

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 12/10/2022

Inspection Period: 12/4/2022 thru 12/10/2022



**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: 7			Temperature: 45.0 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.)	#DIV/0!			
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.)	9.3			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.42			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.7			
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	STS being removed 12/12				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.2', wkly					
Spill volume	0	per FPP	Avg (kcfs)	7.4	Avg %		
Spill pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

Fisheries Related Operations

Smolt Monitoring Operations:

SMF was dewatered on 12/7

Adult Ladder Operations:

SFL is running in criteria, the NFL was placed on orifice flow Nov 29th, and dewatered on December 1st (see 22JDA16) for winter maintance

Project Operations:

Current outages: Line 1 (MU1-4 ETR-12/22/22) MU4 (ETR: 11/2/23), MU7 (ETR: 7/31/28), MU8 (ETR: 1/31/23), MU10 (ETR: 1/31/23) MU13 (ETR: 11/12/22) MU15&16 (ETR:12/15/22)

Spill Season ended on November 29th at JDA

Maintenance:

NFL down for Winter Maintenance

Calibration:

All gauges within the 0.3' criteria.

Bird Data:

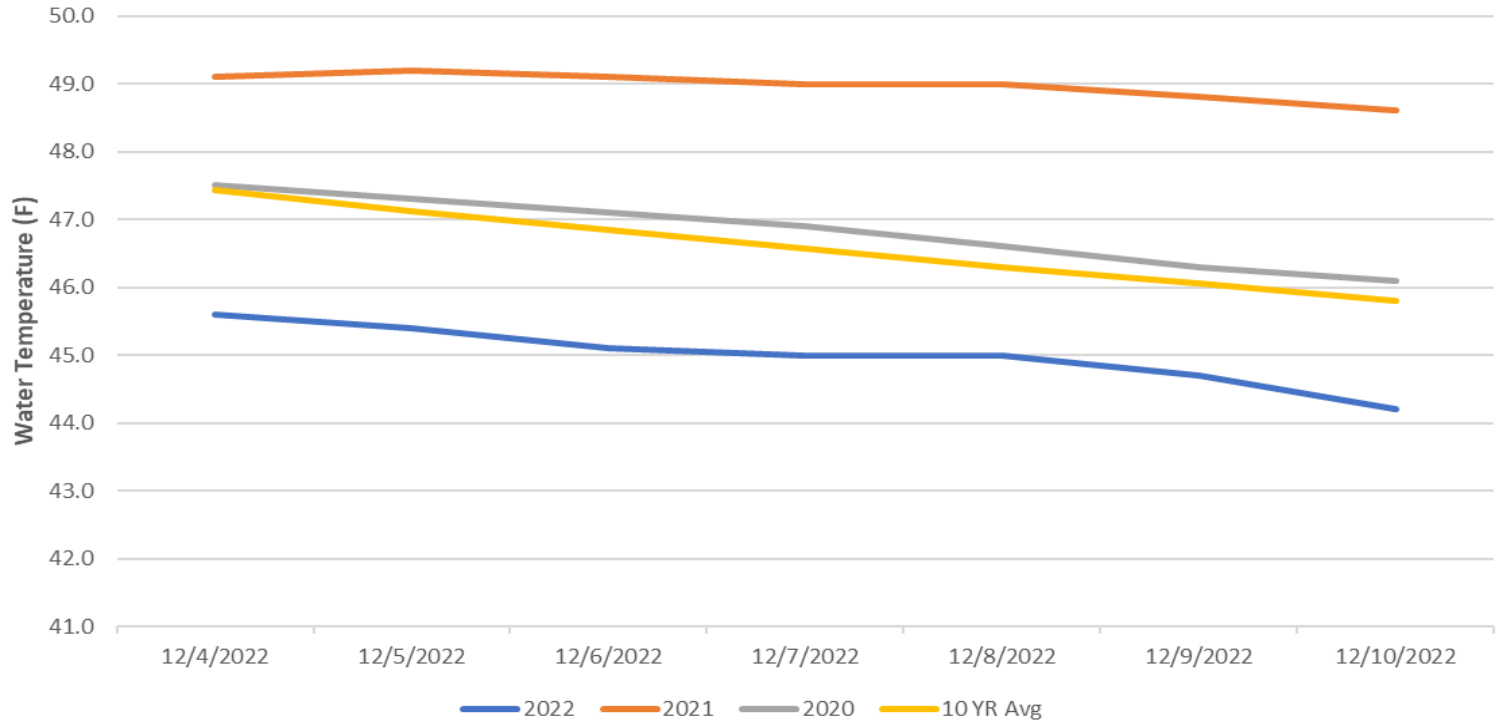
Gull and Cormorant numbers are holding steady, and Grebe numbers are decreasing. There are approximately 3 pelicans hanging around Preacher's Island with very few foraging observations in JDA bird counting zones.

