

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/1/2022

Inspection Period: 9/25/2022 thru 10/1/2022



**US Army Corps
of Engineers**
Portland District

JD/WC Project-Fisheries
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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:	67.2 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.)	1.4				
Entrance weir SE1	1	depth (≥ 8')	AVG (Ft.)	8.7				
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	1	depth (≥ 8')	AVG (Ft.)	8.6				
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	8.9				
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 %	1.7		
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 2022 sampling season on September 15.

Adult Ladder Operations:

Both ladders are operating within criteria.

Project Operations:

Current outages: MU4, MU6, MU7, MU8, MU10. TSWs were removed on 8/31. From August 15 through November 30, adult fish attraction flow will be provided by spilling through Bay 2 open one stop (approximately 1.6 kcfs) during daylight hours.

Maintenance:

NFL HVAC system repairs completed.

Calibration:

All gauges within the 0.3' criteria.

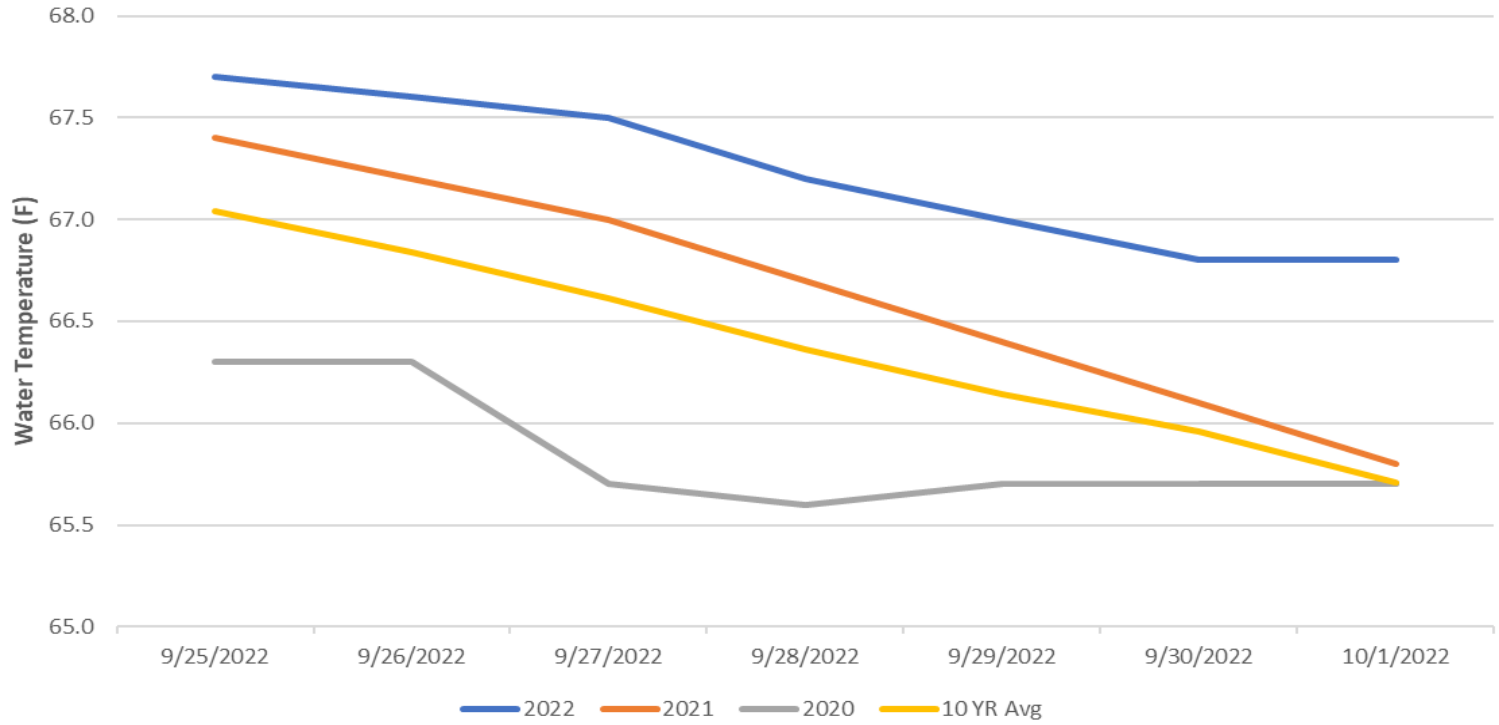
Bird Data:

Gull, Cormorant, and Grebe numbers are increasing. Pelican numbers have decreased.
11 of 125 avian lines down.

