

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/22/2022

Inspection Period: 10/16/2022 thru 10/22/2022



**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:	65.5 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.)	1.4			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.7			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.41			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6			
Entrance weir NE1	0	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 %		
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.

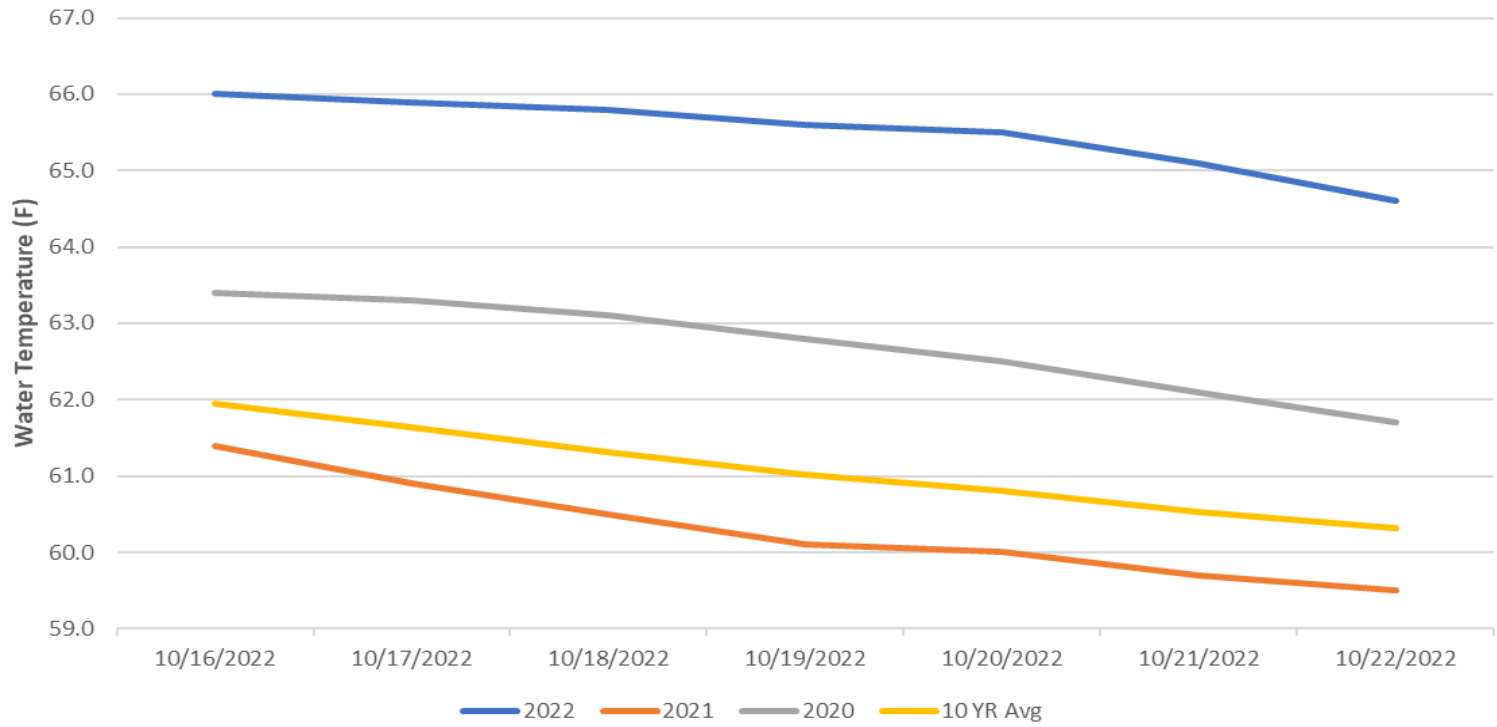
Bird Data:

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.

