

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 7/15/2023

Inspection Period: 7/9/2023 thru 7/15/2023



**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:	70.2 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.)	8.2			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.66			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.6			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.4			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	next inspection 7/24-7/27				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.2', wkly					
Spill volume	0	per FPP	Avg (kcfs)	49.7	Avg (%)	34.8	
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 started the 2023 sampling season on April 3rd for condition monitoring only. High water temperature protocol went into effect on July 6 when water temperatures exceeded 70F. Sampling will occur on Mondays and Thursdays unless water temperature drops below 69.5, at which point sampling will resume on Monday, Wednesday, and Fridays until September 15.

Adult Ladder Operations:

NFL is operating in criteria.

SFL turbine #2 RTS 3/20 @ reduced RPMs (55 RPMs) to prolong the repairs. SFL turbine #3 OOS (Philadelphia gear inspected on 2/22 and recommended FOOS - See 23JDA03) - Funding awarded (RTS-Unknown). FOG's removed

Ladders switched to salmon mode on 7/11.

Project Operations:

Current outages: MU4 (ETR: 11/2/23), MU7 (ETR: 7/31/28), MU8 (ETR: 1/10/24), MU10 (ETR: 11/15/23)

Spillbay Outages: #1-missing brake/motor (ETR Unknown), #6 and #10-operates in manual/local mode only (ETR: Unknown),

Weekly Average Tailwater TDG: 114.7

Maintenance:

NFL AWS pump #4 is OOS with an unknown RTS date (see 21JDA02). NFL AWS pump #2 has a failed RTD sensor that keeps it from reading an accurate temperature on the lower bearing (occurred 4/22/23). Therefore, there is no overheat fail safe and it is being run as a last on first off pump (the pump will need to be unstacked to repair the sensor).

Calibration: All gauges within the 0.3' criteria.

Bird Data:

Pelican foraging is increasing within the tailrace (average ~144/inspection), Grebe numbers are decreasing (~2/inspection), Gull numbers have slightly increased this week (~5/inspection).

There are ~250 pelicans hanging around Preacher's Island

19 of 125 avian lines down

Research:

Four Peaks started ladder counts on 3/1/23 and will be performing year-round counts for 2023 (Day video 11/1/23 - 2/29/24)

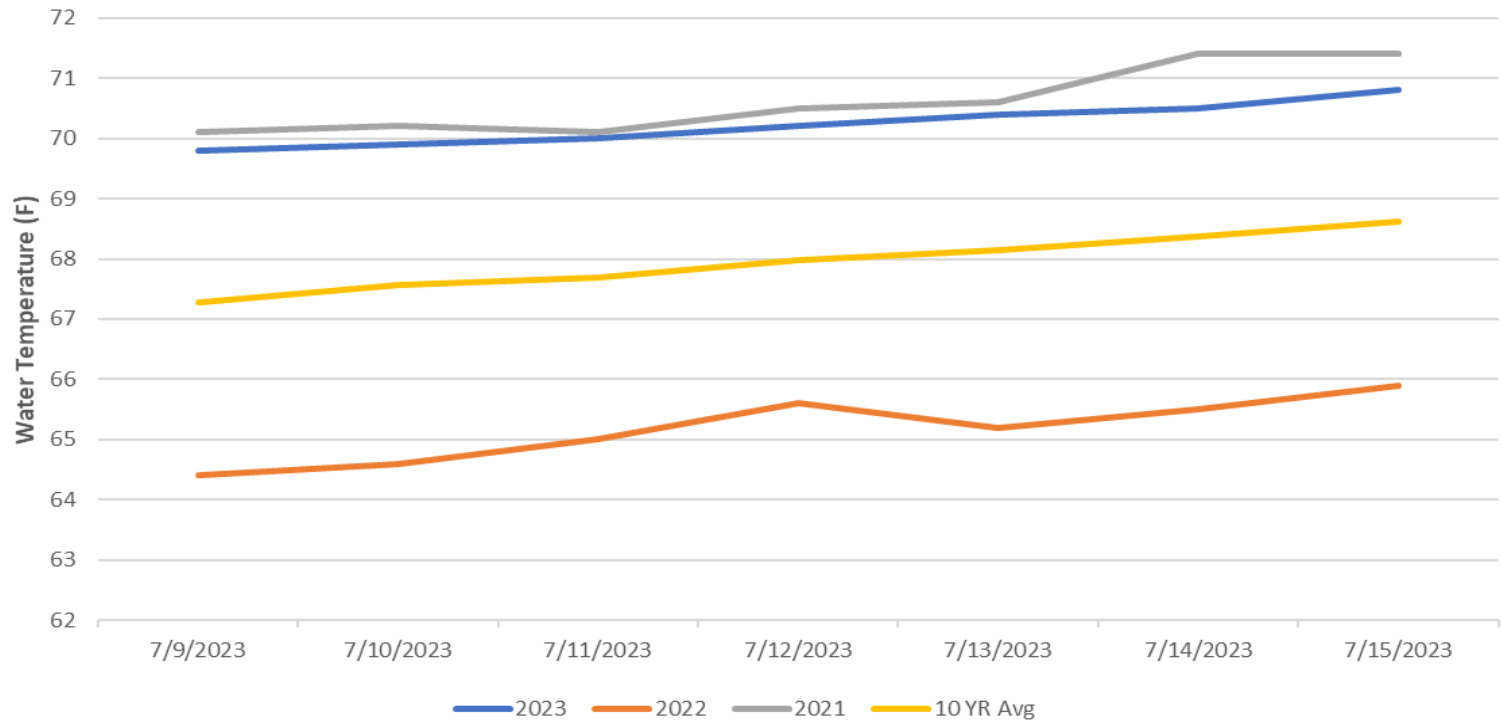
PSMFC smolt condition monitoring began 4/3/23 (currently 2-days/week)

