2	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
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	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
25-Oct	SW2	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
25-Oct	SW3	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Total/Survey		32		128		8		14		0		0		0		0		36		0		217
26-Oct	PHFB	0	0	210	0	0	0	0	0	0	0	0	0	0	0	0	0	82	102	0	0	394
26-Oct	SWFB	0	0	265	425	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	690
26-Oct	PH1	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102
26-Oct	PH2	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
26-Oct	PH3	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
26-Oct	SW1	0	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	0	30	0	0	0	0	0	0	0	0	0	0	0	0	30
26-Oct	SW3	0	0	0	50	0	0	0	25	0	0	0	0	0	0	0	6	0	0	0	0	81
Total/Survey		70		475		0		28		0		0		0		3		92		0		667

JDA Bird Counts: 10/23/22 to 10/29/22

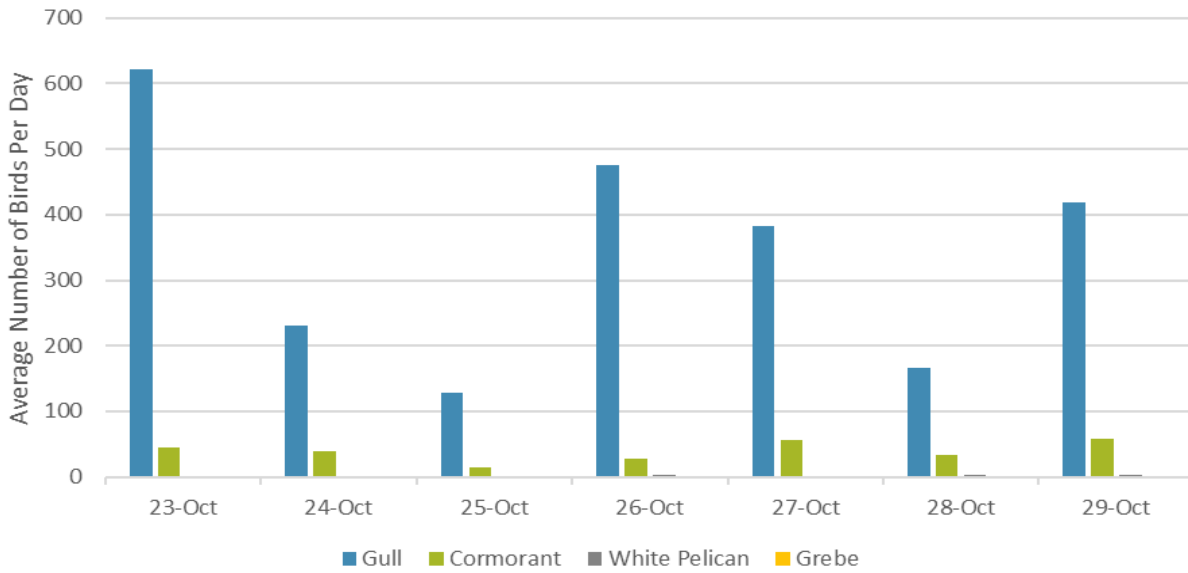
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Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
27-Oct PHFB		0	0	25	250	0	0	35	0	0	0	0	0	0	0	0	153	165	0	0	628	
27-Oct SWFB		0	0	317	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	492	
27-Oct PH1		123	35	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	168	
27-Oct PH2		9	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
27-Oct PH3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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	18	43	0	0	0	0	0	0	0	0	0	0	0	61	
27-Oct SW3		0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7	
Total/Survey		92		384		0		57		0		0		0		0		159		0	691	
28-Oct PHFB		0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	115	132	0	0	256	
28-Oct SWFB		0	0	177	156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	333	
28-Oct PH1		143	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	186	
28-Oct PH2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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	34	25	0	0	0	0	0	0	0	0	0	0	0	59	
28-Oct SW3		0	0	0	0	0	0	0	0	0	0	0	0	0	5	3	0	0	0	0	8	
Total/Survey		93		167		0		34		0		0		0		4		124		0	421	
29-Oct PHFB		0	0	0	257	0	0	0	0	0	0	0	0	0	0	0	115	102	0	0	474	
29-Oct SWFB		0	0	389	193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	582	
29-Oct PH1		8	8	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18	
29-Oct PH2		2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
29-Oct PH3		50	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62	
29-Oct SW1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29-Oct SW2		0	0	0	0	0	0	51	48	0	0	0	0	0	0	0	0	0	0	0	99	
29-Oct SW3		0	0	0	0	0	0	16	0	0	0	0	0	0	6	0	0	0	0	0	22	
Total/Survey		44		420		1		58		0		0		0		3		109		0	633	
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		864		4850		31		548		0		0		0		28		1504		0	3913	
Avg/Survey		62		346		2		39		0		0		0		2		107		0	559	

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