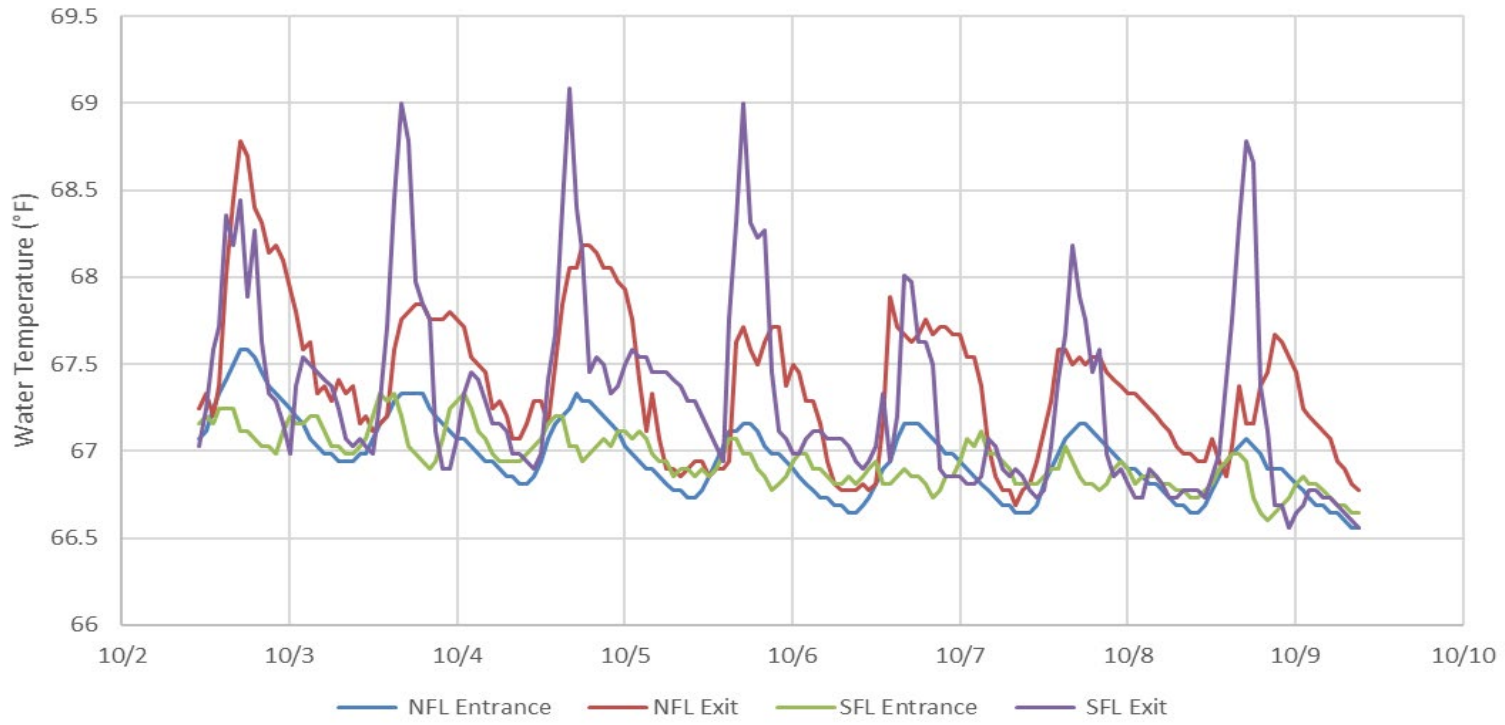
Research:

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 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)
10/19/2022	Unit 4	2.34	0,68,68	160.0
10/19/2022	Unit 12	2.47	0,68,68	160.0
10/20/2022	Unit 4	2.36	0,68,68	159.5
10/20/2022	Unit 12	2.40	0,68,68	159.5
10/22/2022	Unit 4	2.41	0,68,68	159.4
10/22/2022	Unit 12	2.50	0,68,68	159.4

