

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 9/24/2022

Inspection Period: 9/18/2022 thru 9/24/2022



**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:	68.9 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.)	1.5				
Entrance weir SE1	1	depth (≥ 8')	AVG (Ft.)	8.3				
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.44				
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.7				
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	8.3				
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- 9/26-9/29					
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 %	1.9		
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 concluded the 2022 sampling season on September 15.

Adult Ladder Operations:

Both ladders are operating within criteria.

Project Operations:

Current outages: MU4, MU6, MU7, MU8, MU10, MU11. TSWs were removed on 8/31. From August 15 through November 30, adult fish attraction flow will be provided by spilling through Bay 2 open one stop (approximately 1.6 kcfs) during daylight hours.

Maintenance:

NFL HVAC unit replaced and returned to service on 6 July - repairs did not fully fix the HVAC system and the repairs are currently being investigated

Calibration:

All gauges within the 0.3' criteria.

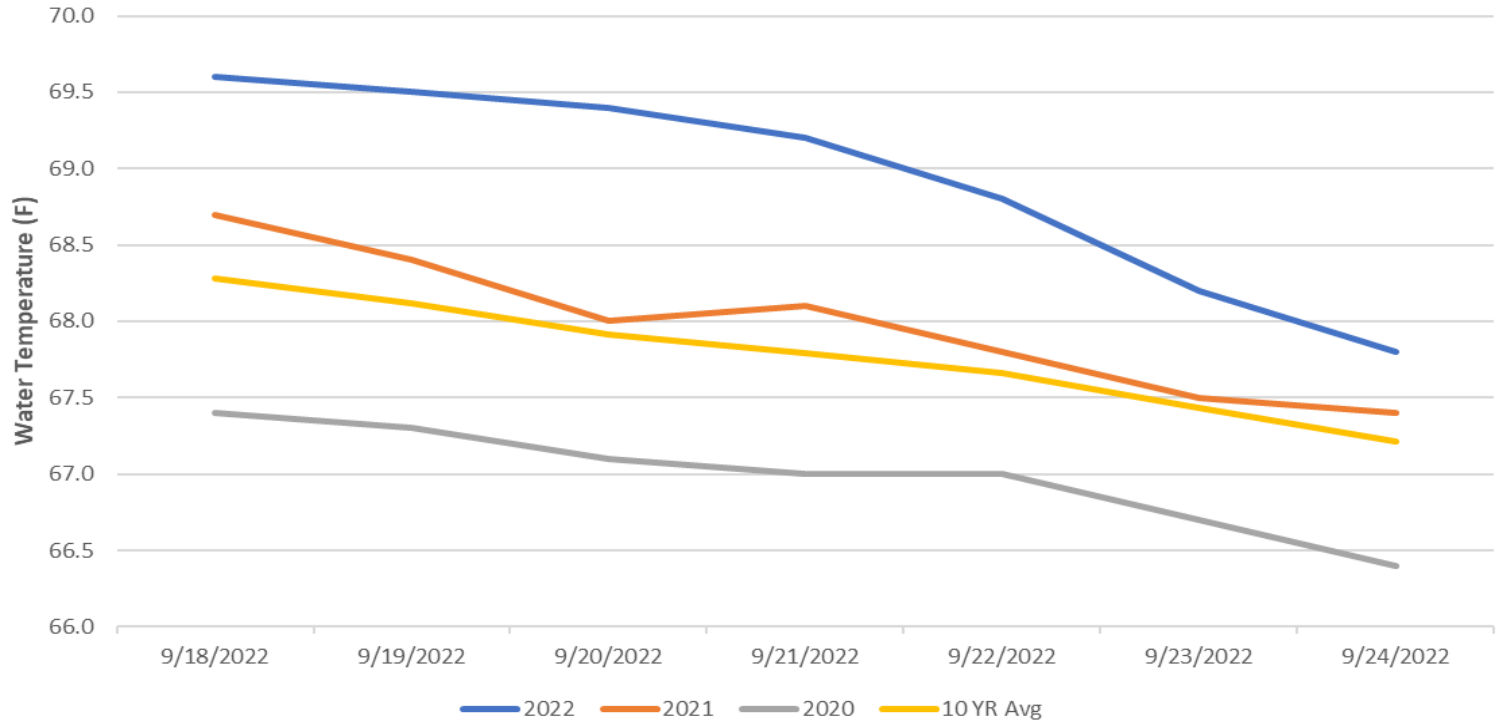
Bird Data:

