

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/7/2023

Inspection Period: 10/1/2023 thru 10/7/2023



**US Army Corps
of Engineers**
Portland District

JD/WC Project-Fisheries
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Phone: 541-739-1061

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: 65.7 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.)	1.6			
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	0	depth (≥ 8')	AVG (Ft.)	8.1			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.58			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.4			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.4			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.5			
Submersible traveling screens	0	visual inspect	Inspection completed 9/25-9/28				
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 (%)	2.3	
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 2023 sampling season on September 15th.

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

Project Operations:

Current outages: MU1-Annual (ETR: 10/11/23), MU4 (ETR: 11/2/23), MU7 (ETR: 7/31/28), MU10 (ETR: 11/15/23), MU15 (ETR: 11/30/23)

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

From Aug. 15 - Nov. 30, spillbay #2 will be open 1-stop (approximately 1.6 kcfs), during daylight hours, for NFL adult fish attraction.

Weekly Average Tailwater TDG: 98.7

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). The repair date is unknown.

Calibration: All gauges within the 0.3' criteria.

Bird Data:

Decrease in pelican foraging within the tailrace this week with zero sightings, foraging gull numbers have remained steady this week (~24/inspection), foraging grebes increased this week (from an average ~11/inspection to 24/inspection), and foraging cormorants (average ~1/inspection), observed this week.

There are ~17-pelicans hanging around Preacher's Island

20 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)

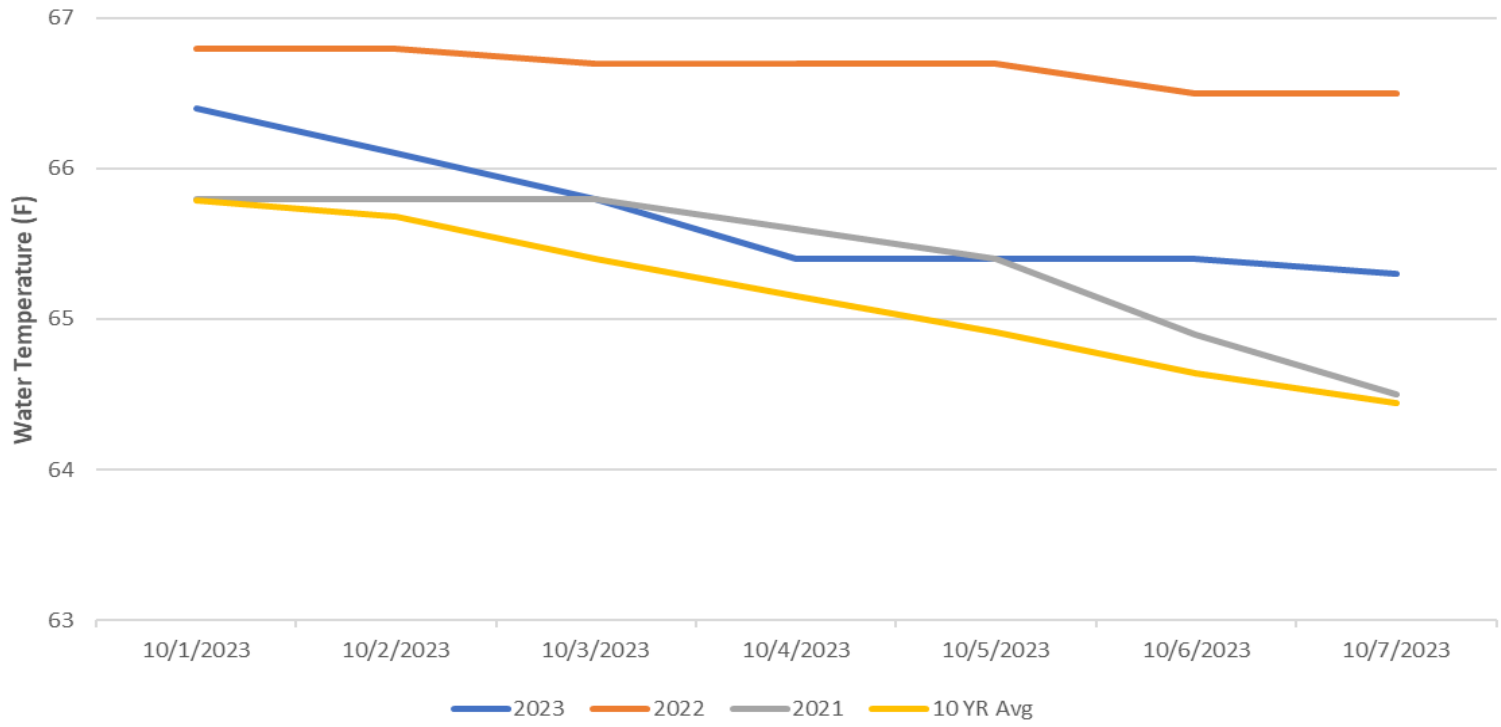
PSMFC smolt condition monitoring ended 9/15/23.

