

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/8/2022

Inspection Period: 10/2/2022 thru 10/8/2022



**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:	66.6 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.)	2.44				
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6				
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	8.7				
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.0				
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 %	2.1		
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: MU1, MU4, MU7, MU8, MU10 MU13. 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 system repairs completed.

Calibration:

All gauges within the 0.3' criteria.

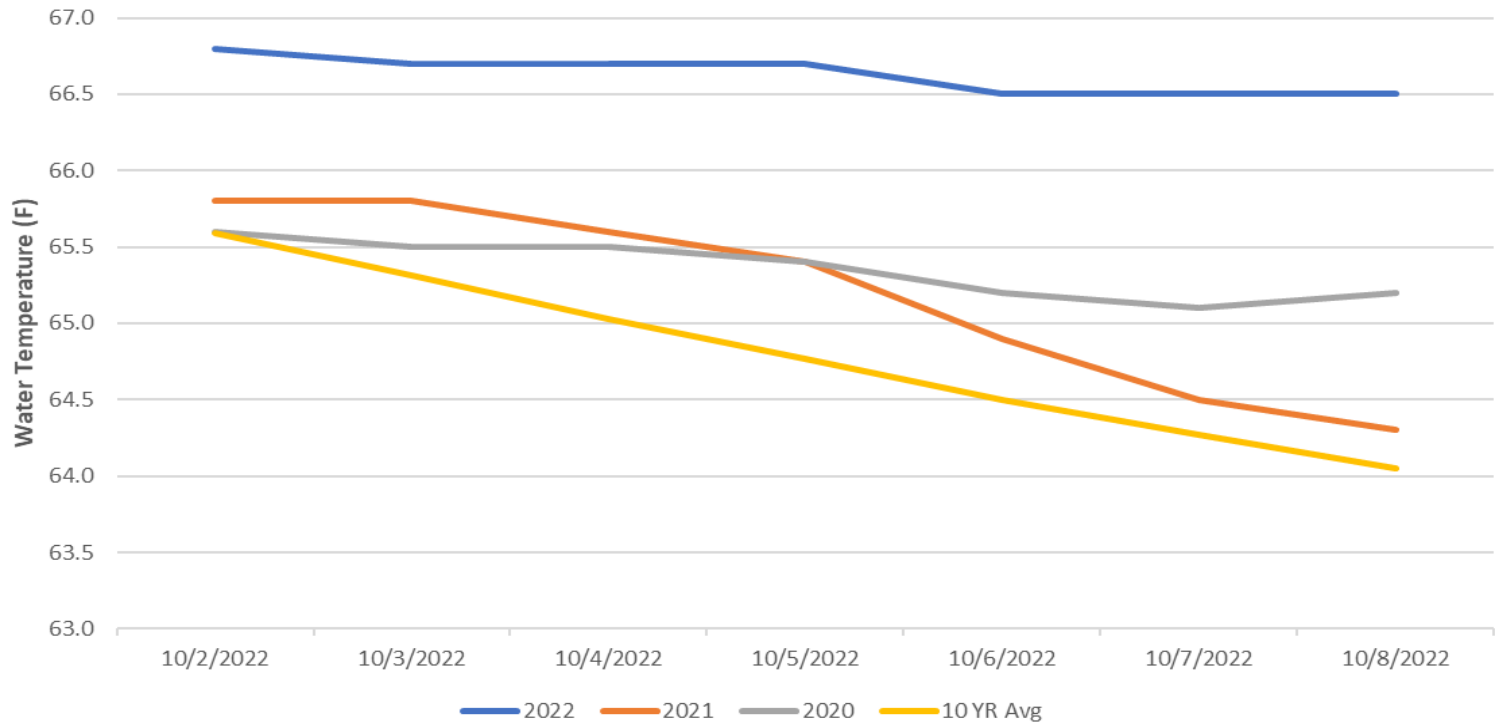
Bird Data:

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

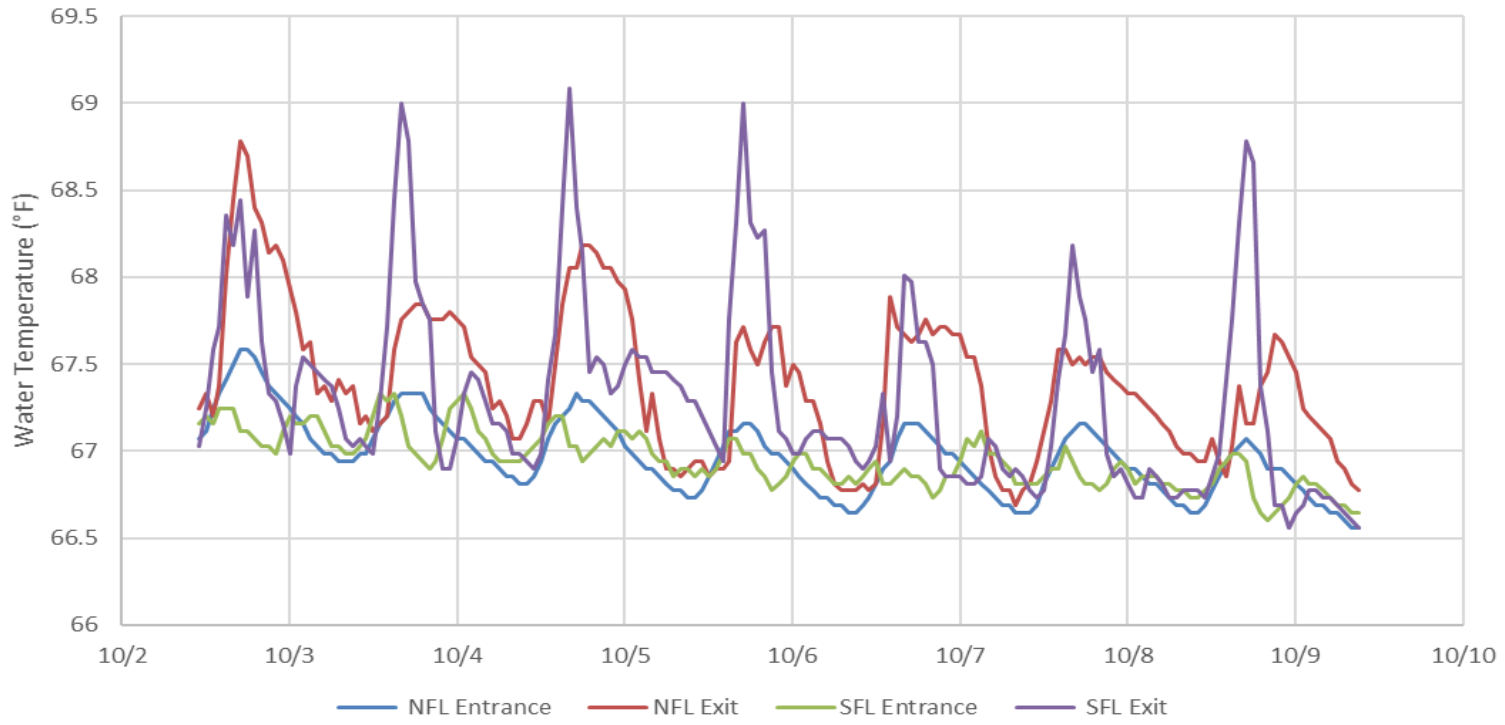
Research:

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)
10/3/2022	Unit 4	2.40	0,68,68	159.4
10/3/2022	Unit 12	2.52	0,68,68	159.4
10/6/2022	Unit 4	2.37	0,68,68	159.6
10/6/2022	Unit 12	2.46	0,68,68	159.6
10/8/2022	Unit 4	2.39	0,68,68	159.4
10/8/2022	Unit 12	2.53	0,68,68	159.4

