

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 6/11/2022

Inspection Period: 6/5/2022 thru 6/11/2022



**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:	57.3 F
						Secchi:	3.7 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.)	9.9					
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	3.09					
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.7					
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	12.2					
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	11.9					

JUVENILE PASSAGE

Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6					
Submersible traveling screens	0	visual inspect	next visual inspection 5/23 - 5/26						
Turbine trashrack drawdown	0	<1.5', wkly							
Vert barrier screen drawdown	0	<1.5', wkly							
Spill volume	0	per FPP	Avg (kcfs)	200.8	Avg %	49.9			
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 2022 sampling season on April 1 for condition monitoring only. From April 1 - June 15 condition sampling will occur 5 days a week (Monday-Friday) from approximately 0700-1300 or until the target of 100 fish of the predominant species has been reached. From June 16 - September 15 condition sampling will occur 3 days a week (Monday, Wednesday, Friday) from approximately 0700-1300 or until the target of 100 fish of the predominant species has been reached. High water temperature protocol goes into effect when water temperatures exceed 70F.

Adult Ladder Operations:

Both ladders are operating within criteria. Ladders switched to shad mode on 5/31.

Project Operations:

Current outages: MU3, MU4, MU7, MU15.

Spring spill started April 10. Caspian tern forebaby operation for the Blalock islands ended 6/1.

USDA avian hazing started 16 April.

Tailwater average weekly TDG: 126.1. Tailwater TDG exceeded gas cap every day this week.

Summer Spill starts June 15th

Maintenance:

South fish turbine #2 was forced out of service on 30 March with an excessive vibration issue.

MU 15 was FOOS on 14 May.

Elevator #4 is not working and is OOS (Lamprey Elevator)

Calibration:

All gauges within the 0.3' criteria.

Bird Data:

Cormorants have dispersed. Gull numbers continue to increase with more foraging observed in the tailrace. Pelican numbers starting to increase on Preacher's Island, with a few seen foraging in the tailrace. Grebe numbers are steady. (see 'Bird Count' tab for details).

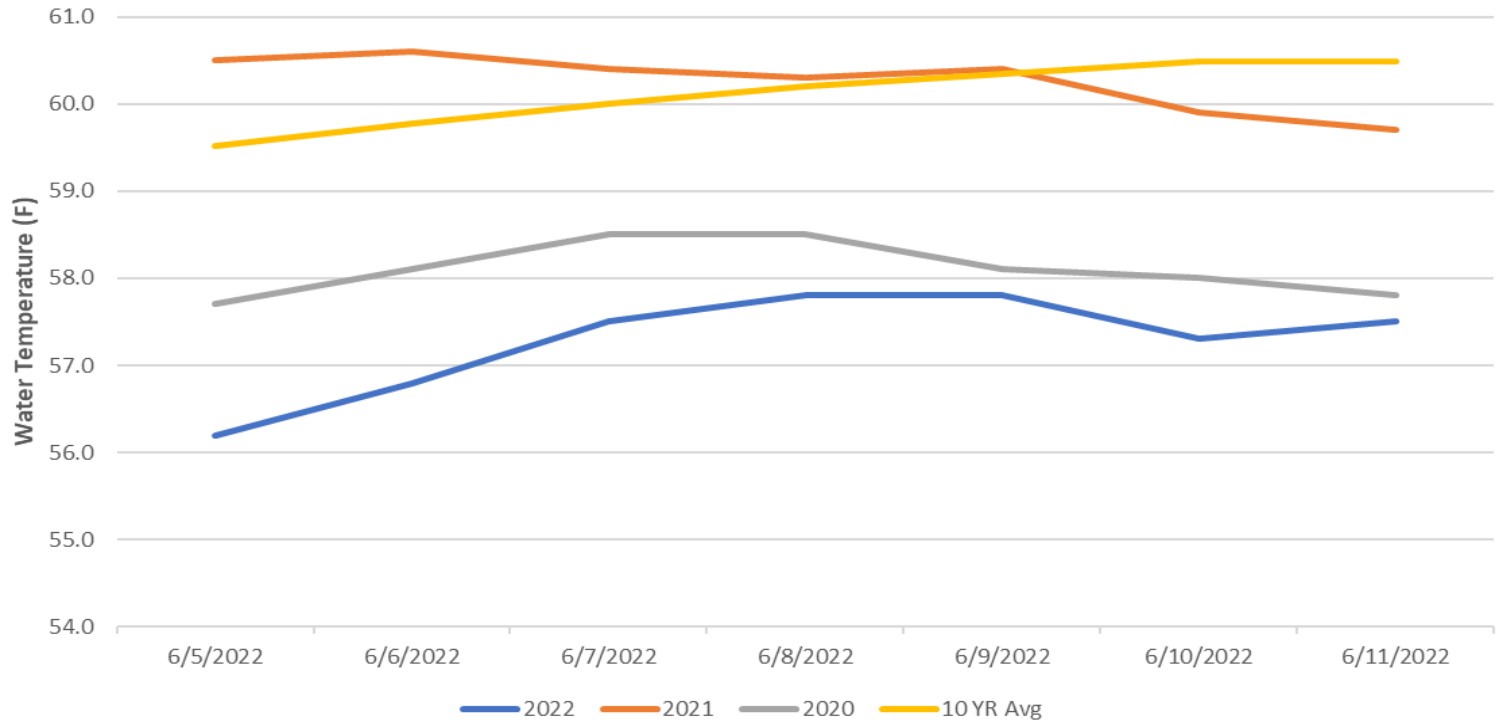
1-avian line fell over the weekend there are 3 of 125 avian lines down.

