

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 7/2/2022

Inspection Period: 6/26/2022 thru 7/2/2022



**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:	61.2 F
						Secchi:	3.9 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.)	1.5			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.3			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.94			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.7			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	11.0			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	10.6			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	next visual inspection 7/25-7/28				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.2', wkly					
Spill volume	0	per FPP	Avg (kcfs)	152.6	Avg %	41.8	
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 2022 sampling season on April 1 for condition monitoring only. This was the last week of 5 days a week sampling due to high flows and high debris load. From July 4 - 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, MU10

Summer spill started 06/16.

USDA avian hazing started 16 April.

Tailwater average weekly TDG: 121

Maintenance:

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

Calibration:

All gauges within the 0.3' criteria.

Bird Data:

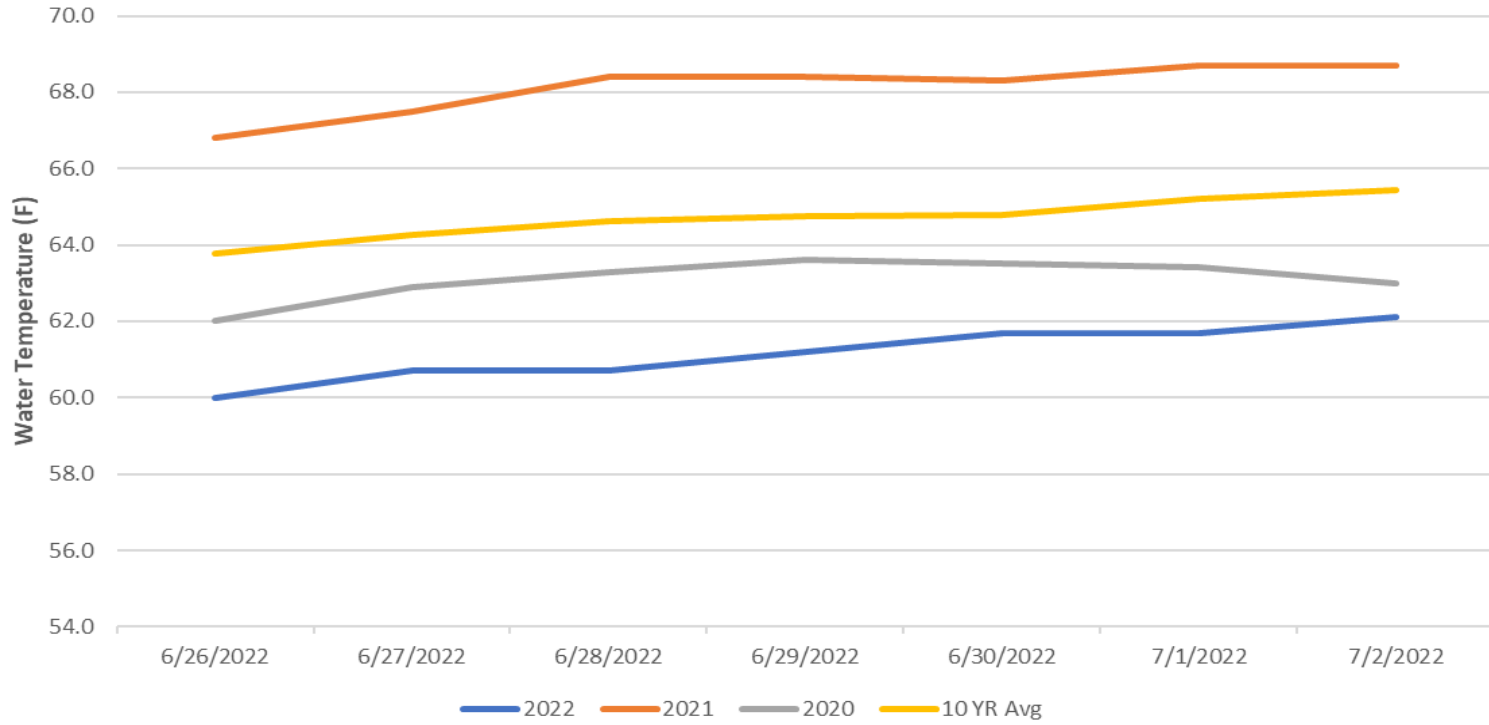
Cormorants have dispersed. Gull numbers have decreased. Grebe numbers are steady. Pelican numbers are increasing with more foraging in tailrace being observed. Pelicans on Preacher's Island: averaged 230 per day. (see 'Bird Count' tab for details).