USDA hazing started on 04/16/23 and ended 07/31/23

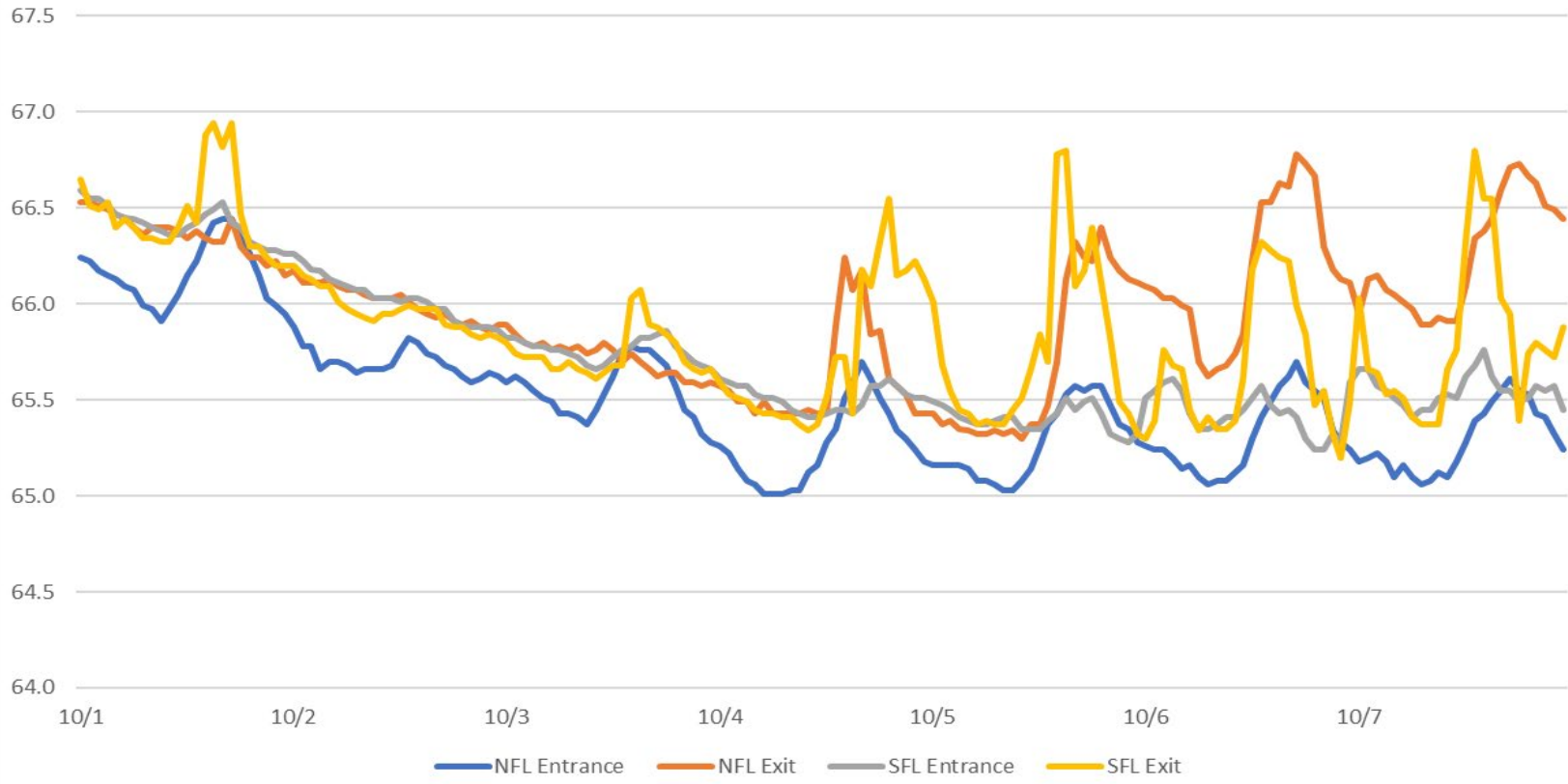
WDFW currently performing NPMP dam angling (started 5/8/23)

CRITFC translocation ended on 9/6/23.

