

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/15/2022

Inspection Period: 10/9/2022 thru 10/15/2022



**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:	66.2 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.)	1.6			
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.)	1.3			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.5			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.43			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.5			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	8.5			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	8.8			
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)	1.5	Avg %	2.1	
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.

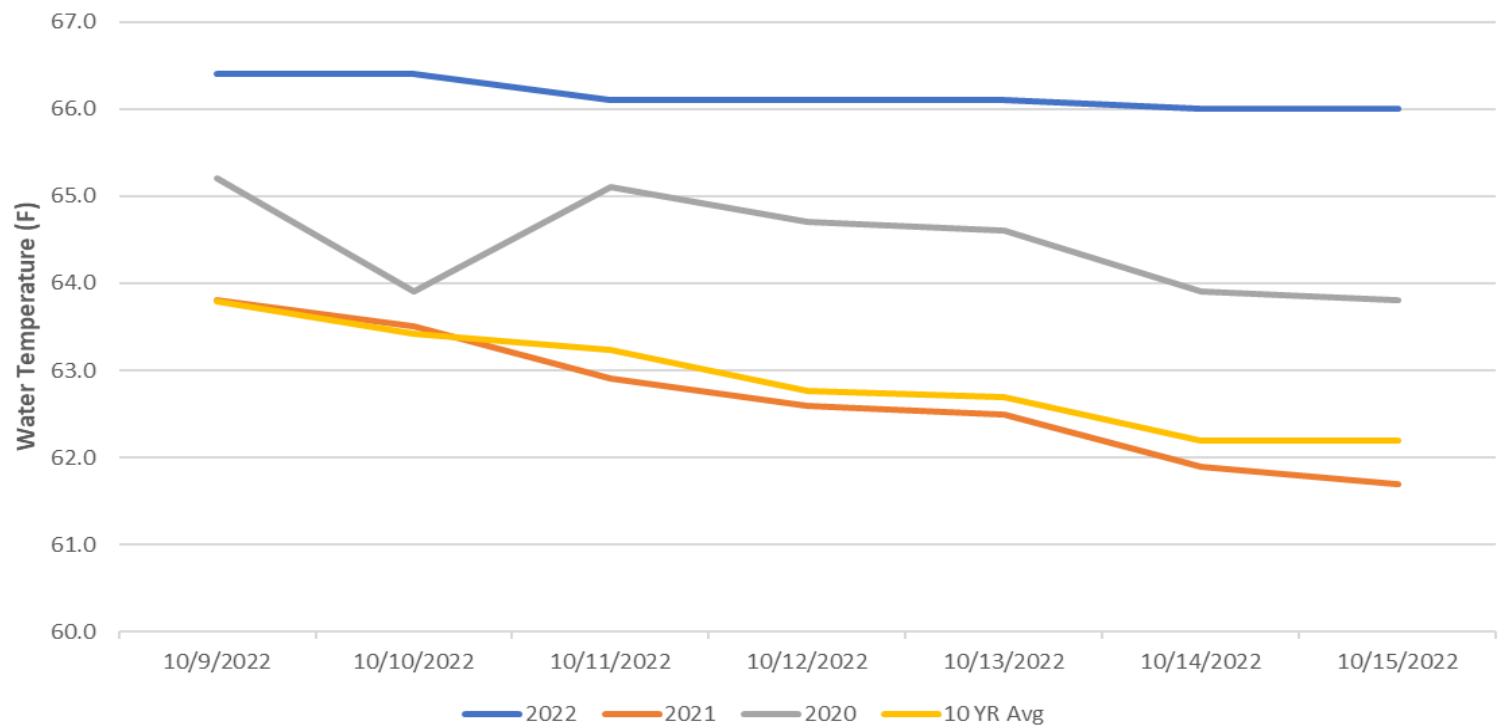
Bird Data:

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 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)
10/10/2022	Unit 4	2.30	0,68,68	159.1
10/10/2022	Unit 12	2.47	0,68,68	159.1
10/12/2022	Unit 4	2.45	0,68,68	159.0
10/12/2022	Unit 12	2.44	0,68,68	159.0
10/15/2022	Unit 4	2.38	0,68,68	159.6
10/15/2022	Unit 12	2.55	0,68,68	159.6