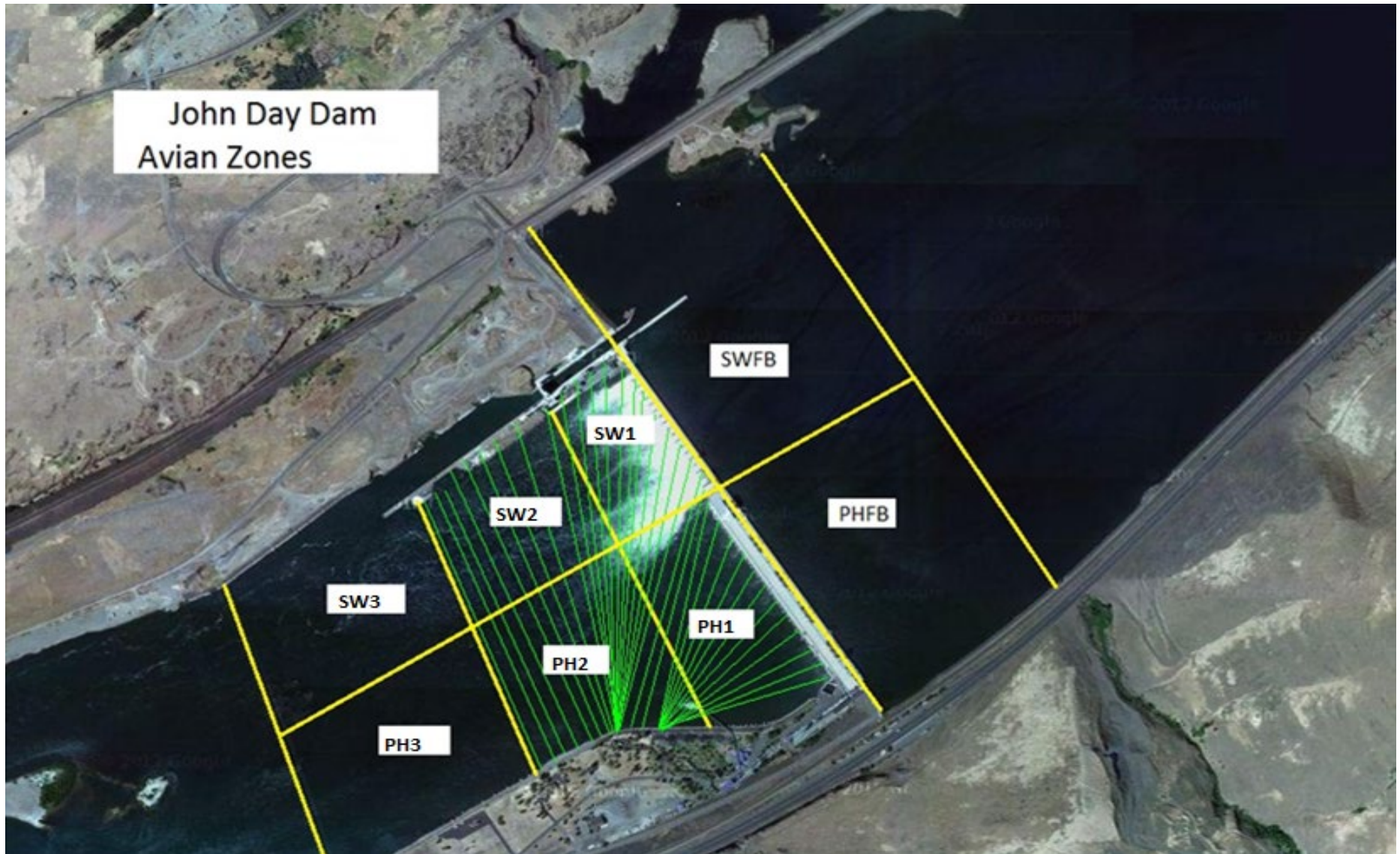
Average Weekly Velocity (ft/sec)	2.41
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JOHN DAY WEEKLY AVERAGES