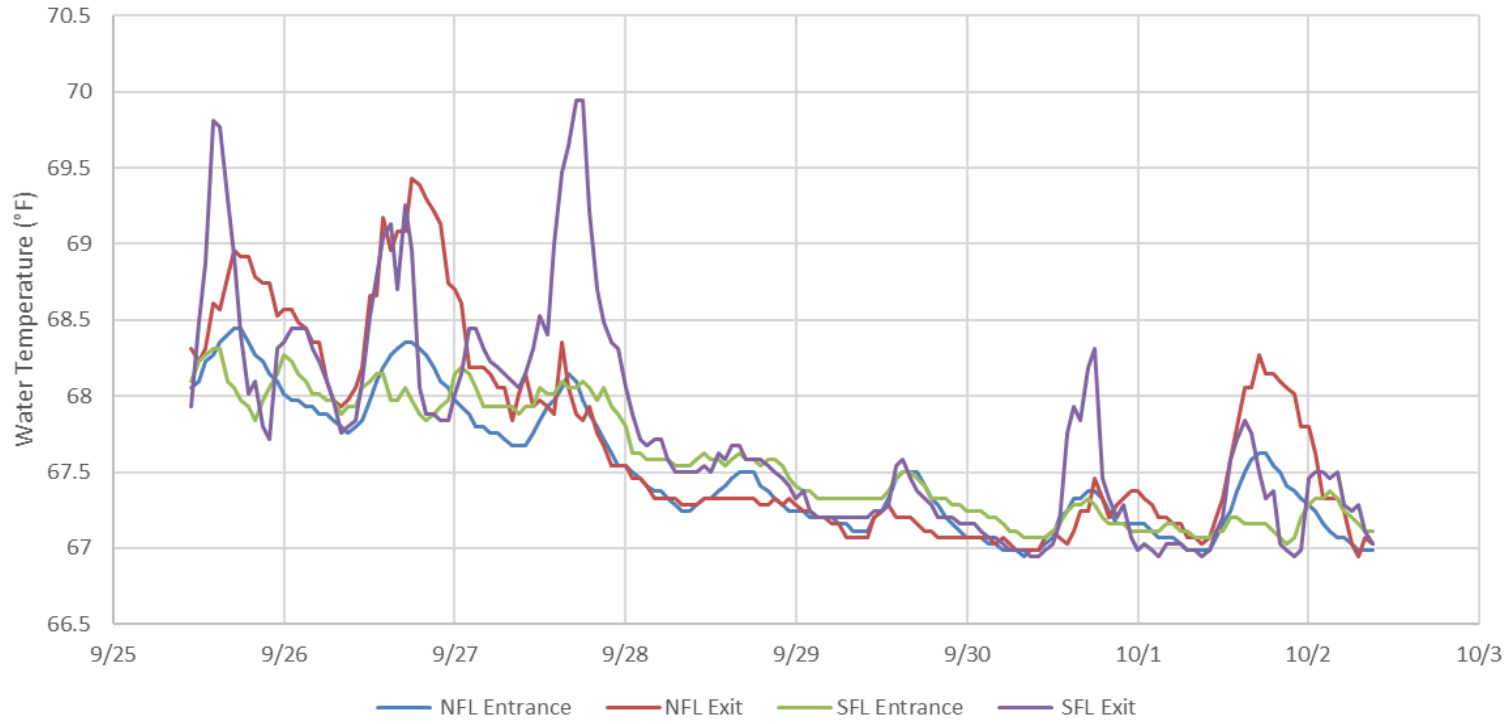
Research:

Adult fish counting started April 1.
USGS temperature probes were removed from the forebay on 9/14.