USDA began hazing on 4/16/23 for 7-days/week, as crew availability and weather conditions permit

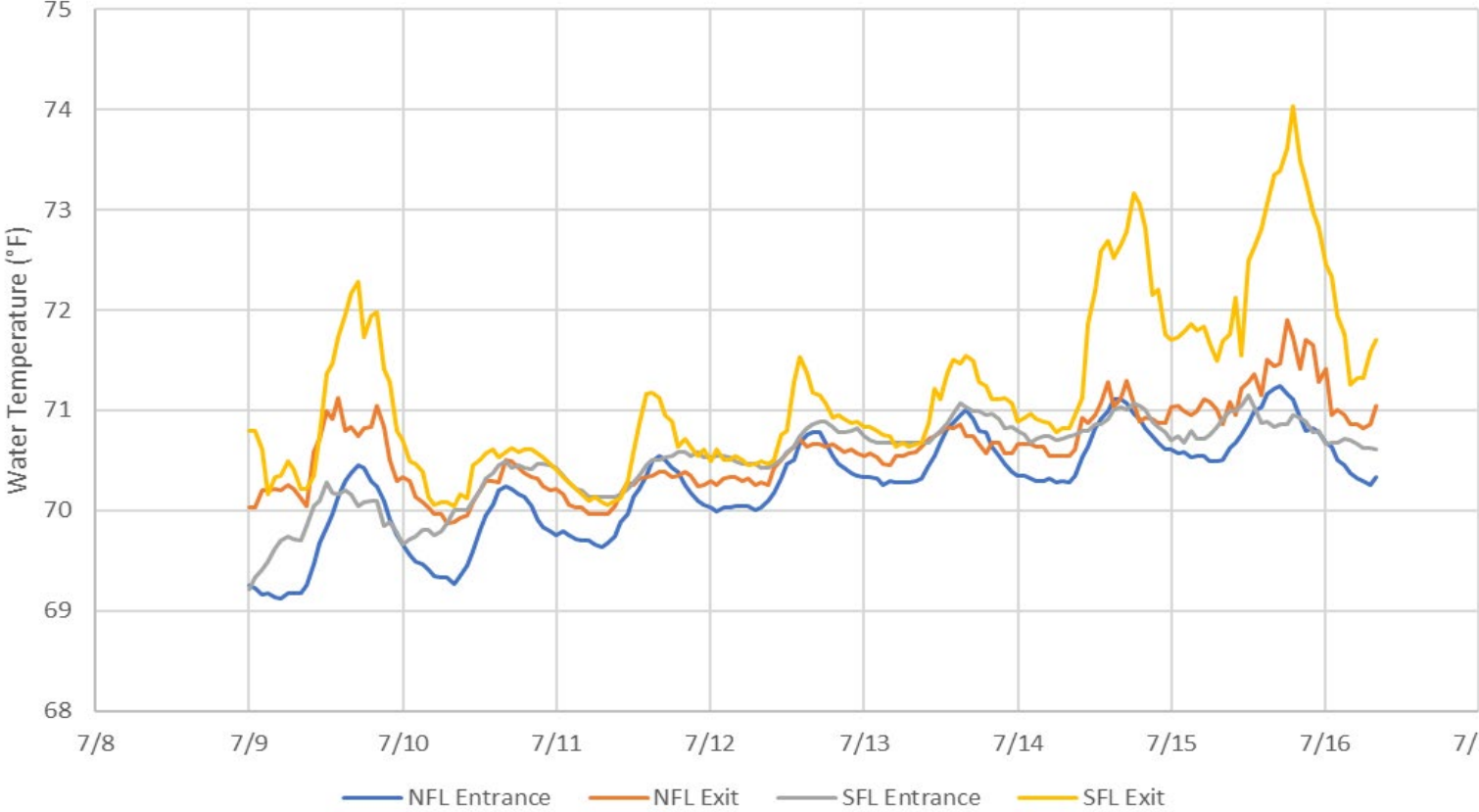
WDFW currently performing NPMP dam angling (started 5/8/23)

