

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: 56.8 F	Secchi: 2.6 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.)	10.3			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	3.04			
N. Entrance PH(Bay 19)differential	1	1.0' - 2.0'	AVG (Ft.)	1.9			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	12.8			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	12.8			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	next visual inspection				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.2', wkly					
Spill volume	0	per FPP	Avg (kcfs)	211.7	Avg %	47.9	
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

Summer spill started 06/16

USDA avian hazing started 16 April.

Maintenance:

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

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

Calibration:

All gauges within the 0.3' criteria.

Bird Data:

Cormorants have dispersed.

Pelican numbers on Preacher's Island and foraging in tailrace are increasing.

Pelicans on Preacher's Island: averaged 111 per day

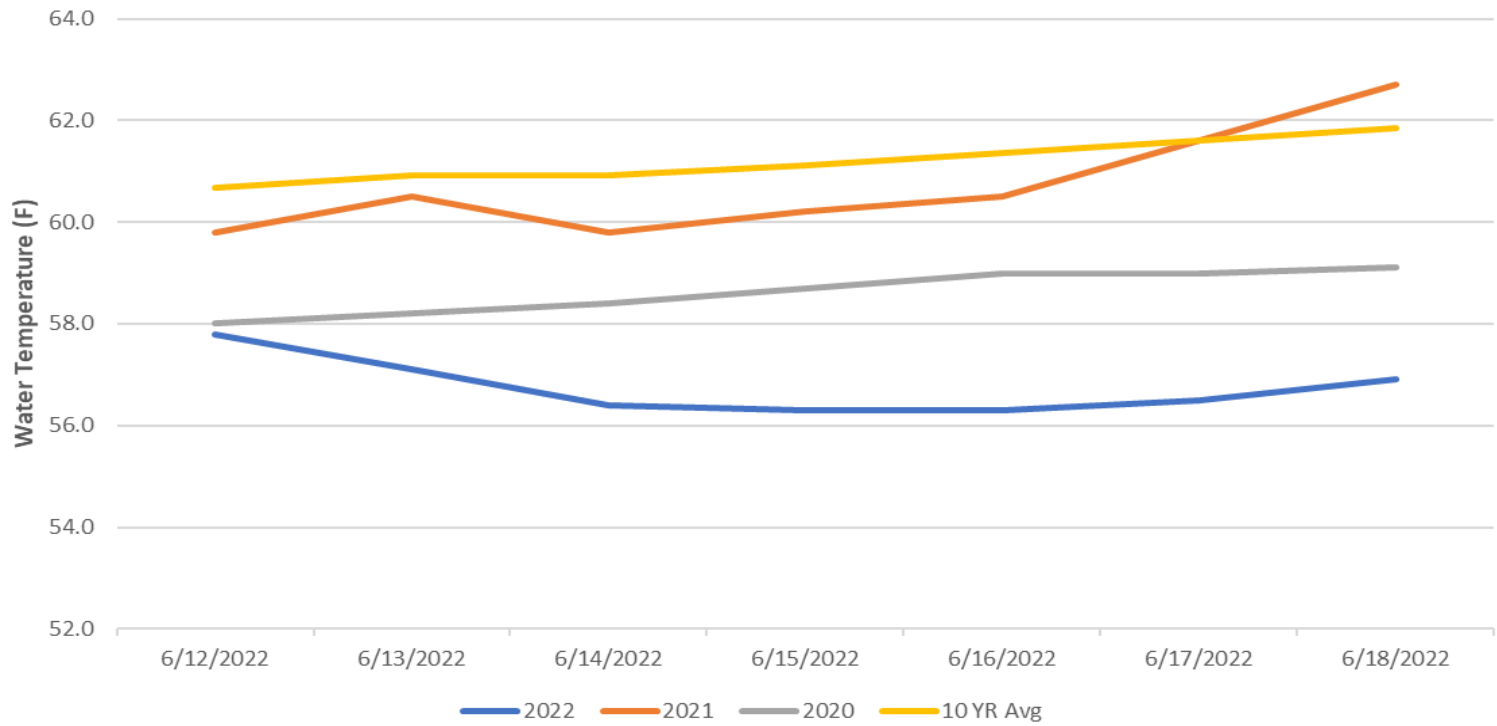
Grebe numbers are steady. (see 'Bird Count' tab for details).

122 of 125 avian lines available.