John Day Dam Water Temperature (F)



JDA Ladder Temperatures (F) 10/1/23 - 10/7/23



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)
10/2/2023	Unit 4	2.65	55,55,0	160.4
10/2/2023	Unit 12	2.57	55,55,0	160.4
10/4/2023	Unit 4	2.53	55,55,0	159.6
10/4/2023	Unit 12	2.56	55,55,0	159.6
10/6/2023	Unit 4	2.56	55,55,0	159.7
10/6/2023	Unit 12	2.59	55,55,0	159.7

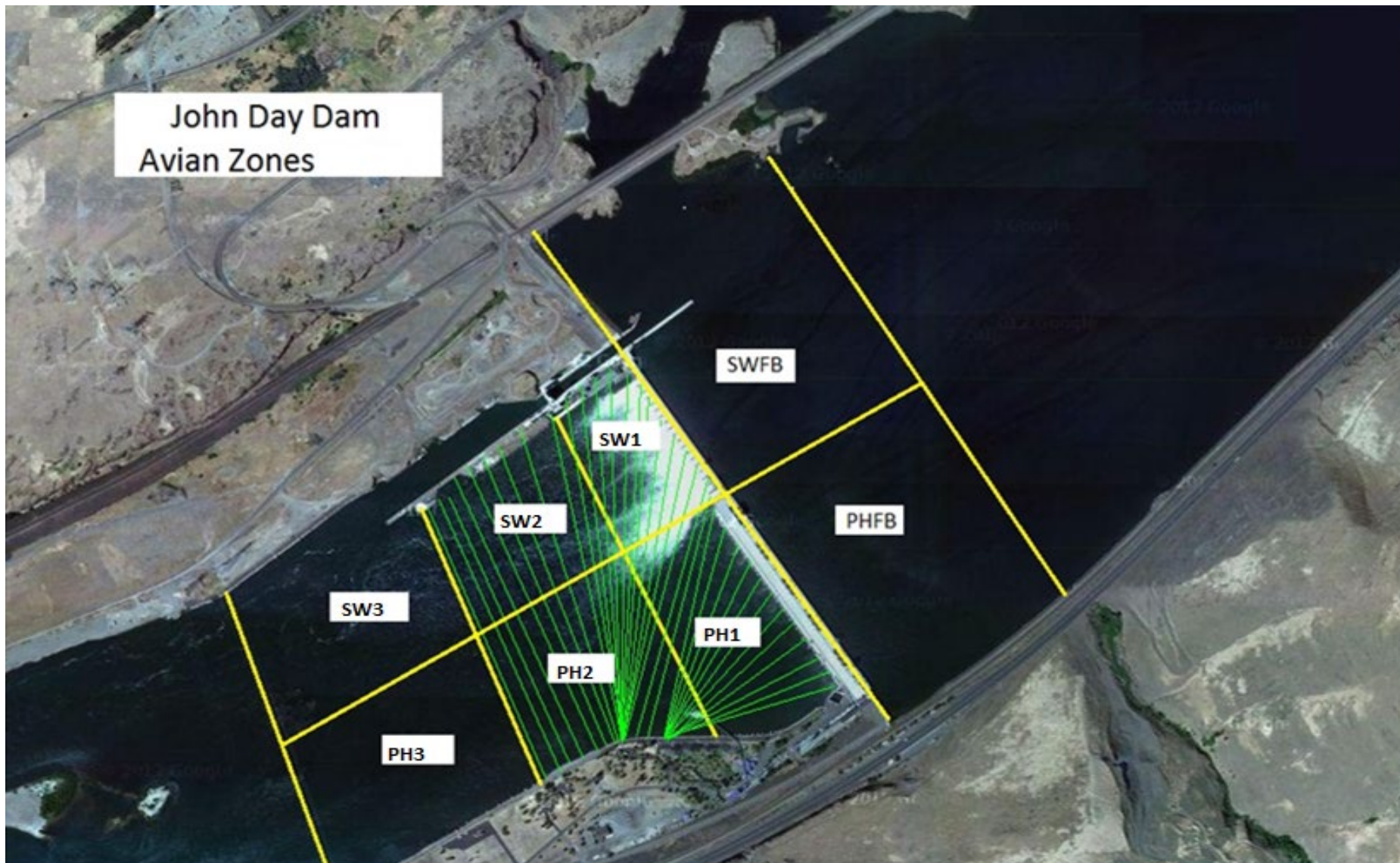
Average Weekly Velocity (ft/sec)	2.58
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JOHN DAY WEEKLY AVERAGES