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)
9/26/2022	Unit 4	2.48	0,68,68	160.0
9/26/2022	Unit 12	2.65	0,68,68	160.0
9/28/2022	Unit 4	2.33	0,68,68	159.6
9/28/2022	Unit 12	2.49	0,68,68	159.6
10/1/2022	Unit 4	2.36	0,68,68	159.3
10/1/2022	Unit 12	2.52	0,68,68	159.3

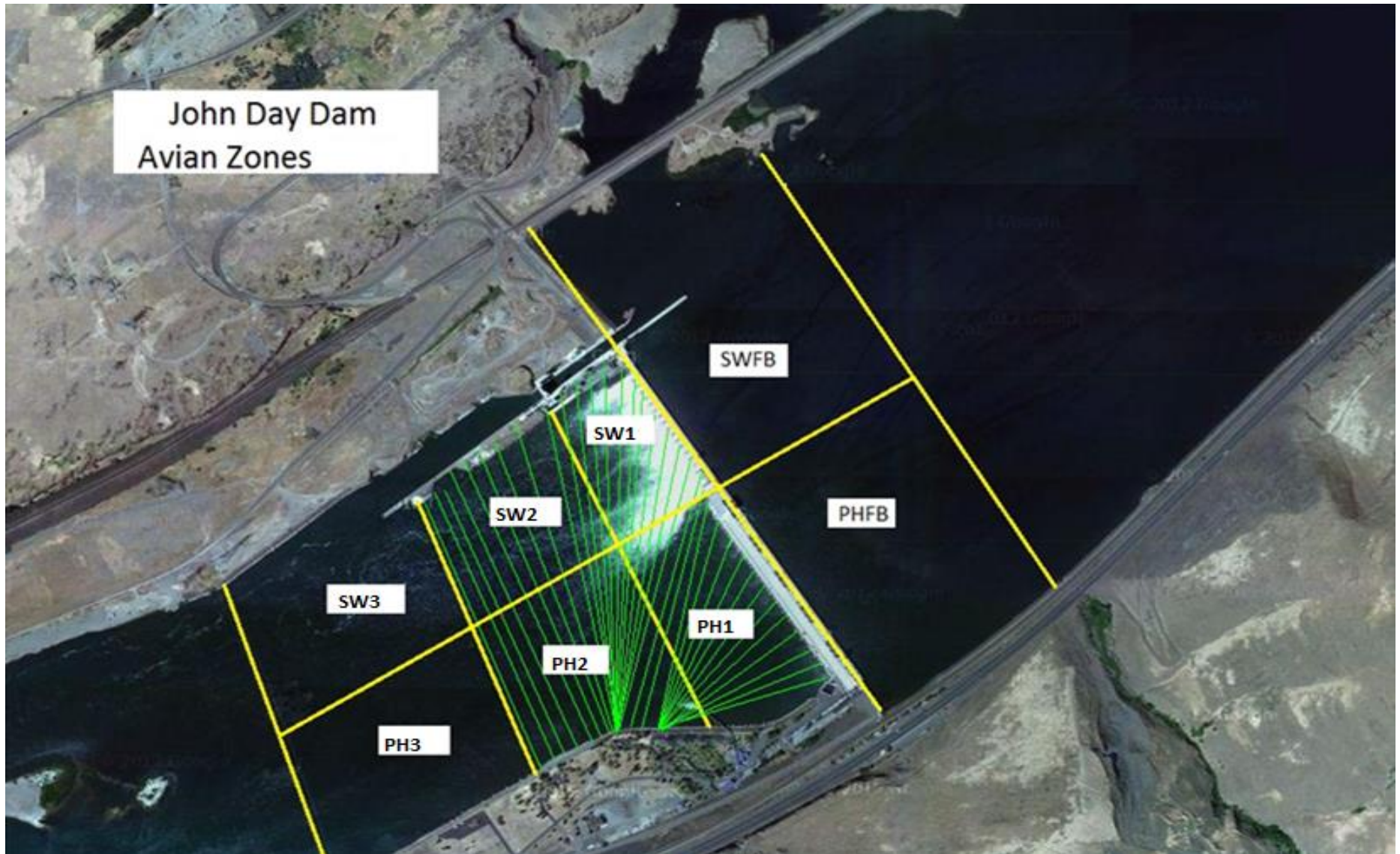
Average Weekly Velocity (ft/sec)	2.47
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JOHN DAY WEEKLY AVERAGES