CRITFC translocation started on 6/12/23. NFL LPS collection ended on 6/20/23 due to safety concerns (see 23JDA24)

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)
7/10/2023	Unit 4	2.65	55,55,0	158.5
7/10/2023	Unit 12	2.59	55,55,0	158.5
7/12/2023	Unit 4	2.70	55,55,0	159.5
7/12/2023	Unit 12	2.63	55,55,0	159.5
7/15/2023	Unit 4	2.72	55,55,0	159.5
7/15/2023	Unit 12	2.67	55,55,0	159.5

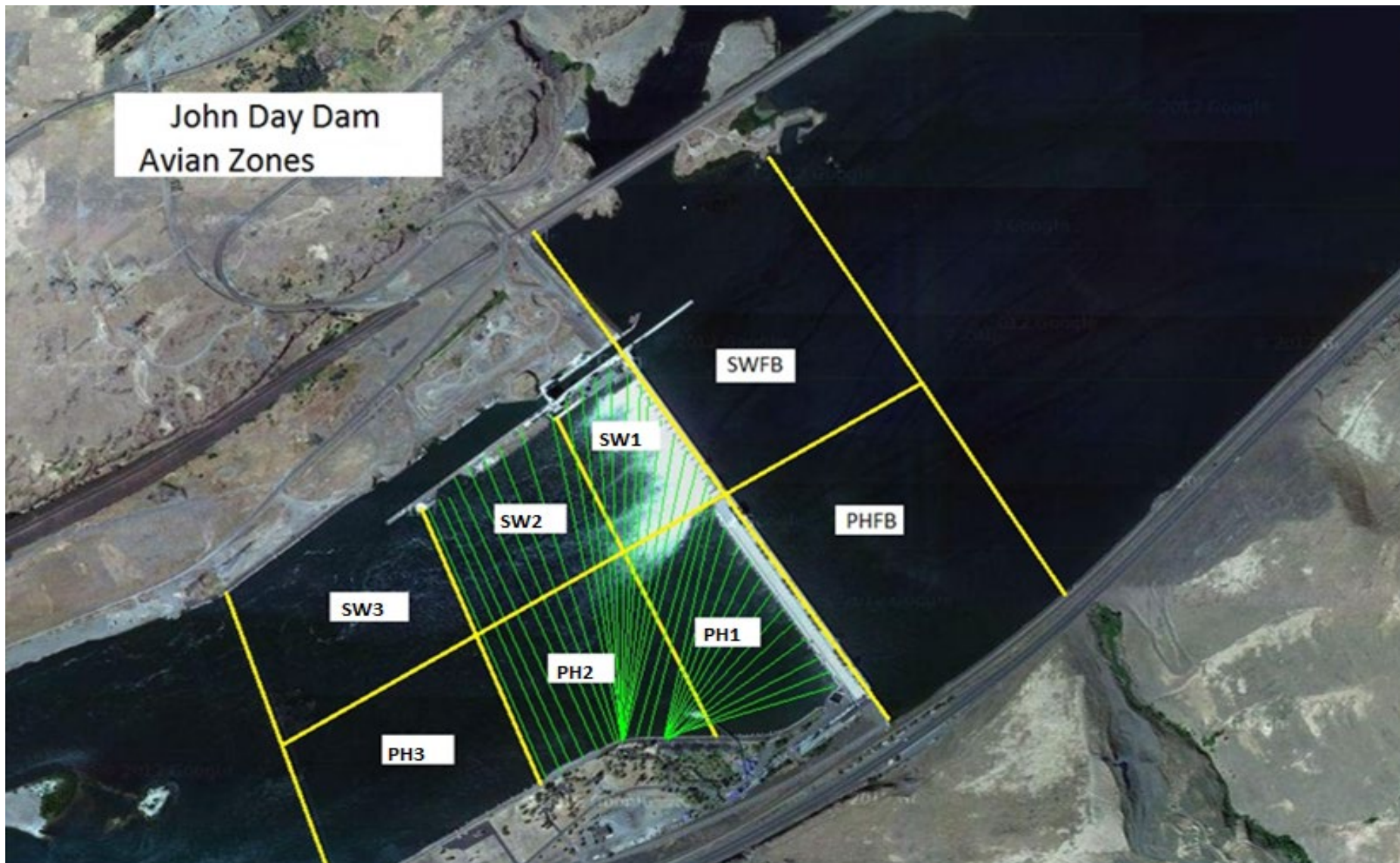
Average Weekly Velocity (ft/sec)	2.66
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JOHN DAY WEEKLY AVERAGES