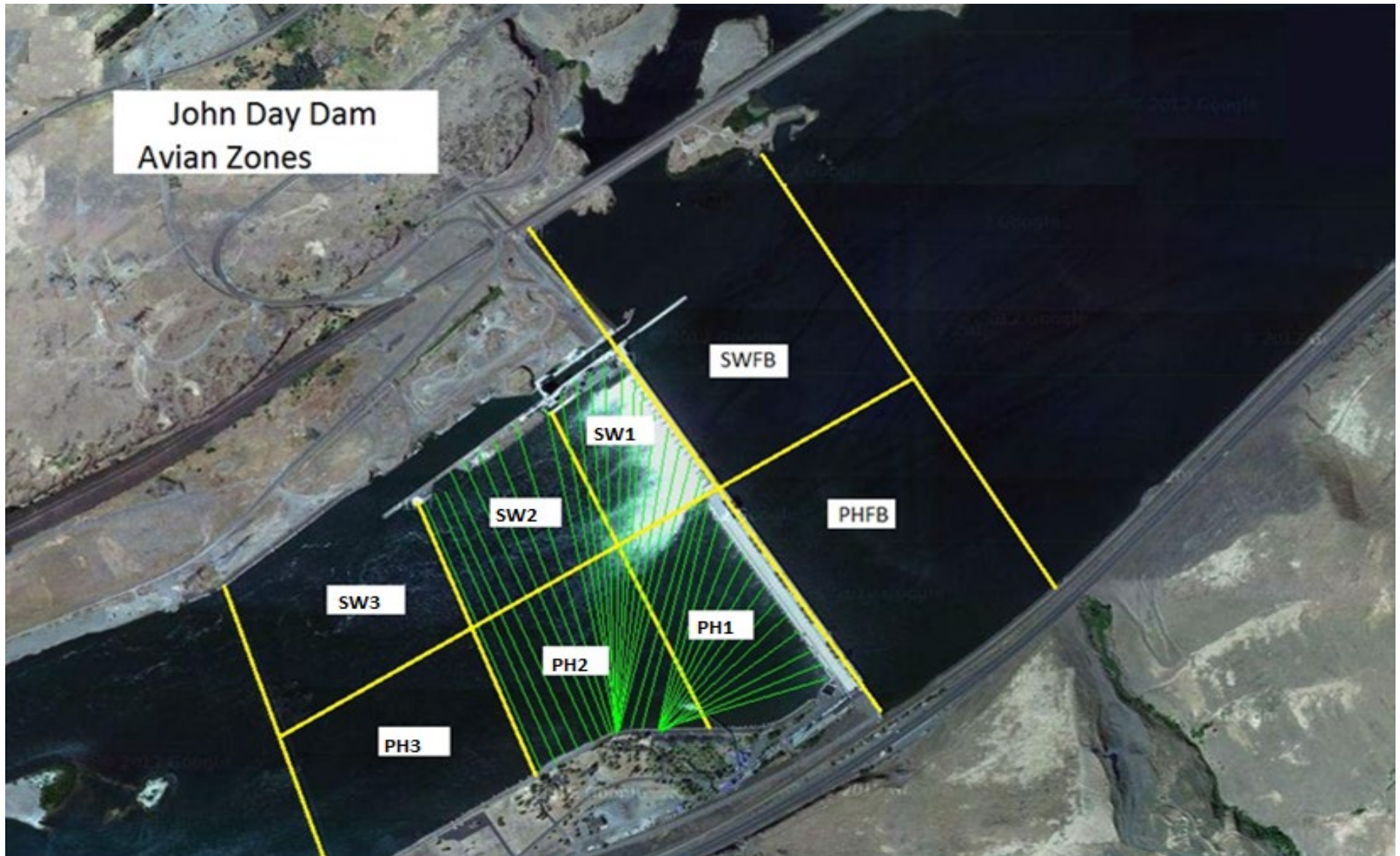
Average Weekly Velocity (ft/sec)	2.43
----------------------------------	------

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	1.3	8.4	8.7	1.7	1.6	4.6	1.8	2.9	1
Sunday	8.4	1.8	8.3	8.7	1.8	1.6	4.7	1.8	3.1	1
Monday	8.5	1.3	8.5	8.8	1.6	1.5	4.5	1.8	2.6	1
Monday	8.5	1.4	8.3	8.7	1.7	1.6	4.6	1.7	2.3	1
Tuesday	8.6	1.4	8.7	9.0	1.7	1.5	4.6	1.8	2.4	1
Tuesday	8.8	0.0	8.7	9.1	0.3	1.5	4.6	1.6	2.5	1
Wednesday	8.0	1.5	8.1	8.4	1.5	1.6	4.6	1.6		1
Wednesday	8.1	1.8	8.0	8.4	1.3	1.7	4.5	1.6	2.6	1
Thursday	8.0	1.6	8.0	8.3	1.6	1.6	4.7	1.6	2.0	1
Thursday	8.8	1.3	8.7	9.1	1.2	1.3	4.5	1.5	2.0	1
Friday	8.5	1.5	8.7	9.0	1.5	1.6	4.5	1.6		1
Friday	8.8	1.2	8.7	9.1	1.6	1.5	4.5	1.6	1.5	1
Saturday	8.5	1.4	8.7	9.0	1.4	1.6	4.6	0.0	0.0	1
Saturday	8.5	1.2	8.6	8.9	1.5	1.5	4.8	1.5	1.8	1
AVG:	8.5	1.3	8.5	8.8	1.5	1.6	4.6	1.5	2.1	1.0