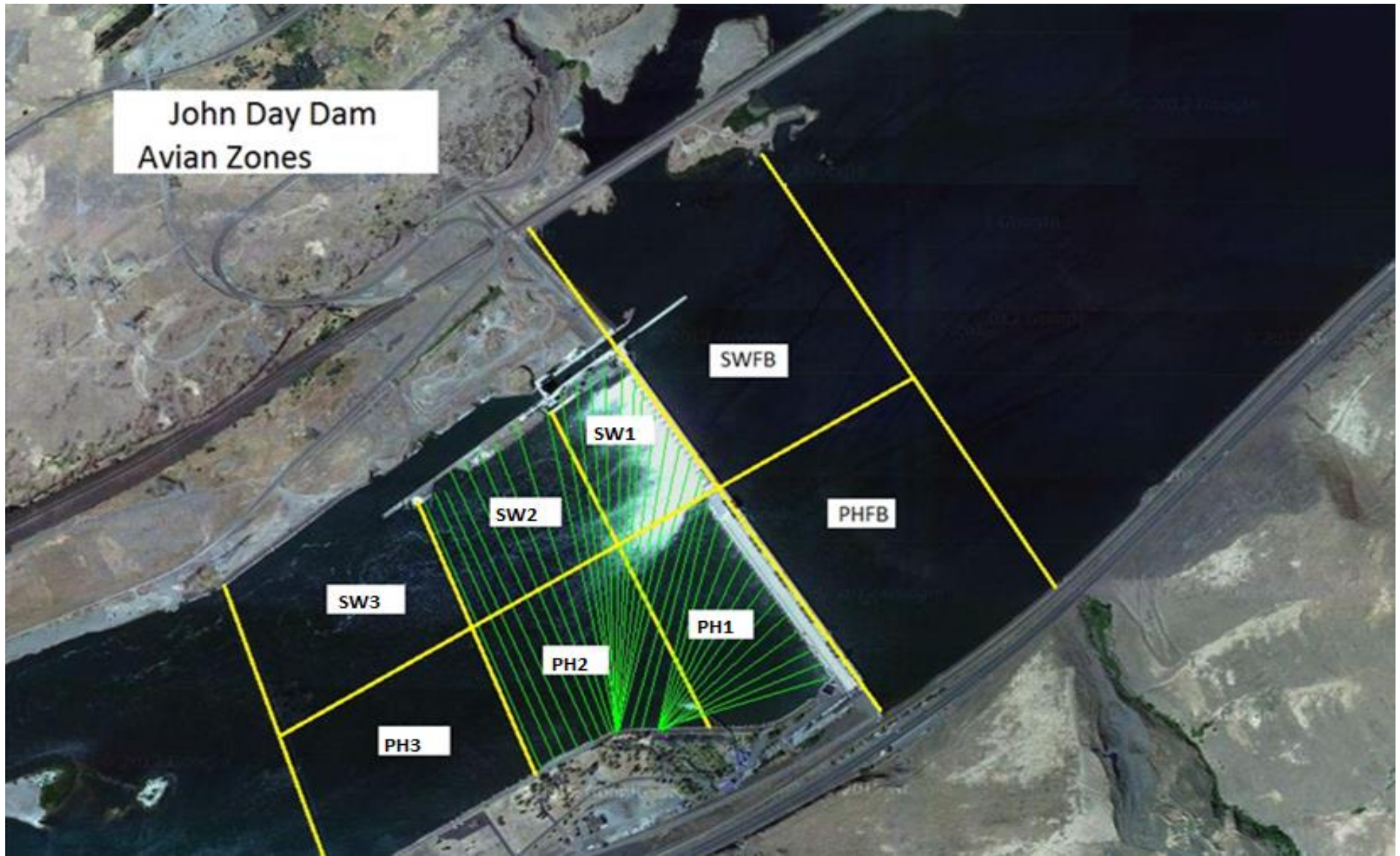
Average Weekly Velocity (ft/sec)	2.44
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JOHN DAY WEEKLY AVERAGES

	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	8.7	1.3	8.6	8.9	1.7	1.5	4.5	1.6	2.3	1
Sunday	8.6	1.4	8.5	8.9	1.7	1.5	4.5	1.6	2.2	1
Monday	8.7	1.4	8.7	9.0	1.8	1.5	4.6	1.6	1.6	1
Monday	9.0	1.3	8.9	9.3	1.5	1.5	4.6	1.5	1.5	1
Tuesday	8.9	1.2	8.8	9.1	1.7	1.7	4.6	1.6	2.4	1
Tuesday	8.9	1.4	9.0	9.4	1.5	1.5	4.6	1.6	2.3	1
Wednesday	8.6	1.3	8.6	8.9	1.8	1.6	4.5	1.5	2.2	1
Wednesday	9.3	1.3	9.2	9.6	1.5	1.5	4.7	1.5	1.8	1
Thursday	8.1	1.5	8.4	8.7	1.5	1.6	4.7	1.5	1.6	1
Thursday	8.6	1.5	8.8	9.2	1.5	1.4	4.6	1.5	2.1	1
Friday	8.7	1.3	9.0	9.3	1.4	1.5	4.5	1.6	1.8	1
Friday	8.6	1.3	8.7	9.1	1.3	1.6	4.5	1.8	1.9	1
Saturday	8.1	1.5	8.1	8.4	1.8	1.6	4.6	1.8	3.1	1
Saturday	8.4	1.4	8.3	8.7	1.6	1.6	4.7	1.8	2.5	1
AVG:	8.7	1.4	8.7	9.0	1.6	1.5	4.6	1.6	2.1	1.0

	Temp (F)	Secchi (Ft)	Average # of Pelicans on Island Per Day
Sunday	66.8	6.0	
Monday	66.7	6.0	
Tuesday	66.7	6.0	
Wednesday	66.7	6.0	
Thursday	66.5	6.0	
Friday	66.5	6.0	
Saturday	66.5	6.0	
AVG	66.6	6.0	#DIV/0!