Pelicans on Preacher's Island: averaged 26 per day

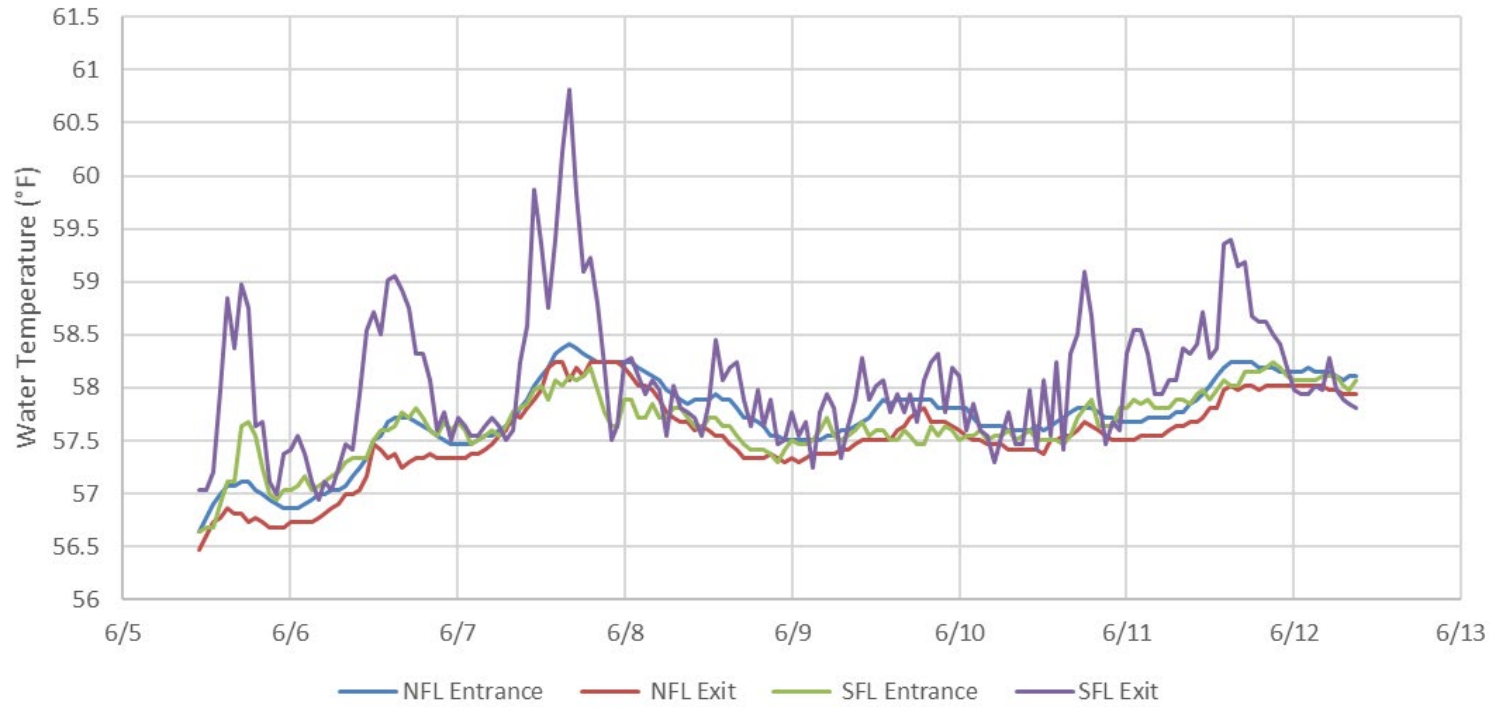
Research:

Adult fish counting started April 1. USGS temperature probes were installed in the forebay on 3/29.

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)
6/6/2022	Unit 4	3.18	65,0,65	164.2
6/6/2022	Unit 12	3.35	65,0,65	164.2
6/8/2022	Unit 4	2.95	65,0,65	165.5
6/8/2022	Unit 12	3.12	65,0,65	165.5
6/11/2022	Unit 4	2.89	68,0,68	165.4
6/11/2022	Unit 12	3.04	68,0,68	165.4

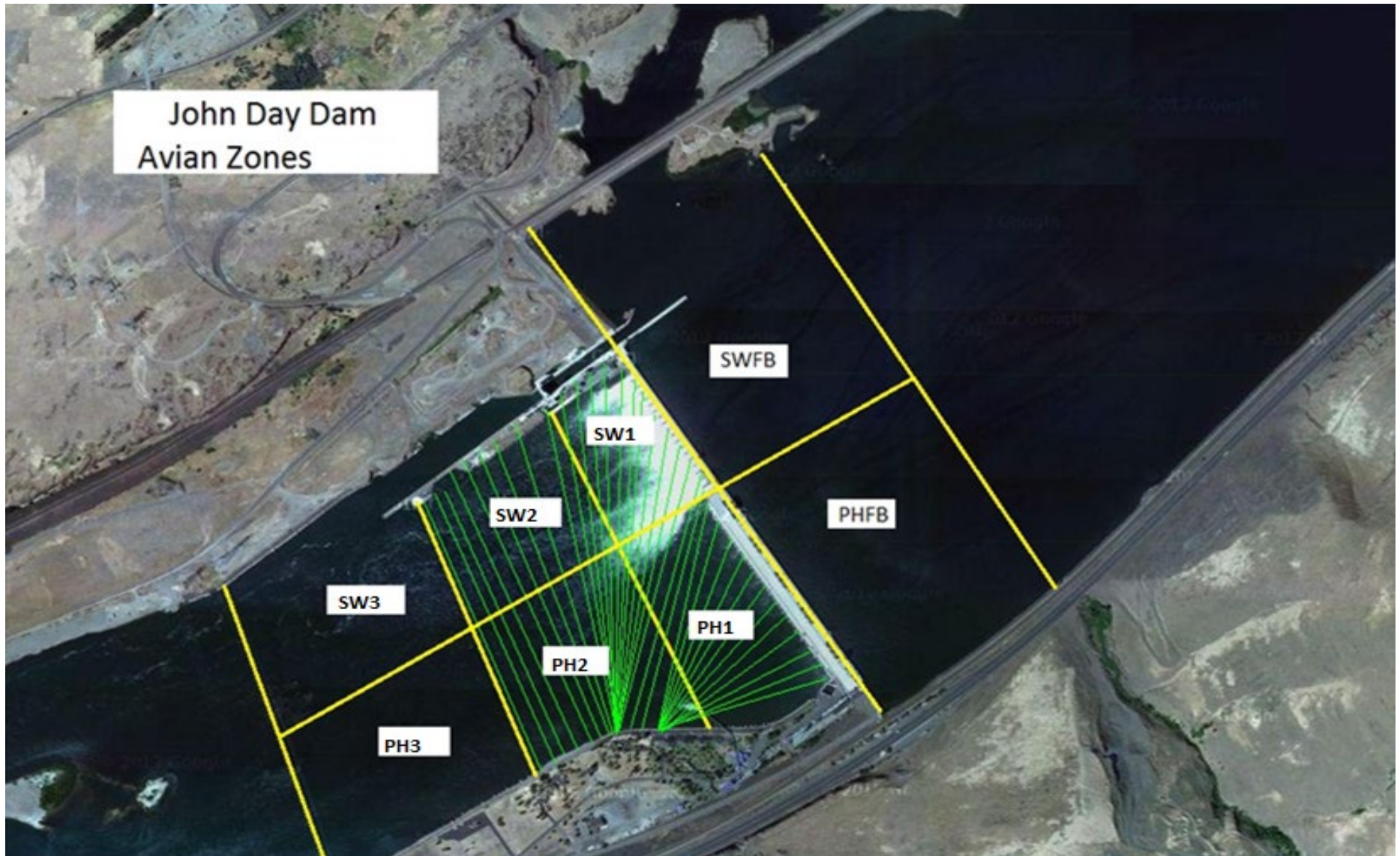
Average Weekly Velocity (ft/sec)	3.09
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JOHN DAY WEEKLY AVERAGES