Gull and Cormorant numbers are increasing. Grebe and Pelican numbers have decreased.
11 of 125 avian lines down.

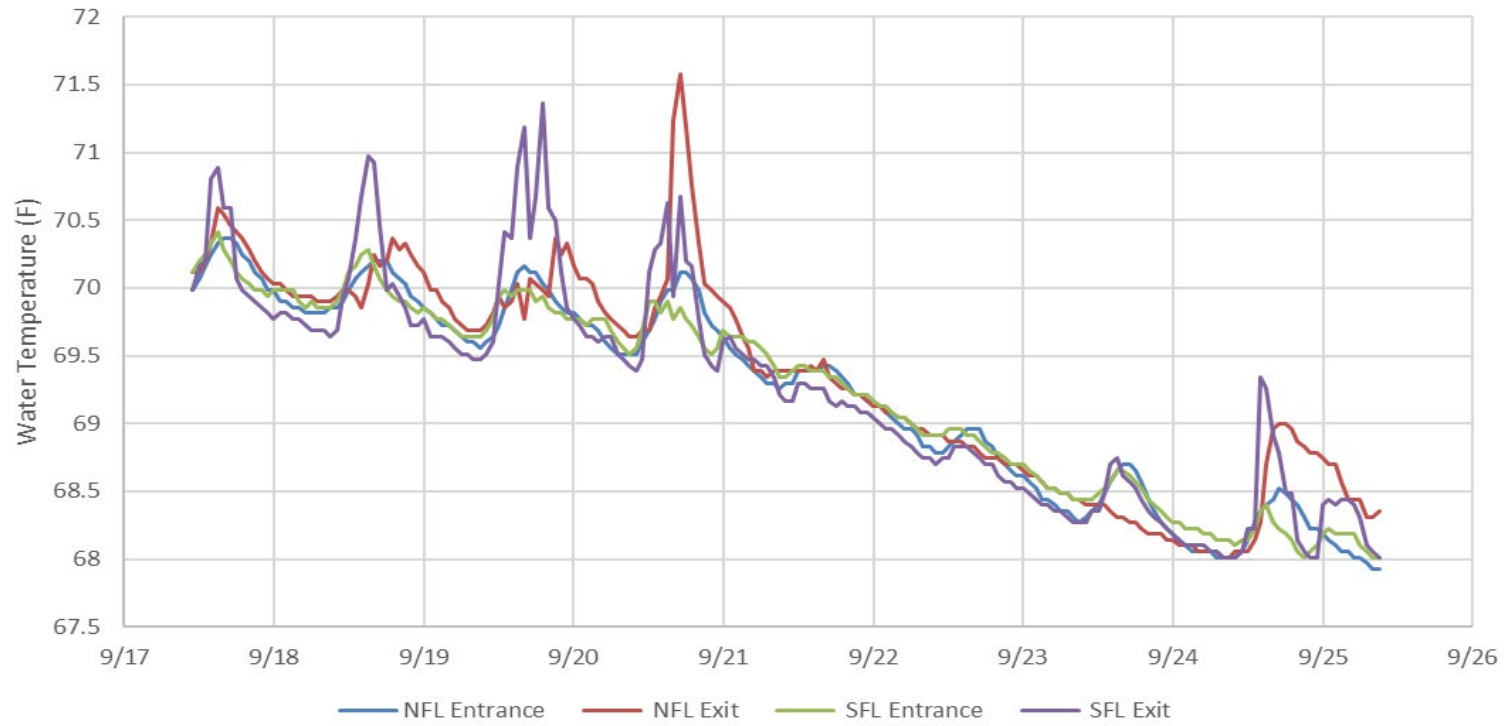
Research:

Adult fish counting started April 1.
USGS temperature probes were removed from the forebay on 9/14.