	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	1.9	9.0	9.0	1.8	1.6	4.5	1.6	2.6	1
Sunday	8.2	1.3	9.1	9.1	1.7	1.6	4.5	1.6	2.5	1
Monday	8.4	1.2	9.8	9.8	1.9	1.7	4.6	1.6	2.2	1
Monday	8.2	1.3	9.9	9.9	1.8	1.6	4.6	1.6	2.2	1
Tuesday	8.2	1.4	9.7	9.7	1.6	1.3	4.5	1.6	2.1	1
Tuesday	8.3	1.4	9.8	9.8	1.8	1.5	4.7	1.6	2.3	1
Wednesday	8.2	1.5	9.7	9.7	1.5	1.5	4.4	1.6	2.3	1
Wednesday	8.0	1.3	9.3	9.3	1.5	1.7	4.5	1.6	2.1	1
Thursday	8.0	1.7	9.0	8.9	1.5	1.5	4.5	1.6	2.1	1
Thursday	8.0	1.3	9.3	9.4	1.3	1.6	4.6	1.6	2.2	1
Friday	8.0	1.3	9.2	9.1	1.5	1.6	4.4	1.6	2.2	1
Friday	8.0	1.3	9.3	9.4	1.5	1.5	4.5	1.6	2.3	1
Saturday	8.0	1.2	9.4	9.3	1.4	1.6	4.5	1.6	2.7	1
Saturday	8.0	1.3	9.2	9.2	1.4	1.7	4.6	1.6	2.3	1
AVG:	8.1	1.4	9.4	9.4	1.6	1.6	4.5	1.6	2.3	1.0

	Temp (F)	Secchi (Ft)	Notes
Sunday	66.4	6.0	
Monday	66.1	6.0	
Tuesday	65.8	6.0	
Wednesday	65.4	6.0	
Thursday	65.4	6.0	
Friday	65.4	6.0	
Saturday	65.3	6.0	
AVG	65.7	6.0	