	NE1 (Ft)	NE2 (Ft)	S.Ent (Ft)	SE1 (Ft)	N.Ent (Ft)	JBS Diff (Ft)	Bay19 (Ft)	Spill Vol. (kcfs)	Spill %	# Spillbays
Sunday	11.8	11.8	1.3	9.4	1.6	4.5	1.6	228.3	61.2	19
Sunday	12.4	12.4	1.3	9.5	1.5	4.5	1.6	148.1	38.9	19
Monday	12.0	12.0	1.5	9.7	1.6	4.5	1.7	224.9	57.8	19
Monday	12.4	12.5	1.2	10.1	1.4	4.6	1.7	158.9	41.8	19
Tuesday	10.1	10.1	1.9	8.4	1.4	4.7	1.9	219.9	58.5	19
Tuesday	12.1	12.1	1.1	11.6	1.3	4.5	2.0	220.2	55.9	19
Wednesday	11.8	11.2	1.5	9.8	1.6	4.6	1.6	220.0	54.6	19
Wednesday	11.6	11.0	1.5	9.7	1.4	4.5	1.8	227.0	54.6	19
Thursday	12.6	12.0	1.2	10.2	1.4	4.6	1.1	215.1	51.7	19
Thursday	12.5	11.9	1.2	10.3	1.4	4.7	1.6	164.6	41.6	19
Friday	13.4	12.7	1.3	10.3	1.7	4.6	1.4	205.2	46.6	19
Friday	13.1	12.5	1.5	10.1	1.4	4.6	1.8	154.0	39.9	19
Saturday	12.6	12.0	1.3	10.0	1.7	4.7	1.9	204.9	45.9	19
Saturday	12.5	11.9	1.8	10.0	1.9	4.5	2.0	220.1	49.6	19
AVG:	12.2	11.9	1.4	9.9	1.5	4.6	1.7	200.8	49.9	19.0

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	56.2	4.0	N/A	15
Monday	56.8	3.5	3	7
Tuesday	57.5	5.0	0	32
Wednesday	57.8	4.0	12	45
Thursday	57.8	4.0	20	10
Friday	57.3	2.5	10	
Saturday	57.5	3.0	N/A	47
AVG	57.3	3.7	9	26