	Temp (F)	Secchi (Ft)	Notes
Sunday	66.4	6.0	1) The south entrance OOC on Tuesday was for assisting with an oil spill from the "Blue Goose" (see MFR: 22JDA15) 2) The 0% spill on Saturday is from an inspection performed before FPP daytime spill hours (see: FPP page JDA-10 (Table-5)) It <u>was</u> opened on time.
Monday	66.4	6.0	
Tuesday	66.1	6.0	
Wednesday	66.1	6.0	
Thursday	66.1	6.0	
Friday	66.0	6.0	
Saturday	66.0	6.0	
AVG	66.2	6.0	

John Day Dam
Avian Zones



JDA Bird Counts: 10/9/22 to 10/15/22

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

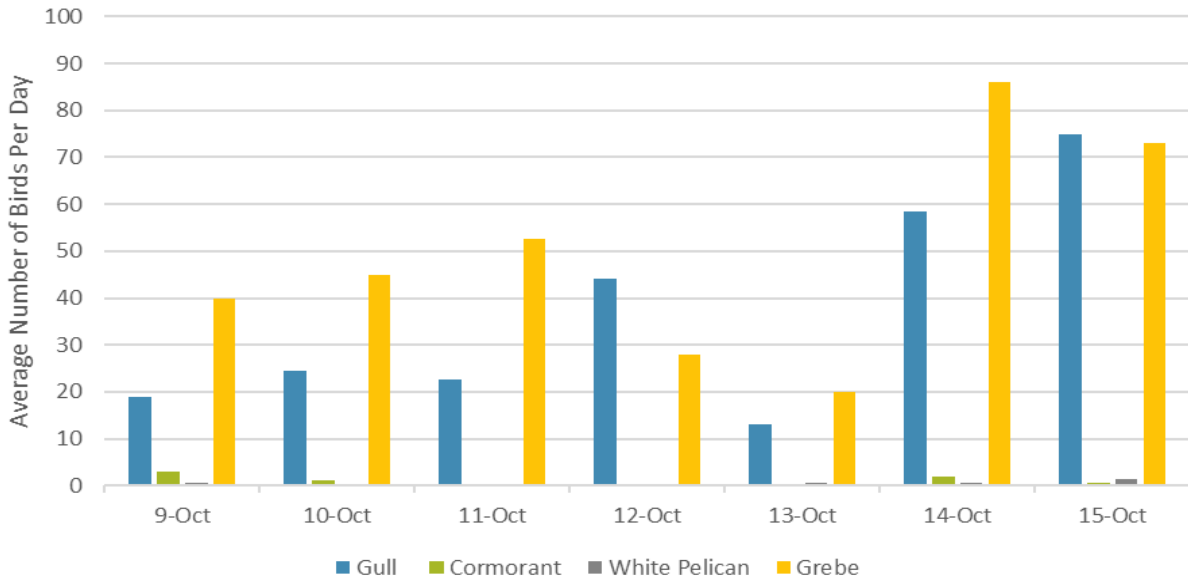
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
9-Oct	PHFB	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	48	32	0	0	87
9-Oct	SWFB	0	0	94	123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	217
9-Oct	PH1	5	4	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
9-Oct	PH2	17	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
9-Oct	PH3	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
9-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Oct	SW2	0	0	0	0	0	0	36	45	0	0	0	0	0	0	0	0	0	0	0	0	81
9-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6
Total/Survey		19		109		3		44		0		0		1		3		40		0		218
10-Oct	PHFB	0	0	0	57	0	0	9	0	0	0	0	0	0	0	0	0	51	39	0	0	156
10-Oct	SWFB	0	0	156	202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	358
10-Oct	PH1	10	10	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
10-Oct	PH2	20	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
10-Oct	PH3	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
10-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Oct	SW2	0	0	28	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	58
10-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	13
Total/Survey		25		222		1		20		0		0		0		7		45		0		318
11-Oct	PHFB	0	0	34	12	0	0	0	0	0	0	0	0	0	0	0	0	56	49	0	0	151
11-Oct	SWFB	0	0	309	315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	624
11-Oct	PH1	3	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
11-Oct	PH2	15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
11-Oct	PH3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Oct	SW2	0	0	0	0	0	0	37	50	0	0	0	0	0	0	0	0	0	0	0	0	87
11-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		23		335		0		44		0		0		0		0		53		0		454
12-Oct	PHFB	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	56	0	0	50	124
12-Oct	SWFB	0	0	102	310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	412
12-Oct	PH1	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
12-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Oct	PH3	0	48	0	0	0	0	20	0	0	0	0	0	0	0	0	1	0	0	0	0	69
12-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Oct	SW2	0	0	0	0	0	0	13	35	0	0	0	0	0	0	0	0	0	0	0	0	48
12-Oct	SW3	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
Total/Survey		44		232		0		43		0		0		0		1		28		25		373