	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	8.2	1.3	9.2	9.0	1.8	1.6	4.6	44.0	35.5	15.0
Sunday	8.2	1.3	10.3	10.2	1.8	1.5	4.6	63.2	34.4	19.0
Monday	8.2	1.4	8.4	8.2	1.8	1.5	4.7	38.0	34.9	11.0
Monday	8.3	1.2	9.4	9.2	1.8	1.4	4.6	52.1	33.5	19.0
Tuesday	8.3	1.4	9.8	9.6	1.5	1.6	4.6	42.3	34.6	14.0
Tuesday	8.1	1.3	10.0	9.8	1.7	1.4	4.5	47.3	35.1	17.0
Wednesday	8.0	1.4	9.7	9.5	1.5	1.6	4.7	47.2	35.1	17.0
Wednesday	8.1	1.2	9.4	9.2	1.7	1.6	4.6	54.2	35.3	19.0
Thursday	8.0	1.3	8.9	8.7	1.5	1.7	4.6	44.0	35.3	15.0
Thursday	8.2	1.4	9.9	9.7	1.5	1.4	4.4	51.1	35.0	18.0
Friday	8.1	1.2	9.8	9.6	1.2	1.6	4.6	53.9	35.0	19.0
Friday	8.1	1.4	10.0	9.8	1.9	1.4	4.6	54.0	34.6	19.0
Saturday	8.2	1.2	9.9	9.7	1.6	1.5	4.5	52.2	34.8	19.0
Saturday	8.2	1.4	9.8	9.6	1.7	1.7	4.6	52.0	34.7	19.0
AVG:	8.2	1.3	9.6	9.4	1.6	1.5	4.6	49.7	34.8	17.1

	Temp (F)	Secchi (Ft)	Notes
Sunday	69.8	6.0	
Monday	69.9	6.0	
Tuesday	70.0	6.0	
Wednesday	70.2	6.0	
Thursday	70.4	6.0	
Friday	70.5	6.0	
Saturday	70.8	6.0	
AVG	70.2	6.0	