	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	8.3	1.4	8.2	8.5	1.8	1.6	4.5	1.6	1
Sunday	8.4	1.4	8.2	8.5	1.9	1.6	4.9	1.6	1
Monday	9.0	1.3	9.0	9.3	1.6	1.4	4.6	1.6	1
Monday	9.0	1.3	8.8	9.2	1.7	1.6	4.5	1.6	1
Tuesday	8.1	1.5	8.1	8.4	1.8	1.7	4.6	1.6	1
Tuesday	8.3	1.6	8.4	8.8	1.7	1.6	4.9	1.6	1
Wednesday	8.9	1.2	9.0	9.3	1.4	1.4	4.6	1.5	1
Wednesday	9.5	1.3	9.1	9.5	1.2	1.4	4.5	1.6	1
Thursday	8.5	1.3	8.4	8.7	1.6	1.6	4.5	1.5	1
Thursday	8.8	1.3	8.5	8.9	1.5	1.6	4.5	1.6	1
Friday	8.8	1.3	8.8	9.1	1.6	1.3	4.6	1.6	1
Friday	8.8	1.3	8.9	9.2	1.5	1.5	4.6	1.6	1
Saturday	8.6	1.4	8.6	8.9	1.7	1.5	4.7	1.5	1
Saturday	8.6	1.4	8.5	8.8	1.6	1.5	4.5	1.6	1
AVG:	8.7	1.4	8.6	8.9	1.6	1.5	4.6	1.6	1.0

	Temp (F)	Secchi (Ft)	Notes
Sunday	66.0	6.0	
Monday	65.9	6.0	
Tuesday	65.8	6.0	
Wednesday	65.6	6.0	
Thursday	65.5	6.0	
Friday	65.1	6.0	
Saturday	64.6	6.0	
AVG	65.5	6.0	

John Day Dam
Avian Zones



JDA Bird Counts: 10/16/22 to 10/22/22

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

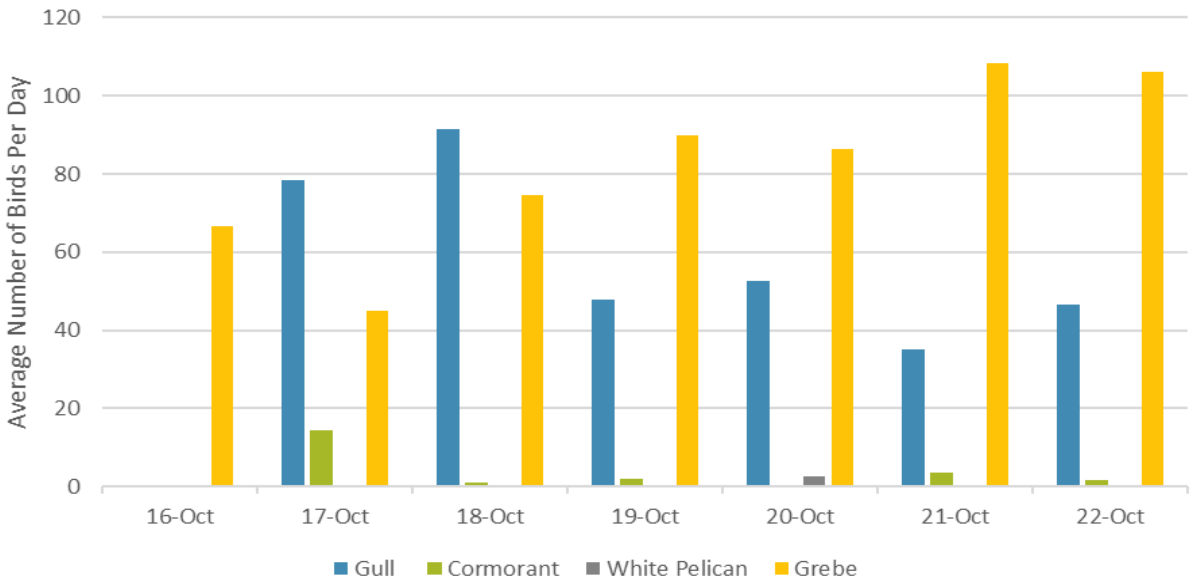
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
16-Oct	PHFB	0	0	0	0	0	0	64	15	0	0	0	0	0	0	0	0	68	65	0	0	212
16-Oct	SWFB	0	0	0	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	135
16-Oct	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-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		0		68		0		40		0		0		0		0		67		0		174
17-Oct	PHFB	0	0	0	0	0	0	25	22	0	0	0	0	0	0	0	0	45	45	0	0	137
17-Oct	SWFB	0	0	211	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	411
17-Oct	PH1	56	41	0	0	18	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	126
17-Oct	PH2	38	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
17-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Oct	SW2	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	17
17-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		79		206		15		32		0		0		0		0		45		0		376
18-Oct	PHFB	0	0	0	16	0	0	24	0	0	0	0	0	0	0	0	0	86	63	0	0	189
18-Oct	SWFB	0	0	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85
18-Oct	PH1	60	91	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	153
18-Oct	PH2	24	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
18-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Oct	SW2	0	0	0	0	0	0	19	15	0	0	0	0	0	0	0	0	0	0	0	0	34
18-Oct	SW3	0	0	0	0	0	0	5	8	0	0	0	0	0	0	13	0	0	0	0	0	26
Total/Survey		92		51		1		36		0		0		0		7		75		0		260
19-Oct	PHFB	0	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0	123	57	0	0	217
19-Oct	SWFB	0	0	94	210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	304
19-Oct	PH1	14	40	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
19-Oct	PH2	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
19-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Oct	SW2	0	0	0	0	0	0	3	45	0	0	0	0	0	0	0	0	0	0	0	0	48
19-Oct	SW3	0	0	0	35	0	0	9	0	0	0	0	0	0	0	10	11	0	0	0	0	65
Total/Survey		48		170		2		47		0		0		0		11		90		0		367