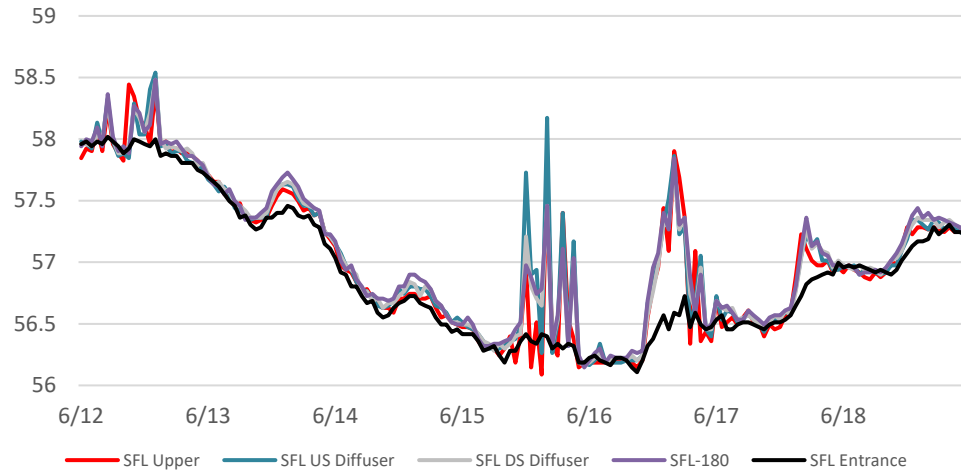
Research:

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

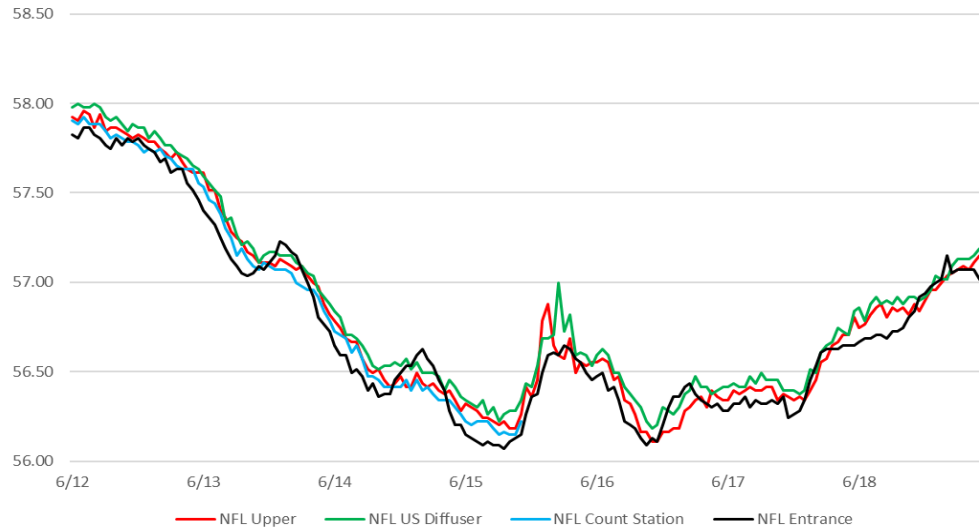
John Day Dam Water Temperature (F)



South Fish Ladder Water Temperatures for Week Ending 6/18/22



North Fish Ladder Water Temperatures for Week Ending 6/18/22



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)
6/13/2022	Unit 4	3.00	68,0,68	166.0
6/13/2022	Unit 12	2.97	68,0,68	166.0
6/16/2022	Unit 4	2.97	68,0,68	167.0
6/16/2022	Unit 12	3.03	68,0,68	167.0
6/18/2022	Unit 4	3.10	68,0,68	167.1
6/18/2022	Unit 12	3.15	68,0,68	167.1