John Day Dam
Avian Zones



JDA Bird Counts: 10/1/23 to 10/7/23

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

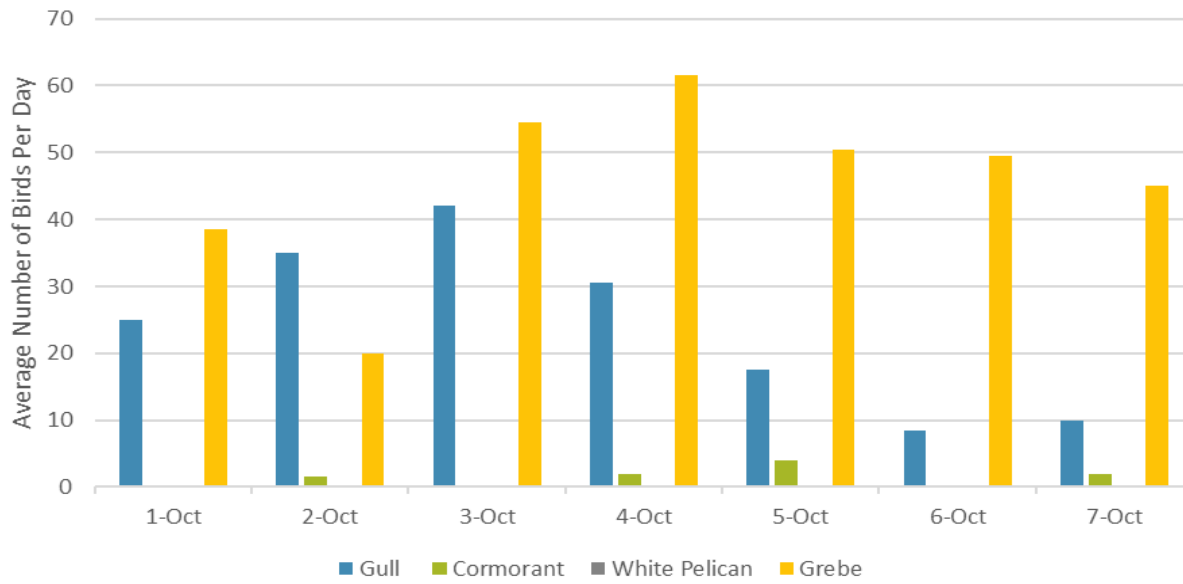
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total	
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)		
1-Oct	PHFB	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	40	37	0	0	95	
1-Oct	SWFB	0	0	50	127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	177
1-Oct	PH1	20	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
1-Oct	PH2	10	10	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	21
1-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Oct	SW1	0	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	1	0	0	0	17	50	0	0	0	0	0	0	0	0	0	0	0	0	0	68
1-Oct	SW3	0	0	1	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Avg/Survey		25		90		0		48		0		0		0		1		39		0		201	
2-Oct	PHFB	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	40	0	0	0	0	49
2-Oct	SWFB	0	0	102	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	177
2-Oct	PH1	20	30	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
2-Oct	PH2	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
2-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Oct	SW2	0	0	0	0	0	0	30	20	0	0	0	0	0	0	0	0	0	0	0	0	0	50
2-Oct	SW3	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Avg/Survey		35		89		2		35		0		0		0		0		20		0		180	
3-Oct	PHFB	0	0	14	0	0	0	12	0	0	0	0	0	0	0	0	0	57	52	0	0	0	135
3-Oct	SWFB	0	0	166	211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	377
3-Oct	PH1	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
3-Oct	PH2	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
3-Oct	PH3	9	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
3-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Oct	SW2	0	0	0	0	0	0	40	30	0	0	0	0	0	0	0	0	0	0	0	0	0	70
3-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		42		196		0		41		0		0		0		0		55		0		333	
4-Oct	PHFB	0	0	2	0	2	0	34	0	0	0	0	0	0	0	0	0	70	53	0	0	0	161
4-Oct	SWFB	0	0	255	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	440
4-Oct	PH1	3	37	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
4-Oct	PH2	9	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
4-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Oct	SW2	0	0	0	0	0	0	16	39	0	0	0	0	0	0	0	0	0	0	0	0	0	55
4-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11
Avg/Survey		31		221		2		45		0		0		0		6		62		0		365	

JDA Bird Counts: 10/1/23 to 10/7/23

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)	
5-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	51	0	0	101	
5-Oct	SWFB	0	0	150	263	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	413	
5-Oct	PH1	25	0	0	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	33	
5-Oct	PH2	8	2	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
5-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5-Oct	SW2	0	0	0	0	0	0	28	17	0	0	0	0	0	0	0	0	0	0	0	45	
5-Oct	SW3	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
Avg/Survey		18		214		4		24		0		0		0		0		51		0	310	
6-Oct	PHFB	0	0	25	0	0	0	12	0	0	0	0	0	0	0	0	50	49	0	0	136	
6-Oct	SWFB	0	0	103	223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	326	
6-Oct	PH1	10	0	14	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	
6-Oct	PH2	5	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
6-Oct	PH3	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
6-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6-Oct	SW2	0	0	0	0	0	0	8	23	0	0	0	0	0	0	0	0	0	0	0	31	
6-Oct	SW3	0	0	0	35	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	37	
Avg/Survey		9		210		0		23		0		0		0		0		50		0	290	
7-Oct	PHFB	0	0	0	210	0	0	24	0	0	0	0	0	0	0	0	43	47	0	0	324	
7-Oct	SWFB	0	0	181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	181	
7-Oct	PH1	10	0	12	21	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	
7-Oct	PH2	7	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
7-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7-Oct	SW2	0	0	0	0	0	0	21	41	0	0	0	0	0	0	0	18	0	0	0	80	
7-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avg/Survey		10		213		2		43		0		0		0		9		45		0	322	
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	337	2462	19	513	0	0	0	0	0	30	639	0	4000									
Avg/Survey	24	176	1	37	0	0	0	2	46	0	286											

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