JDA Bird Counts: 10/16/22 to 10/22/22

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)	
20-Oct	PHFB	0	0	0	0	0	0	30	0	0	0	0	0	5	0	0	0	93	80	0	0	208
20-Oct	SWFB	0	0	300	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	325
20-Oct	PH1	75	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95
20-Oct	PH2	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
20-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Oct	SW2	0	0	0	0	0	0	19	50	0	0	0	0	0	0	0	0	0	0	0	0	69
20-Oct	SW3	0	0	15	0	0	0	4	4	0	0	0	0	0	0	9	0	0	0	0	0	32
Total/Survey		53		170		0		54		0		0		3		5		87		0		370
21-Oct	PHFB	0	0	437	0	0	0	0	0	0	0	0	0	0	0	0	0	114	103	0	0	654
21-Oct	SWFB	0	0	171	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	176
21-Oct	PH1	57	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64
21-Oct	PH2	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
21-Oct	PH3	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
21-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Oct	SW2	0	0	0	0	0	0	23	31	0	0	0	0	0	0	0	0	0	0	0	0	54
21-Oct	SW3	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	1	0	0	0	0	9
Total/Survey		35		307		4		29		0		0		0		3		109		0		485
22-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	115	0	0	212
22-Oct	SWFB	0	0	394	432	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	826
22-Oct	PH1	24	35	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62
22-Oct	PH2	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
22-Oct	PH3	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
22-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Oct	SW2	0	0	0	0	0	0	43	43	0	0	0	0	0	0	0	0	0	0	0	0	86
22-Oct	SW3	0	0	0	0	0	0	15	0	0	0	0	0	0	0	6	0	0	0	0	0	21
Total/Survey		47		413		2		51		0		0		0		3		106		0		621
Totals	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total	
	F		NF		F		NF		F		NF		F		NF		F		NF			
	704		2765		45		574		0		0		5		54		1154		0			2651
Avg/Survey		50		198		3		41		0		0		0		4		82		0		379

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