5 of 125 avian lines down.

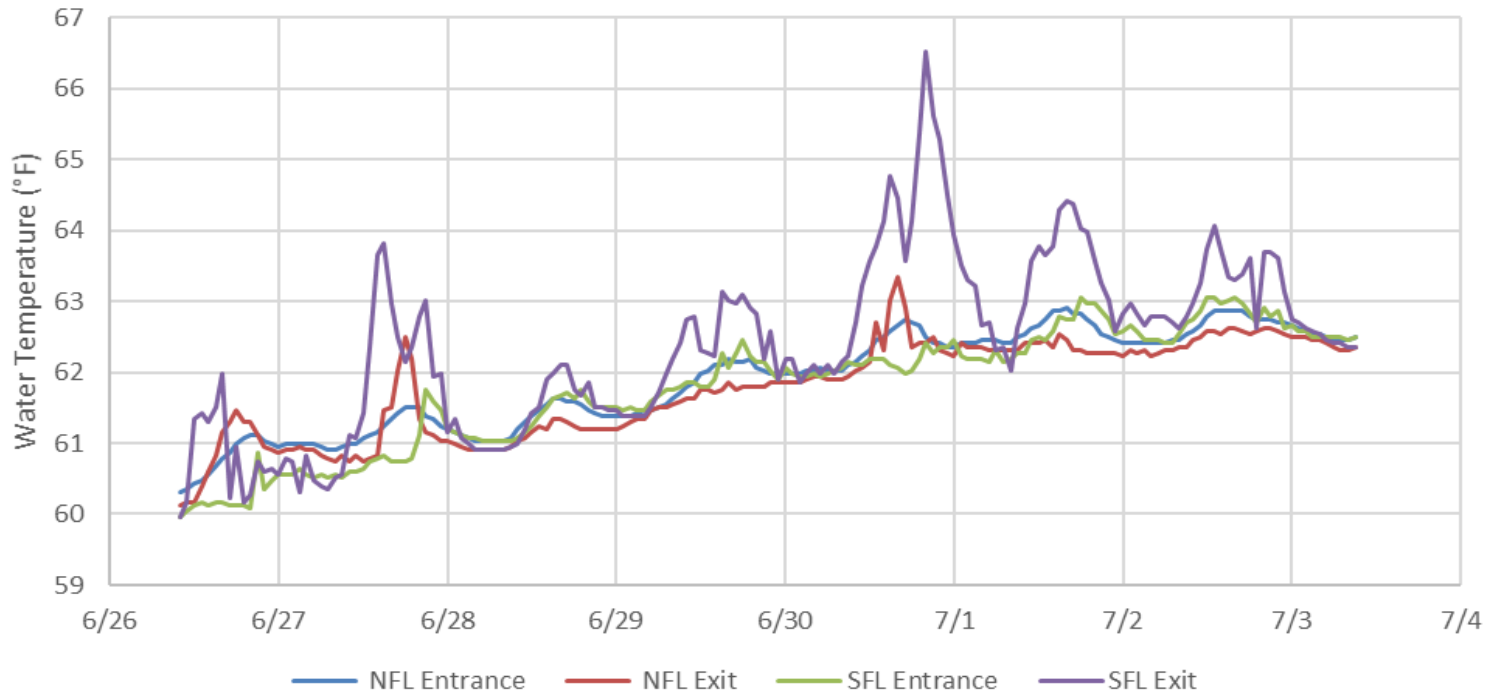
Research:

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)
6/27/2022	Unit 4	2.93	68,0,68	164.6
6/27/2022	Unit 12	3.06	68,0,68	164.6
6/30/2022	Unit 4	2.91	68,0,68	164.9
6/30/2022	Unit 12	2.89	68,0,68	164.9
7/2/2022	Unit 4	2.83	68,0,68	162.9
7/2/2022	Unit 12	3.01	68,0,68	162.9