John Day Dam
Avian Zones



JDA Bird Counts: 6/5/22 to 6/11/22

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

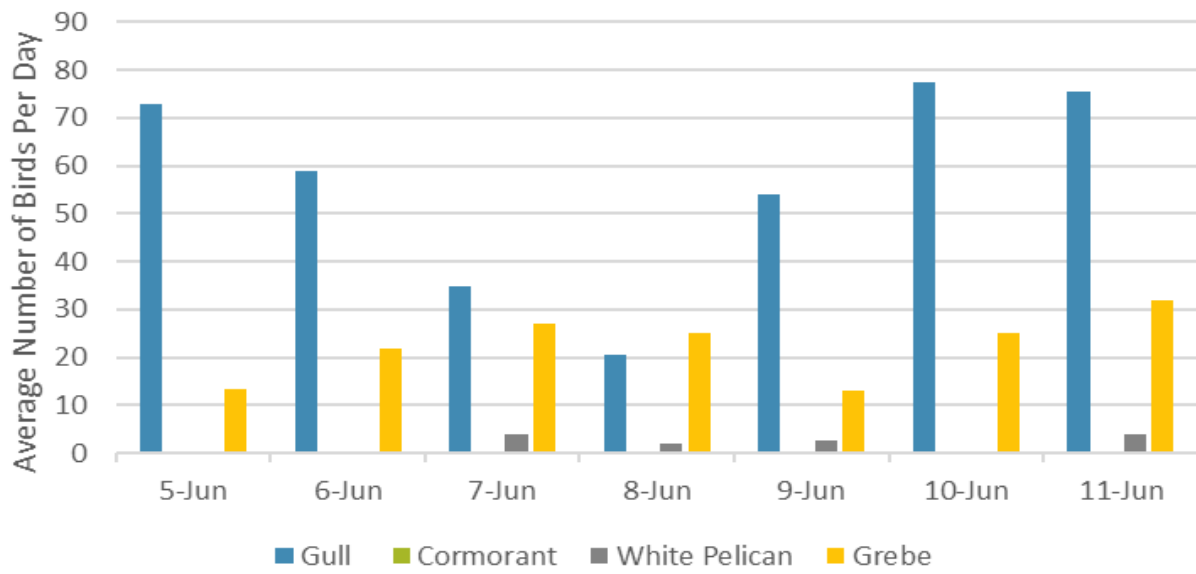
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
5-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	27
5-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Jun	PH1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5-Jun	PH2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5-Jun	PH3	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
5-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Jun	SW2	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
5-Jun	SW3	73	42	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	116
Total/Survey		73		0		0		0		0		0		1		0		14		0		87
6-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0	0	0	29
6-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	15
6-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Jun	SW2	2	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
6-Jun	SW3	35	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99
Total/Survey		59		0		0		0		0		0		0		0		22		0		81
7-Jun	PHFB	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	19	35	0	0	57
7-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jun	PH3	8	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
7-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jun	SW2	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6
7-Jun	SW3	18	29	0	0	0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	54
Total/Survey		35		2		0		0		0		0		4		0		27		0		68
8-Jun	PHFB	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	20	0	0	51
8-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jun	SW3	20	20	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	44
Total/Survey		21		0		0		0		0		0		2		0		25		0		48

JDA Bird Counts: 6/9/22 to 6/11/22

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-Jun PHFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	26	
9-Jun SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9-Jun PH1		0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
9-Jun PH2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9-Jun PH3		10	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	
9-Jun SW1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9-Jun SW2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9-Jun SW3		22	41	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	68	
Total/Survey		54	0	0	0	0	0	0	0	0	0	0	3	0	0	13	0	0	0	0	70	
10-Jun PHFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	27	0	0	0	50	
10-Jun SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12	
10-Jun PH1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10-Jun PH2		6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
10-Jun PH3		15	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	
10-Jun SW1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10-Jun SW2		0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
10-Jun SW3		33	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	
Total/Survey		78	0	0	0	0	0	0	0	0	0	0	0	6	0	25	0	0	0	0	109	
11-Jun PHFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	26	0	0	0	64	
11-Jun SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11-Jun PH1		6	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
11-Jun PH2		12	15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	28	
11-Jun PH3		22	37	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	64	
11-Jun SW1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11-Jun SW2		3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
11-Jun SW3		12	28	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	42	
Total/Survey		76	0	0	0	0	0	0	0	0	0	0	4	0	0	32	0	0	0	0	112	
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	F	NF				
Weekly Total	789	3	0	0	0	0	0	0	0	0	0	0	26	12	0	0	315	0	0	0	573	
Avg/Survey	56	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	23	0	0	0	82	

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