John Day Dam
Avian Zones



JDA Bird Counts: 7/9/23 to 7/15/23

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

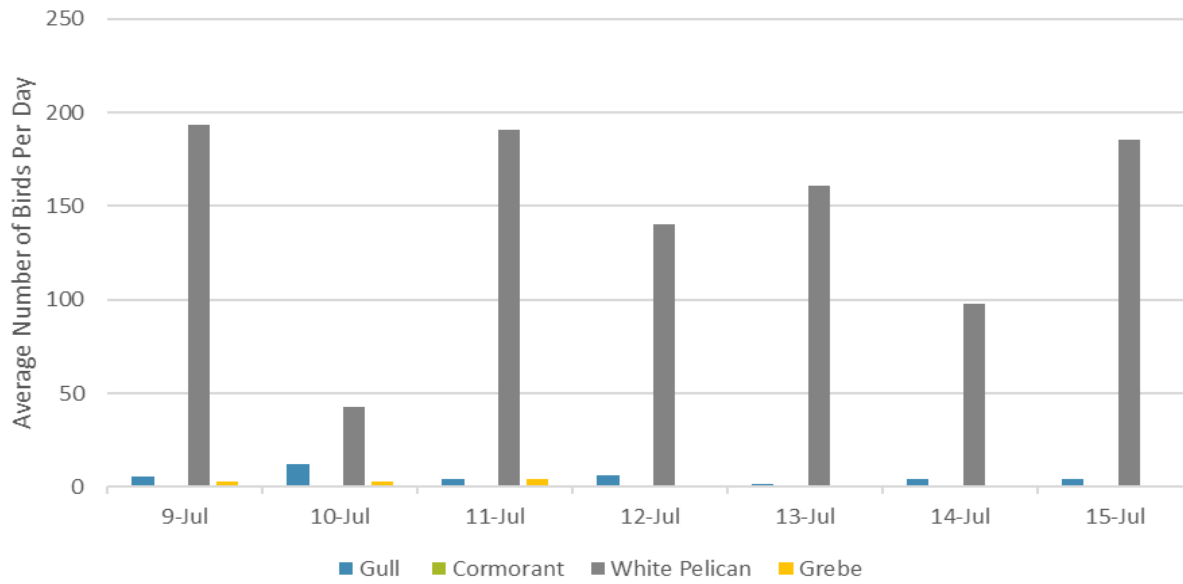
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
9-Jul	PHFB	7	4	0	0	0	0	0	0	0	0	0	0	3	2	0	0	3	3	0	0	22
9-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	69	41	0	0	0	0	0	0	110
9-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	20
9-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	50	30	0	0	0	0	0	0	80
9-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	100	5	0	0	0	0	0	0	105
9-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	62	5	30	0	0	0	0	0	97
Avg/Survey		6		0		0		0		0		0		194		15		3		0		217
10-Jul	PHFB	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	13
10-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul	PH1	10	0	0	0	0	0	0	0	0	0	0	0	28	1	0	0	0	0	0	0	39
10-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul	SW1	0	7	0	0	0	0	0	0	0	0	0	0	25	1	0	0	0	0	0	0	33
10-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	15
10-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	15	0	100	0	0	0	0	0	115
Avg/Survey		12		0		0		0		0		0		43		50		3		0		108
11-Jul	PHFB	0	0	25	16	0	0	0	0	0	0	0	0	2	0	0	0	5	4	0	0	52
11-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul	PH1	0	3	0	0	0	0	0	0	0	0	0	0	15	3	0	0	0	0	0	0	21
11-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	20	3	0	0	0	0	0	0	23
11-Jul	PH3	0	1	0	0	0	0	0	0	0	0	0	0	35	6	0	0	0	0	0	0	42
11-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	65	2	0	0	0	0	0	0	67
11-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	70	5	0	0	0	0	0	0	75
11-Jul	SW3	5	0	0	0	0	0	0	0	0	0	0	0	155	0	0	11	0	0	0	0	171
Avg/Survey		5		21		0		0		0		0		191		6		5		0		226
12-Jul	PHFB	0	0	7	5	0	0	0	0	0	0	0	0	8	0	0	0	1	0	0	0	21
12-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jul	PH1	12	0	0	0	0	0	0	0	0	0	0	0	20	7	0	0	0	0	0	0	39
12-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	27	1	0	0	0	0	0	0	28
12-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	65	2	0	0	0	0	0	0	67
12-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	30
12-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	35
12-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	85	0	70	3	0	0	0	0	158
Avg/Survey		6		6		0		0		0		0		140		37		1		0		189

JDA Bird Counts: 7/9/23 to 7/15/23

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-Jul	PHFB	0	0	4	2	0	0	0	0	0	0	0	0	8	0	0	0	0	1	0	0	15
13-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
13-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jul	SW1	0	3	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	43
13-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	180	9	0	0	0	0	0	0	189
13-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	68	9	103	0	0	0	0	0	180
Avg/Survey		2		3		0		0		0		0		161		52		1		0		218
14-Jul	PHFB	0	0	3	10	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	14
14-Jul	SWFB	0	0	5	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	11
14-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	0	0	0	0	0	63
14-Jul	SW1	6	3	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	15
14-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	43	7	0	0	0	0	0	0	50
14-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	110	23	73	0	0	0	0	0	206
Avg/Survey		5		9		0		0		0		0		98		68		1		0		180
15-Jul	PHFB	0	0	4	27	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	38
15-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jul	PH1	6	2	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	0	0	0	24
15-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	18	10	0	0	0	0	0	0	28
15-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	73	35	0	0	0	0	0	0	108
15-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	32	5	0	0	0	0	0	0	37
15-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	70	0	39	0	0	0	0	0	109
15-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	87	18	25	12	0	0	0	0	142
Avg/Survey		4		16		0		0		0		0		186		38		0		0		243
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	76	108	0	0	0	0	0	0	0	0	0	0	2021	529	24	0	2758					
Avg/Survey	5	8	0	0	0	0	0	0	0	0	0	0	144	38	2	0	197					

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