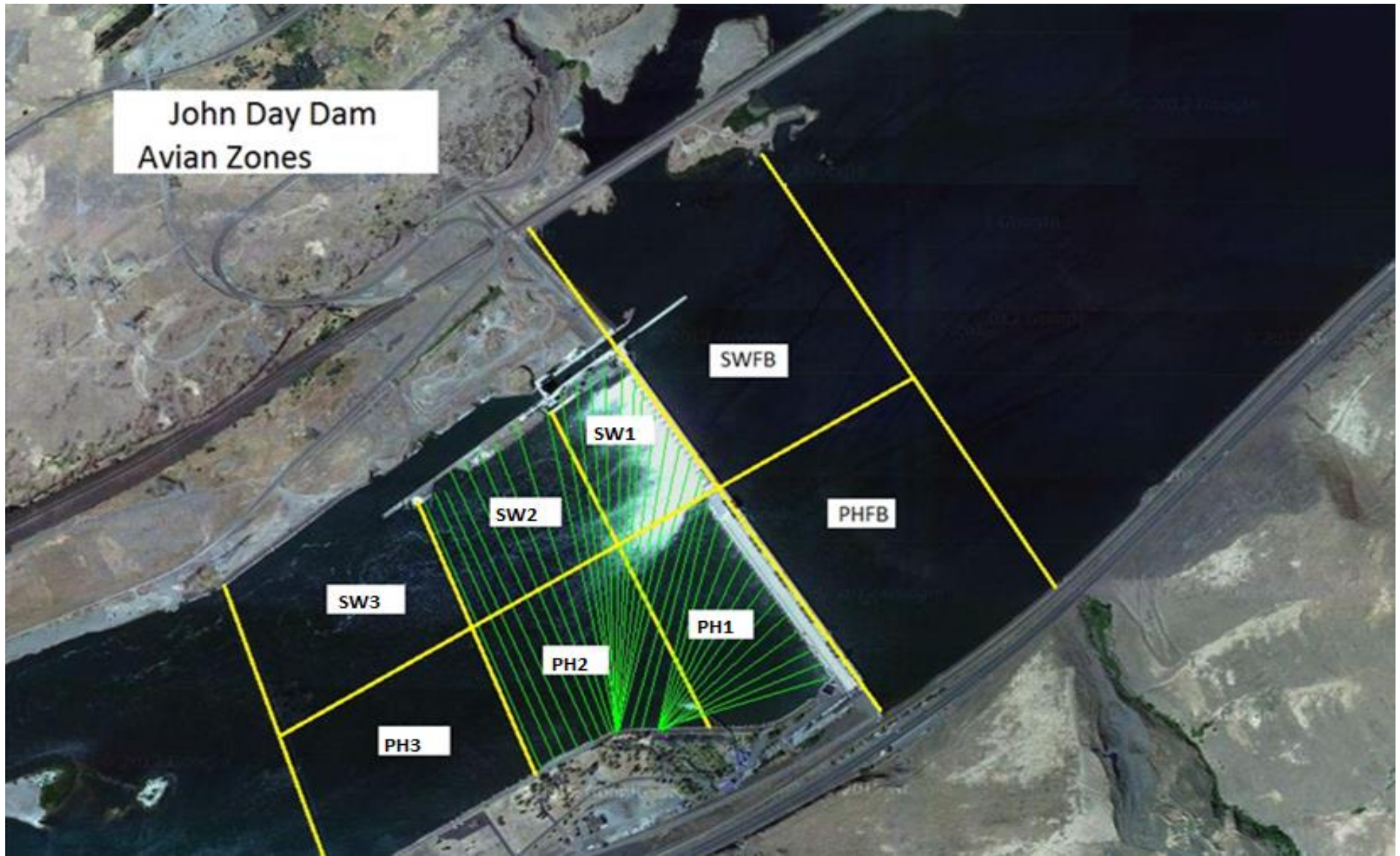
Average Weekly Velocity (ft/sec)	2.94
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JOHN DAY WEEKLY AVERAGES