JDA Bird Counts: 10/9/22 to 10/15/22

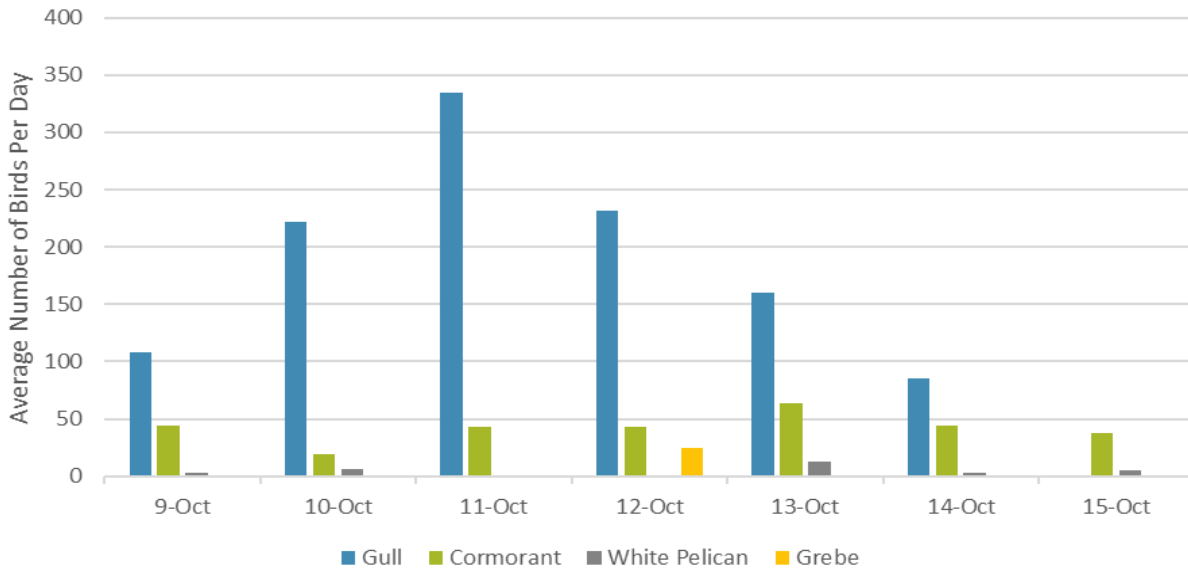
F(1): Forage AM survey F(2): Forage PM Survey NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

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)	
13-Oct	PHFB	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	40	0	0	0	60
13-Oct	SWFB	0	0	60	210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	270
13-Oct	PH1	25	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
13-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Oct	PH3	0	0	10	0	0	0	20	30	0	0	0	0	0	0	0	0	0	0	0	0	60
13-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Oct	SW2	0	0	1	0	0	0	13	45	0	0	0	0	0	1	0	0	0	0	0	0	60
13-Oct	SW3	0	0	10	30	0	0	0	0	0	0	0	0	0	0	14	11	0	0	0	0	65
Total/Survey		13		161		0		64		0		0		1		13		20		0		271
14-Oct	PHFB	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	92	80	0	0	202
14-Oct	SWFB	0	0	171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	171
14-Oct	PH1	0	0	0	0	0	4	14	0	0	0	0	0	0	0	0	0	0	0	0	0	18
14-Oct	PH2	23	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
14-Oct	PH3	0	86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86
14-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Oct	SW2	0	0	0	0	0	0	4	32	0	0	0	0	0	0	0	0	0	0	0	0	36
14-Oct	SW3	0	0	0	0	0	0	8	0	0	0	0	0	1	0	5	0	0	0	0	0	14
Total/Survey		59		86		2		44		0		0		1		3		86		0		279
15-Oct	PHFB	0	0	0	0	0	0	68	0	0	0	0	0	0	0	0	0	64	82	0	0	214
15-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Oct	PH1	2	133	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	136
15-Oct	PH2	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
15-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
15-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Oct	SW2	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
15-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	10	0	0	0	0	11
Total/Survey		75		0		1		38		0		0		2		6		73		0		193
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		513		2286		13		591		0		0		6		61		689		50		2105
Avg/Survey		37		163		1		42		0		0		0		4		49		4		301

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds





Dragonfly molting at JDA SFL taken on 10/14/22 (Maybe Columbia Clubtail???)