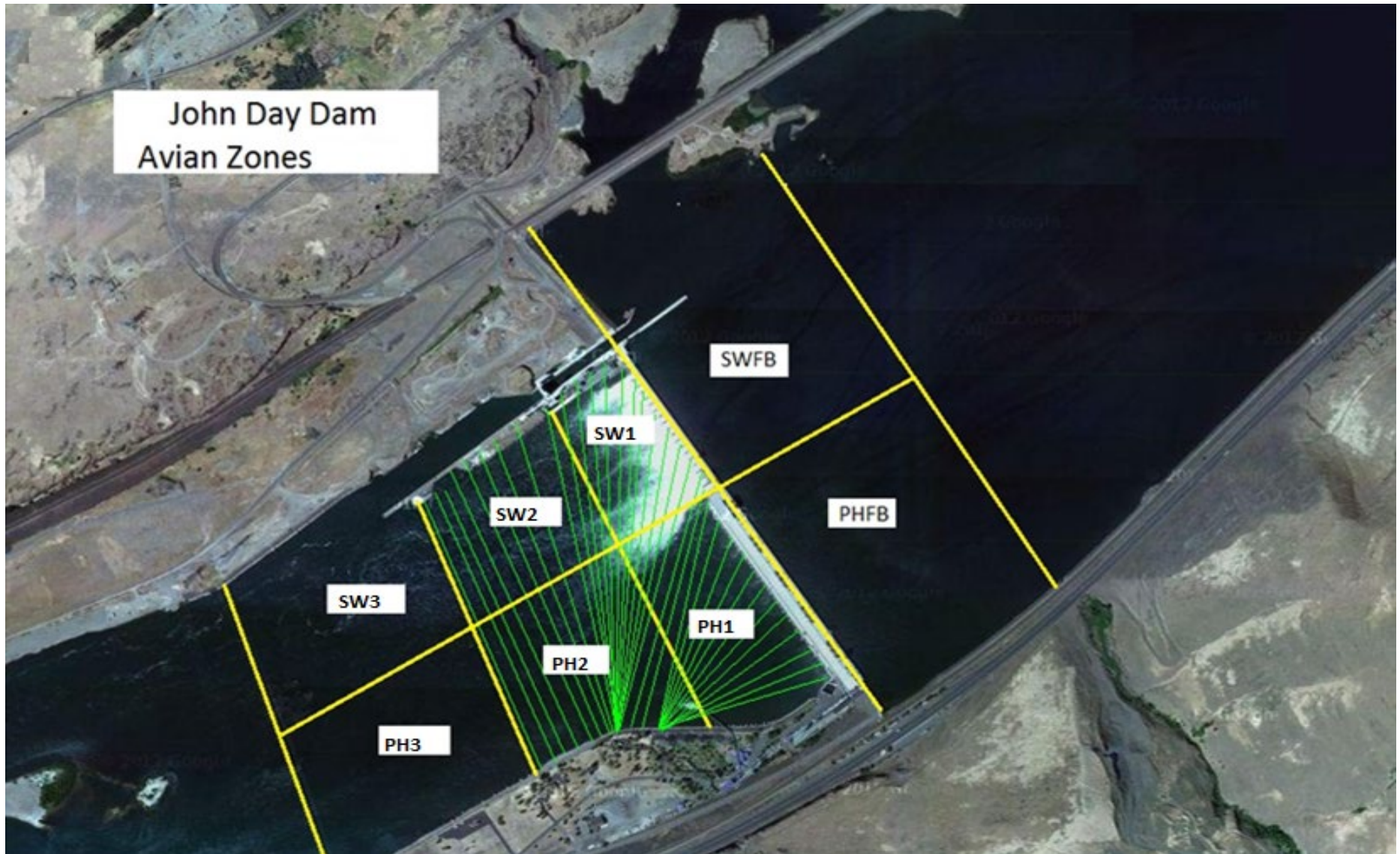
Average Weekly Velocity (ft/sec)	3.04
----------------------------------	------

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	10.3	1.3	12.5	11.9	2.0	1.6	4.6	220.2	49.7	19
Sunday	10.3	1.4	12.9	12.3	1.9	1.6	4.6	220.5	49.8	19
Monday	10.4	1.5	13.3	12.7	2.0	1.5	4.6	225.3	50.3	19
Monday	10.3	1.5	13.1	12.5	2.2	1.5	4.6	222.8	49.8	19
Tuesday	10.3	1.6	12.0	11.4	1.8	1.3	4.6	204.8	47.0	19
Tuesday	10.3	1.4	12.9	12.4	1.7	1.4	4.6	204.8	47.0	19
Wednesday	10.0	1.6	12.6	12.0	1.9	1.4	4.6	220.1	47.8	19
Wednesday	10.0	1.5	12.5	12.1	1.8	1.5	4.7	208.0	47.8	19
Thursday	10.5	1.3	13.1	12.6	1.3	1.2	4.7	209.9	48.0	19
Thursday	10.4	1.6	12.9	12.4	1.9	1.5	4.5	205.1	46.7	19
Friday	10.3	1.6	12.9	12.4	1.9	1.6	4.5	206.2	45.8	19
Friday	10.4	1.5	13.0	12.5	1.8	1.4	4.5	205.0	46.6	19
Saturday	10.2	1.6	12.8	12.3	1.9	1.5	4.6	205.2	46.8	19
Saturday	9.8	1.3	13.2	12.7	1.9	1.3	4.5	205.2	47.0	19
AVG:	10.3	1.5	12.8	12.3	1.9	1.5	4.6	211.7	47.9	19.0