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)
9/19/2022	Unit 4	2.35	0,68,68	159.6
9/19/2022	Unit 12	2.50	0,68,68	159.6
9/21/2022	Unit 4	2.39	0,68,68	159.6
9/21/2022	Unit 12	2.53	0,68,68	159.6
9/23/2022	Unit 4	2.33	0,68,68	159.3
9/23/2022	Unit 12	2.53	0,68,68	159.3

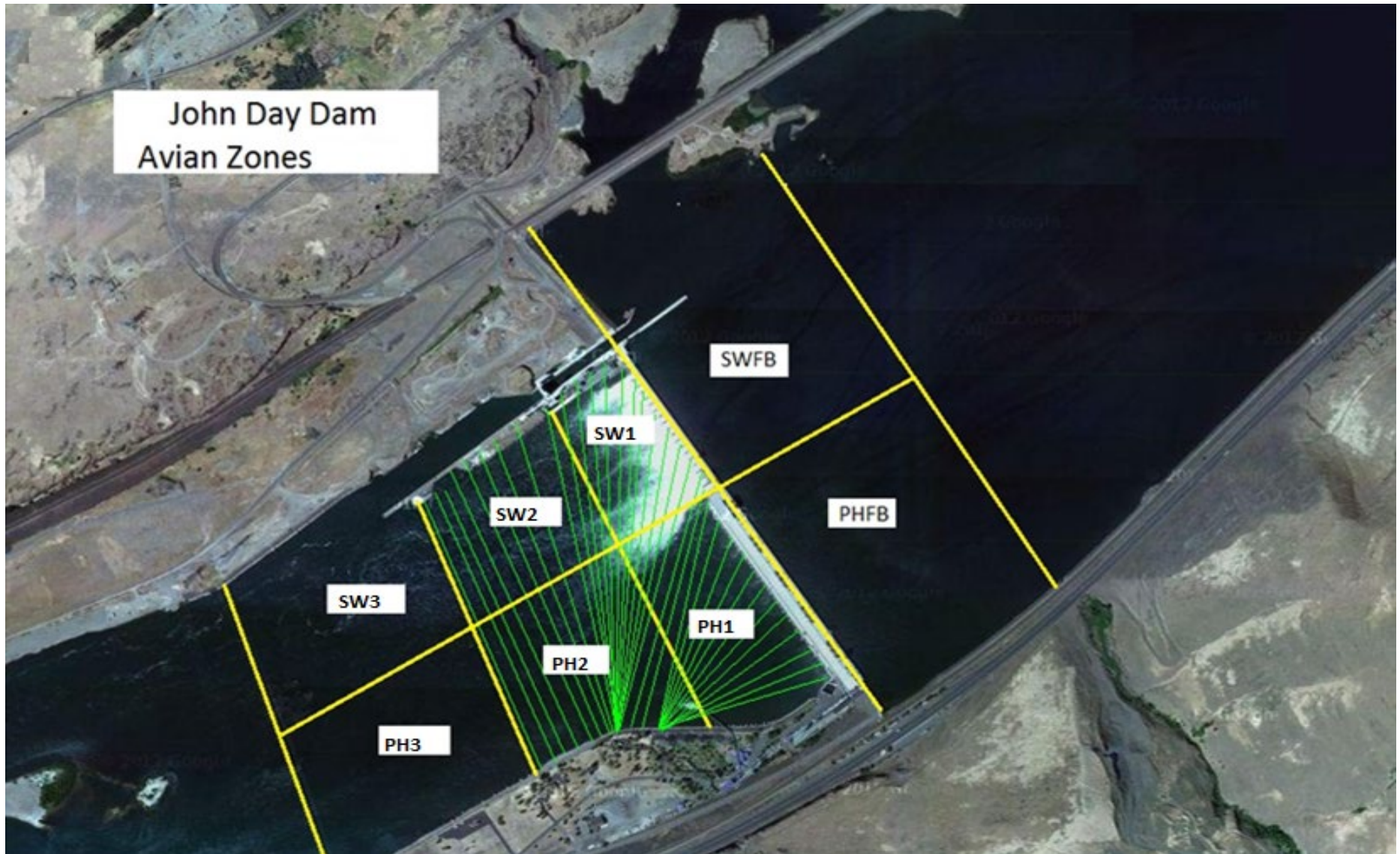
Average Weekly Velocity (ft/sec)	2.44
----------------------------------	------