	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)	Spill %	# Spillbays
Sunday	7.6	1.7	7.5	8.1	2.0	1.6	4.6	1.6	2.1	1
Sunday	8.6	1.3	8.5	8.9	1.6	1.5	4.6	1.6	1.6	1
Monday	8.7	1.4	8.5	8.8	1.8	1.5	4.6	1.6	1.4	1
Monday	9.4	1.4	9.3	9.7	1.5	1.5	4.6	1.6	1.6	1
Tuesday	8.6	1.4	8.7	9.0	1.6	1.7	4.6	1.6	1.8	1
Tuesday	8.9	1.3	8.5	8.9	1.8	1.5	4.7	1.6	1.3	1
Wednesday	8.8	1.3	8.6	8.9	1.7	1.6	4.6	1.5	1.3	1
Wednesday	9.1	1.3	8.8	9.2	1.1	1.6	4.5	1.6	1.2	1
Thursday	8.4	1.5	8.4	8.6	1.6	1.6	4.7	1.6	1.8	1
Thursday	9.0	1.5	8.8	9.2	1.7	1.4	4.6	1.6	1.4	1
Friday	8.9	1.2	8.8	9.1	1.3	1.5	4.6	1.6	1.7	1
Friday	8.9	1.3	9.0	9.3	1.4	1.5	4.5	1.6	1.8	1
Saturday	8.5	1.4	8.4	8.7	1.7	1.6	4.5	1.6	2.3	1
Saturday	8.5	1.4	8.3	8.7	1.7	1.6	4.5	1.6	2.2	1
AVG:	8.7	1.4	8.6	8.9	1.6	1.6	4.6	1.6	1.7	1.0

	Temp (F)	Secchi (Ft)	Average # of Pelicans on Island Per Day
Sunday	67.7	6.0	17
Monday	67.6	6.0	15
Tuesday	67.5	6.0	15
Wednesday	67.2	6.0	14
Thursday	67.0	6.0	
Friday	66.8	6.0	
Saturday	66.8	6.0	8
AVG	67.2	6.0	14