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	57.9	3.0		68
Monday	57.4	3.0		50
Tuesday	56.6	2.5		123
Wednesday	56.2	2.5		135
Thursday	56.4	2.5		123
Friday	56.4	2.5		117
Saturday	56.8	2.5		160
AVG	56.8	2.6	#DIV/0!	111

John Day Dam
Avian Zones



JDA Bird Counts: 6/12/22 to 6/18/22

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

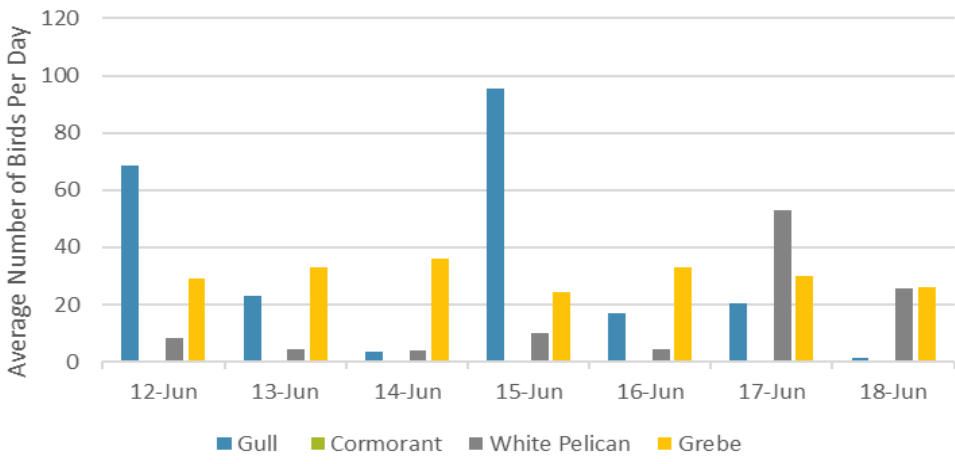
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
12-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	24	0	0	58
12-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jun	PH1	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
12-Jun	PH2	5	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
12-Jun	PH3	6	48	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	57
12-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jun	SW2	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
12-Jun	SW3	38	13	0	0	0	0	0	0	0	0	0	0	4	9	0	0	0	0	0	0	64
Total/Survey		69		0		0		0		0		0		9		0		29		0		106
13-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	33	0	0	66
13-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jun	PH1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jun	PH3	20	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
13-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jun	SW2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
13-Jun	SW3	5	10	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	24
Total/Survey		23		0		0		0		0		0		5		0		33		0		61
14-Jun	PHFB	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	33	39	0	0	73
14-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jun	PH1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
14-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jun	PH3	4	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	6
14-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jun	SW3	2	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	8
Total/Survey		4		1		0		0		0		0		4		0		36		0		44
15-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	24	0	0	49
15-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jun	PH2	6	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
15-Jun	PH3	113	33	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	160
15-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jun	SW3	4	15	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	25
Total/Survey		96		0		0		0		0		0		10		0		25		0		130

JDA Bird Counts: 6/16/22 to 6/18/22

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-Jun PHFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	31	0	0	66	
16-Jun SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16-Jun PH1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16-Jun PH2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16-Jun PH3		5	11	0	0	0	0	0	0	0	0	0	0	9	3	0	0	0	0	0	28	
16-Jun SW1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16-Jun SW2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16-Jun SW3		3	15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	22	
Total/Survey		17		0		0		0		0		0		5		4		33		0	58	
17-Jun PHFB		0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	33	27	0	0	62	
17-Jun SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17-Jun PH1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17-Jun PH2		0	0	0	0	0	0	0	0	0	0	0	63	0	0	0	0	0	0	0	63	
17-Jun PH3		8	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
17-Jun SW1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17-Jun SW2		8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
17-Jun SW3		8	8	0	0	0	0	0	0	0	0	0	43	0	0	0	0	0	0	0	59	
Total/Survey		21		1		0		0		0		0		53		0		30		0	105	
18-Jun PHFB		0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	30	22	0	0	54	
18-Jun SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18-Jun PH1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18-Jun PH2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18-Jun PH3		0	1	0	0	0	0	0	0	0	0	0	37	1	0	0	0	0	0	0	39	
18-Jun SW1		0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	
18-Jun SW2		0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9	
18-Jun SW3		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Total/Survey		2		1		0		0		0		0		26		0		26		0	54	
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	459	5	0	0	0	0	0	0	0	0	0	0	220	7	423	0	557					
Avg/Survey	33	0	0	0	0	0	0	0	0	0	0	0	16	1	30	0	80					

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