11 of 125 avian lines down. No bird counts are currently being counducted on Saturdays and Sundays.

Research:

Preperations for the 2023 Research Season are underway - No new research is scheduled at this time

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)
12/5/2022	Unit 4	2.45	0,68,68	160.3
12/5/2022	Unit 12	2.46	0,68,68	160.3
12/8/2022	Unit 4	2.35	0,68,68	159.9
12/8/2022	Unit 12	2.43	0,68,68	159.9

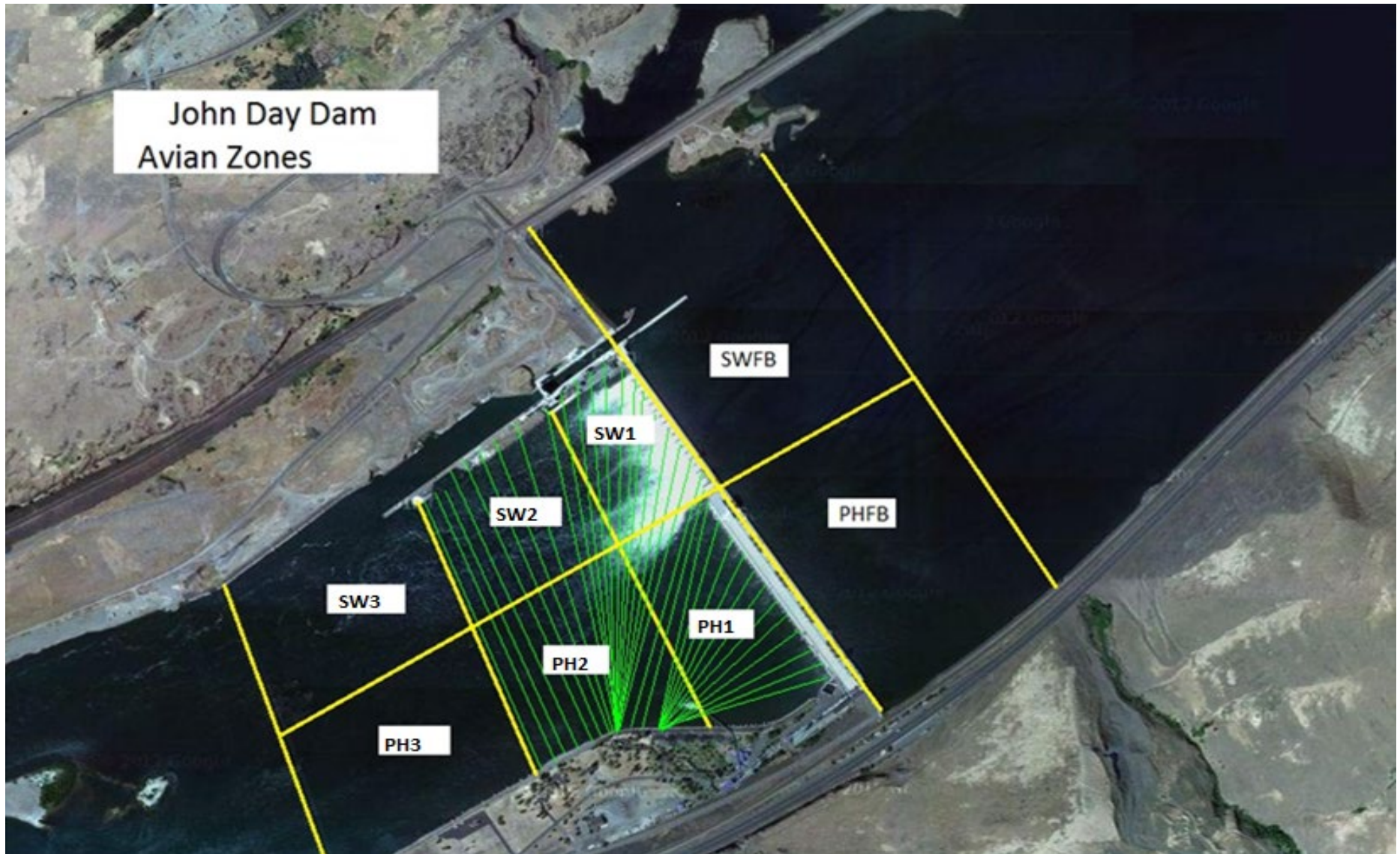
Average Weekly Velocity (ft/sec)	2.42
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JOHN DAY WEEKLY AVERAGES