	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	9.9	1.4	11.9	11.4	1.9	1.4	4.7	170.2	41.5	19
Sunday	9.7	1.8	11.9	11.5	2.0	1.5	4.6	170.3	41.8	19
Monday	9.1	1.8	11.0	10.5	1.9	1.6	4.6	176.2	44.4	19
Monday	9.6	1.4	11.8	11.4	1.7	1.4	4.5	170.2	42.3	19
Tuesday	9.7	1.2	11.5	11.0	1.8	1.5	4.6	180.1	48.1	19
Tuesday	9.3	1.2	10.9	10.4	1.8	1.6	4.5	180.1	51.1	19
Wednesday	9.1	1.6	11.3	10.8	1.6	1.5	4.6	165.0	45.6	19
Wednesday	10.0	1.2	11.4	10.9	1.5	1.5	4.6	165.2	44.0	19
Thursday	9.0	1.5	10.8	10.3	1.7	1.6	4.6	165.1	45.3	19
Thursday	9.4	1.4	10.9	10.5	1.3	1.5	4.5	165.0	45.1	19
Friday	9.5	1.3	10.9	10.4	1.3	1.5	4.7	122.1	35.6	19
Friday	9.0	1.5	10.1	9.7	1.5	1.7	4.5	114.1	34.7	19
Saturday	8.7	1.8	9.8	9.8	1.9	1.5	4.5	98.2	34.7	19
Saturday	8.6	1.6	9.5	9.5	2.0	1.5	4.5	95.0	30.8	19
AVG:	9.3	1.5	11.0	10.6	1.7	1.5	4.6	152.6	41.8	19.0

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	60.0	3.5	N/A	150
Monday	60.7	3.5	29	302
Tuesday	60.7	4.0	17	180
Wednesday	61.2	4.0	52	225
Thursday	61.7	4.0	61	230
Friday	61.7	4.0	49	250
Saturday	62.1	4.0	N/A	275
AVG	61.2	3.9	42	230

John Day Dam
Avian Zones



JDA Bird Counts: 6/26/22 to 7/2/22

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)	
26-Jun	PHFB	0	0	2	4	0	0	1	1	0	0	0	0	4	0	0	0	16	17	0	0	45
26-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Jun	PH2	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
26-Jun	PH3	0	8	0	0	0	0	0	0	0	0	0	0	41	53	0	0	0	0	0	0	102
26-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	13
26-Jun	SW3	1	9	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	0	39
Total/Survey		10		3		0		1		0		0		71		0		17		0		101
27-Jun	PHFB	0	0	0	4	0	0	1	0	0	0	0	0	0	0	0	0	6	16	0	0	27
27-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
27-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	11	18	0	0	0	0	0	0	29
27-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	23	15	0	0	0	0	0	0	38
27-Jun	SW3	0	0	0	0	0	0	0	0	0	0	0	0	13	6	0	0	0	0	0	0	19
Total/Survey		0		2		0		1		0		0		45		0		11		0		59
28-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	12	0	0	24
28-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
28-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
28-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jun	SW3	0	5	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	17
Total/Survey		3		0		0		0		0		0		10		0		12		0		25
29-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10
29-Jun	SWFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	7
29-Jun	PH1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
29-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	14
29-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	2	6	0	0	0	0	0	0	8
29-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	5	3	0	0	0	0	0	0	8
29-Jun	SW3	0	7	0	0	0	0	0	0	0	0	0	0	22	11	0	0	0	0	0	0	40
Total/Survey		6		1		0		0		0		0		32		0		8		0		46

JDA Bird Counts: 6/30/22 to 7/2/22

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)	
30-Jun	PHFB	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	0	0	48	
30-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	20	
30-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	30	
30-Jun	SW3	0	0	0	0	0	0	0	0	0	0	0	50	10	0	0	0	0	0	0	60	
Total/Survey		4	0	0	0	0	0	0	0	0	0	0	55	0	0	20	0	0	0	0	79	
1-Jul	PHFB	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	20	19	0	0	42	
1-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	20	
1-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10	
1-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	
1-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	25	20	0	0	0	0	0	0	45	
1-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	75	20	0	0	0	0	0	0	95	
Total/Survey		2	0	0	0	0	0	0	0	0	0	0	88	0	0	20	0	0	0	0	109	
2-Jul	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	13	0	0	29	
2-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-Jul	PH1	5	0	0	0	0	0	0	0	0	0	0	27	11	0	0	0	0	0	0	43	
2-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	33	15	0	0	0	0	0	0	48	
2-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	15	38	0	0	0	0	0	0	53	
2-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7	
2-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	26	9	0	0	0	0	0	0	35	
2-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	17	11	0	0	0	0	0	0	28	
Total/Survey		3	0	0	0	0	0	0	0	0	0	0	105	0	0	15	0	0	0	0	122	
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	Total		
Weekly Total		52	11	0	3	0	0	809	0	203	0	539										
Avg/Survey		4	1	0	0	0	0	58	0	15	0	77										

Foraging Piscivorous Birds