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	1.4	8.3	8.9	1.8	1.4	4.6	1.6	1.8	1
Sunday	7.9	1.4	8.1	8.7	1.7	1.6	4.6	1.6	1.8	1
Monday	8.4	1.4	8.4	9.0	1.7	1.5	4.6	1.6	2.0	1
Monday	8.5	1.4	8.4	9.0	1.7	1.5	4.7	1.5	1.8	1
Tuesday	8.3	1.5	8.2	8.8	1.8	1.5	4.5	1.6	1.7	1
Tuesday	8.4	1.4	8.3	8.9	1.7	1.4	4.7	1.6	1.8	1
Wednesday	8.5	1.5	8.3	8.9	1.9	1.6	4.9	1.5	1.8	1
Wednesday	8.3	1.5	8.1	8.7	1.2	1.6	4.6	1.6	1.8	1
Thursday	8.3	1.5	8.2	8.8	1.7	1.6	4.5	1.7	2.4	1
Thursday	8.4	1.7	8.3	8.9	1.9	1.5	4.5	1.7	2.1	1
Friday	8.2	1.4	8.1	8.7	1.7	1.6	4.7	1.6	2.3	1
Friday	8.5	1.5	8.5	9.1	1.8	1.5	4.7	1.6	1.8	1
Saturday	8.2	1.5	8.4	9.0	1.4	1.5	4.6	1.6	2.2	1
Saturday	8.3	1.5	8.3	8.9	1.7	1.6	4.5	1.6	1.9	1
AVG:	8.3	1.5	8.3	8.9	1.7	1.5	4.6	1.6	1.9	1.0

	Temp (F)	Secchi (Ft)	Average # of Pelicans on Island Per Day
Sunday	69.6	6.0	
Monday	69.5	6.0	12
Tuesday	69.4	6.0	12
Wednesday	69.2	6.0	13
Thursday	68.8	6.0	14
Friday	68.2	6.0	12
Saturday	67.8	6.0	12
AVG	68.9	6.0	13