	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	9.5	1.3	9.5	9.8	1.7	X	4.6	X	X
Monday	9.3	1.2	8.8	9.1	1.8	X	4.5	X	X
Tuesday	9.0	1.9	8.8	9.1	1.6	X	4.8	4.9	2
Wednesday	9.2	1.5	9.2	9.5	1.6	X	4.5	9.9	3
Thursday	9.6	1.1	9.0	9.3	1.8	X	X	9.9	3
Friday	8.5	1.4	8.5	8.7	1.6	X	X	4.9	3
Saturday	9.9	1.0	9.3	9.6	1.7	X	X	X	X
AVG:	9.3	1.3	9.0	9.3	1.7	#DIV/0!	4.6	7.4	2.8

	Temp (F)	Secchi (Ft)	Notes
Sunday	45.6	6.0	X: Winter Maintenance
Monday	45.4	6.0	
Tuesday	45.1	6.0	
Wednesday	45.0	6.0	
Thursday	45.0	6.0	
Friday	44.7	6.0	
Saturday	44.2	6.0	
AVG	45.0	6.0	

John Day Dam
Avian Zones



JDA Bird Counts: 12/4/22 to 12/10/22

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)	
4-Dec	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Dec	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		0		0		0		0		0		0		0		0		0		0		0
5-Dec	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7
5-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Dec	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Dec	PH2	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
5-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		15		0		0		0		0		0		0		0		7		0		22
6-Dec	PHFB	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	8
6-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Dec	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Dec	PH2	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
6-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Dec	SW2	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	50
6-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		15		0		1		50		0		0		0		0		7		0		73
7-Dec	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	10
7-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Dec	PH1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7-Dec	PH2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
7-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Dec	SW2	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	32
7-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		5		0		3		32		0		0		0		0		10		0		50