John Day Dam
Avian Zones



JDA Bird Counts: 9/25/22 to 10/1/22

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

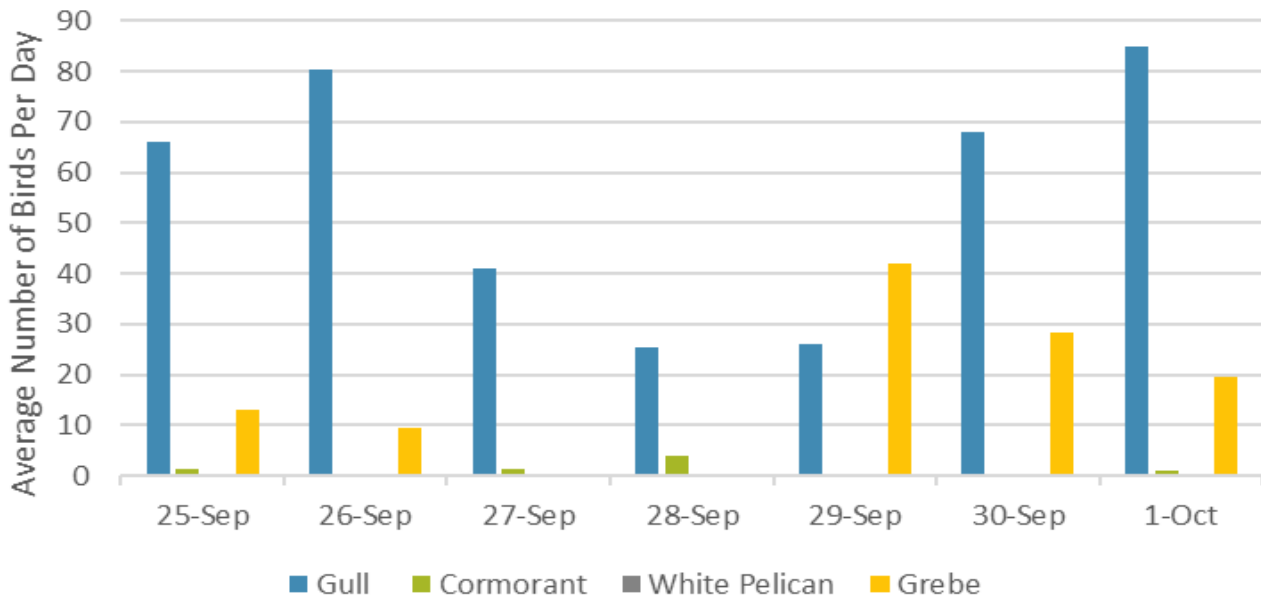
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
25-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	26
25-Sep	SWFB	0	0	119	118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	237
25-Sep	PH1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
25-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Sep	PH3	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132
25-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Sep	SW2	0	0	0	0	0	0	47	33	0	0	0	0	0	0	0	0	0	0	0	0	80
25-Sep	SW3	0	0	56	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	58
Total/Survey		66		147		2		41		0		0		0		0		13		0		268
26-Sep	PHFB	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	19	0	0	0	22
26-Sep	SWFB	0	0	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83
26-Sep	PH1	56	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64
26-Sep	PH2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
26-Sep	PH3	90	1	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	112
26-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Sep	SW2	0	0	0	0	0	0	17	22	0	0	0	0	0	0	0	0	0	0	0	0	39
26-Sep	SW3	0	2	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Total/Survey		81		64		1		32		0		0		0		0		10		0		186
27-Sep	PHFB	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
27-Sep	SWFB	0	0	123	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	298
27-Sep	PH1	45	4	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
27-Sep	PH2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
27-Sep	PH3	5	18	4	0	0	0	6	16	0	0	0	0	0	0	0	2	0	0	0	0	51
27-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Sep	SW2	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	39
27-Sep	SW3	0	5	0	10	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	16
Total/Survey		41		156		2		35		0		0		0		2		0		0		235
28-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
28-Sep	SWFB	0	0	211	388	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	599
28-Sep	PH1	20	1	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
28-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Sep	PH3	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
28-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Sep	SW2	0	0	0	0	0	0	10	25	0	0	0	0	0	0	0	0	0	0	0	0	35
28-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		26		300		4		18		0		0		0		0		1		0		347

JDA Bird Counts: 9/29/22 to 10/1/22

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)	
29-Sep	PHFB	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	51	33	0	0	101
29-Sep	SWFB	0	0	233	223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	456
29-Sep	PH1	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
29-Sep	PH2	15	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
29-Sep	PH3	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
29-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Sep	SW2	0	0	0	0	0	0	8	12	0	0	0	0	0	0	0	0	0	0	0	0	20
29-Sep	SW3	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Total/Survey		26		228		0		26		0		0		0		0		42		0		322
30-Sep	PHFB	0	0	16	0	0	0	15	0	0	0	0	0	0	0	0	0	46	11	0	0	88
30-Sep	SWFB	0	0	147	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	271
30-Sep	PH1	53	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106
30-Sep	PH2	17	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
30-Sep	PH3	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
30-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Sep	SW2	0	0	0	0	0	0	12	17	0	0	0	0	0	0	0	0	0	0	0	0	29
30-Sep	SW3	0	0	0	5	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	12
Total/Survey		68		146		0		26		0		0		0		0		29		0		268
1-Oct	PHFB	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	32	7	0	0	41
1-Oct	SWFB	0	0	226	233	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	459
1-Oct	PH1	43	21	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
1-Oct	PH2	14	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
1-Oct	PH3	62	27	8	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	102
1-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Oct	SW2	0	0	0	0	0	0	33	53	0	0	0	0	0	0	0	0	0	0	0	0	86
1-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		85		234		1		58		0		0		0		0		20		0		397
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		784		2546		17		467		0		0		0		3		226		0		2022
Avg/Survey		56		182		1		33		0		0		0		0		16		0		289

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