John Day Dam
Avian Zones



JDA Bird Counts: 9/18/22 to 9/24/22

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

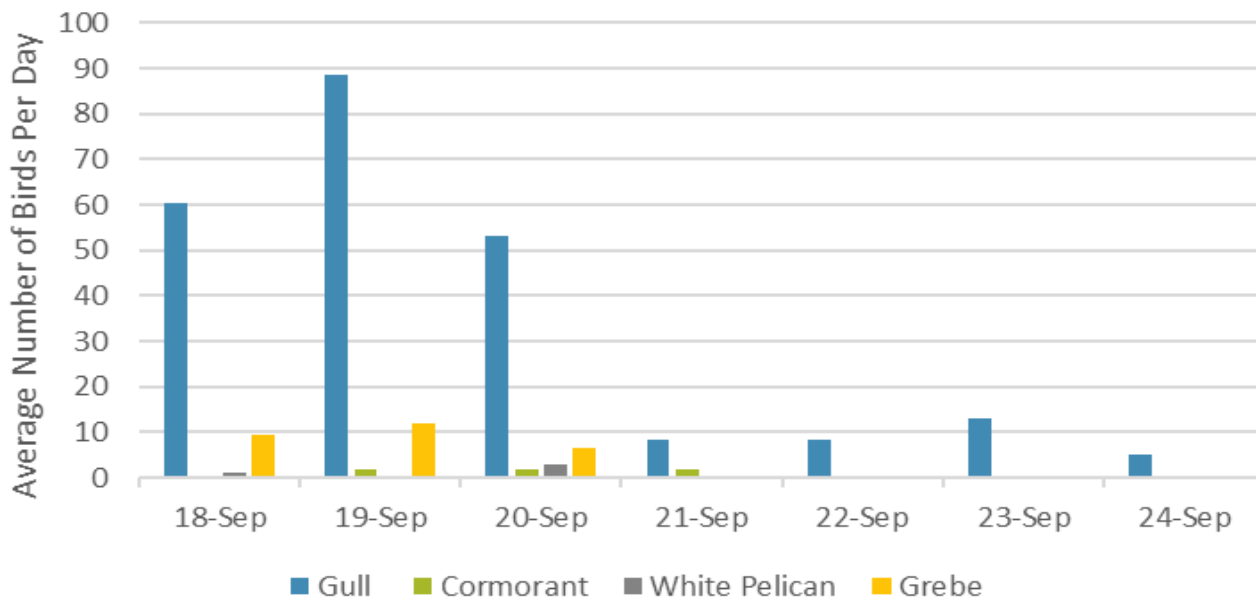
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
18-Sep	PHFB	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	26
18-Sep	SWFB	0	0	294	271	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	565
18-Sep	PH1	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
18-Sep	PH2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
18-Sep	PH3	95	10	25	0	0	0	12	0	0	0	0	0	2	0	0	0	0	0	0	0	144
18-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Sep	SW2	0	0	3	43	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	75
18-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		61		322		0		21		0		0		1		0		10		0		413
19-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	8	0	0	24
19-Sep	SWFB	0	0	145	237	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	382
19-Sep	PH1	23	20	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
19-Sep	PH2	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
19-Sep	PH3	109	15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	125
19-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Sep	SW2	0	0	0	0	0	0	26	41	0	0	0	0	0	0	0	0	0	0	0	0	67
19-Sep	SW3	3	0	11	0	0	0	9	0	0	0	0	0	0	1	0	0	0	0	0	0	24
Total/Survey		89		197		2		38		0		0		1		1		12		0		338
20-Sep	PHFB	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	13	0	0	0	36
20-Sep	SWFB	0	0	229	324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	553
20-Sep	PH1	35	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
20-Sep	PH2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
20-Sep	PH3	53	10	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	0	69
20-Sep	SW1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
20-Sep	SW2	0	0	0	0	0	0	21	42	0	0	0	0	0	0	0	0	0	0	0	0	63
20-Sep	SW3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total/Survey		53		277		2		43		0		0		3		0		7		0		384
21-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Sep	SWFB	0	0	310	326	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	636
21-Sep	PH1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
21-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
21-Sep	PH3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Sep	SW3	15	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	19
Total/Survey		9		318		2		0		0		0		0		1		0		0		330

JDA Bird Counts: 9/22/22 to 9/24/22

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)	
22-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Sep	SWFB	0	0	327	326	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	653
22-Sep	PH1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Sep	PH3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
22-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Sep	SW3	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	8
Total/Survey		9		327		0		1		0		0		1		0		0		0		336
23-Sep	PHFB	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
23-Sep	SWFB	0	0	384	201	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	585
23-Sep	PH1	6	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
23-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
23-Sep	PH3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
23-Sep	SW1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
23-Sep	SW2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23-Sep	SW3	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Total/Survey		13		293		1		2		0		0		0		1		0		0		309
24-Sep	PHFB	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
24-Sep	SWFB	0	0	145	123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268
24-Sep	PH1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
24-Sep	PH2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
24-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Sep	SW2	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	23
24-Sep	SW3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total/Survey		5		134		0		18		0		0		0		0		0		0		157
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	474	3731	13	243	0	0	0	0	10	5	56	0	2266									
Avg/Survey	34	267	1	17	0	0	1	0	4	0	324											

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