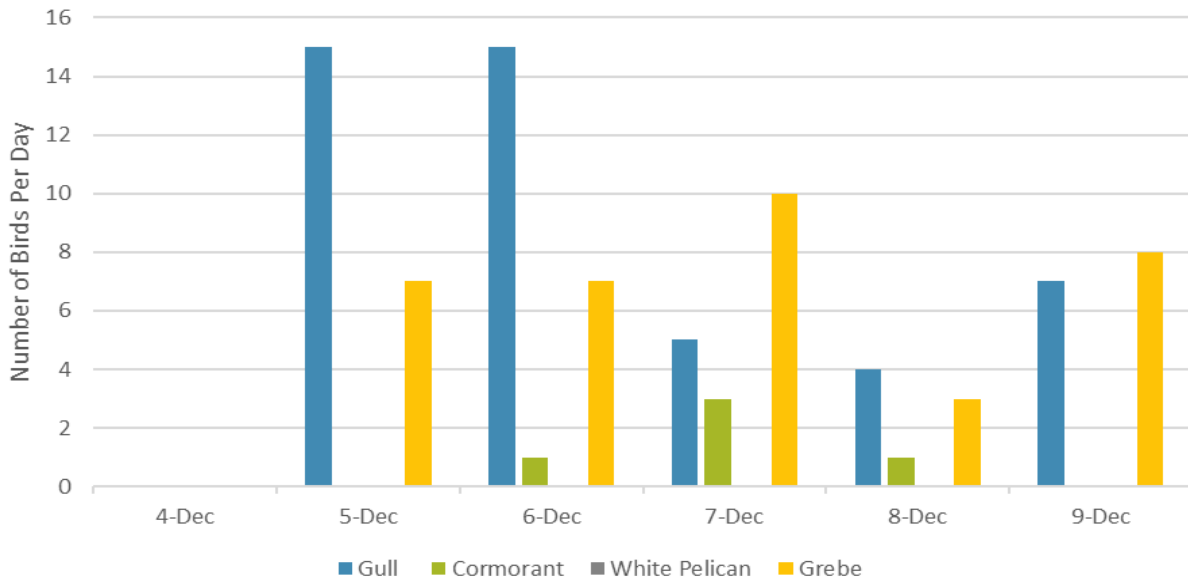
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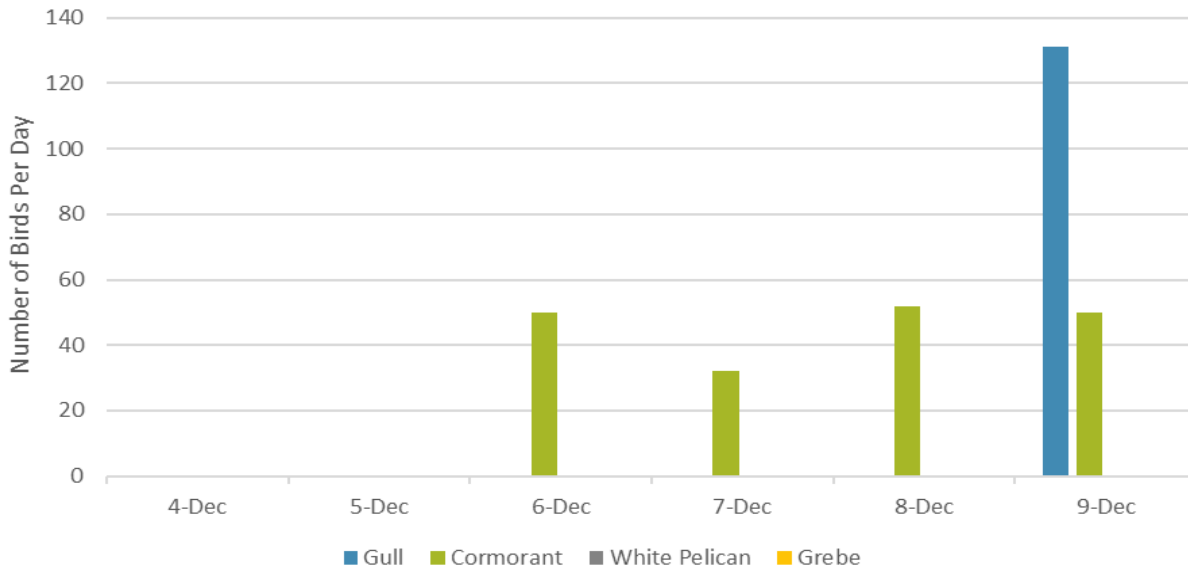
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
8-Dec PHFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8-Dec SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Dec PH1		4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8-Dec PH2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Dec PH3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Dec SW1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Dec SW2		0	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	52
8-Dec SW3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		4		0		1		52		0		0		0		0		3		0		60
9-Dec PHFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8
9-Dec SWFB		0	0	131	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	138
9-Dec PH1		7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
9-Dec PH2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Dec PH3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Dec SW1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Dec SW2		0	0	0	0	0	0	43	0	0	0	0	0	0	0	0	0	0	0	0	0	43
9-Dec SW3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		7		131		0		50		0		0		0		0		8		0		196
10-Dec PHFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Dec SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Dec PH1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Dec PH2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Dec PH3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Dec SW1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Dec SW2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Dec SW3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/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	46	131	5	184	0	0	0	0	0	0	0	0	35	0	401						
Avg/Survey	5	13	1	18	0	0	0	0	0	0	4	0	40								

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds





NFL dewater fish salvage (12/1/22)