John Day Dam
Avian Zones



JDA Bird Counts: 10/2/22 to 10/8/22

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

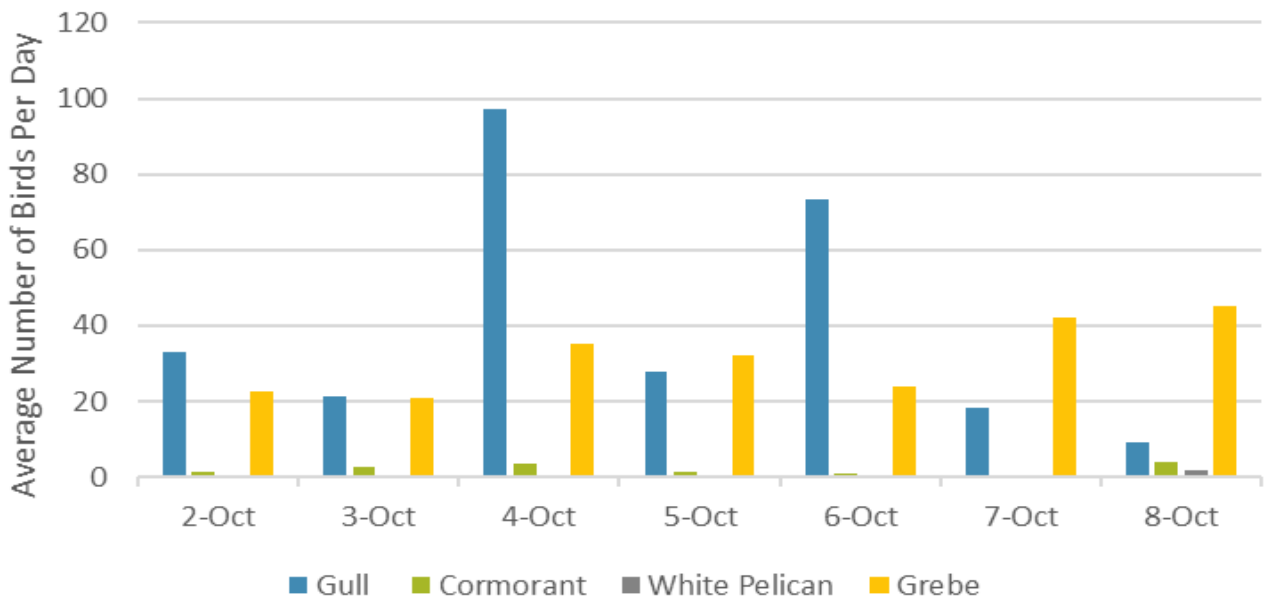
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
2-Oct	PHFB	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	31	14	0	0	48
2-Oct	SWFB	0	0	216	166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	382
2-Oct	PH1	14	11	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
2-Oct	PH2	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
2-Oct	PH3	25	5	0	0	0	0	19	0	0	0	0	0	0	0	11	0	0	0	0	0	60
2-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Oct	SW2	0	0	0	0	0	0	22	41	0	0	0	0	0	0	0	0	0	0	0	0	63
2-Oct	SW3	0	0	8	0	0	0	1	15	0	0	0	0	0	0	9	0	0	0	0	0	33
Total/Survey		33		195		2		51		0		0		0		10		23		0		313
3-Oct	PHFB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	42	0	0	0	43
3-Oct	SWFB	0	0	193	248	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	441
3-Oct	PH1	18	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
3-Oct	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3-Oct	PH3	12	10	0	0	0	0	0	0	0	0	0	0	1	0	15	0	0	0	0	0	38
3-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Oct	SW2	0	0	0	0	0	0	34	54	0	0	0	0	0	0	0	0	0	0	0	0	88
3-Oct	SW3	0	0	0	0	0	0	10	5	0	0	0	0	0	0	5	15	0	0	0	0	35
Total/Survey		22		221		3		52		0		0		1		18		21		0		336
4-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	14	0	0	58
4-Oct	SWFB	0	0	204	185	0	0	4	0	0	0	0	0	0	0	0	0	0	12	0	0	405
4-Oct	PH1	87	68	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	162
4-Oct	PH2	10	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
4-Oct	PH3	26	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	27
4-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Oct	SW2	0	0	0	0	0	0	21	23	0	0	0	0	0	0	0	0	0	0	0	0	44
4-Oct	SW3	0	0	0	0	0	0	13	12	0	0	0	0	0	0	18	0	0	0	0	0	43
Total/Survey		97		195		4		37		0		0		1		9		35		0		376
5-Oct	PHFB	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	36	28	0	0	85
5-Oct	SWFB	0	0	158	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	333
5-Oct	PH1	10	12	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
5-Oct	PH2	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
5-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Oct	SW2	0	0	0	0	0	0	2	15	0	0	0	0	0	0	0	0	0	0	0	0	17
5-Oct	SW3	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	9	0	0	0	0	17
Total/Survey		28		167		2		23		0		0		0		5		32		0		256

JDA Bird Counts: 10/6/22 to 10/8/22

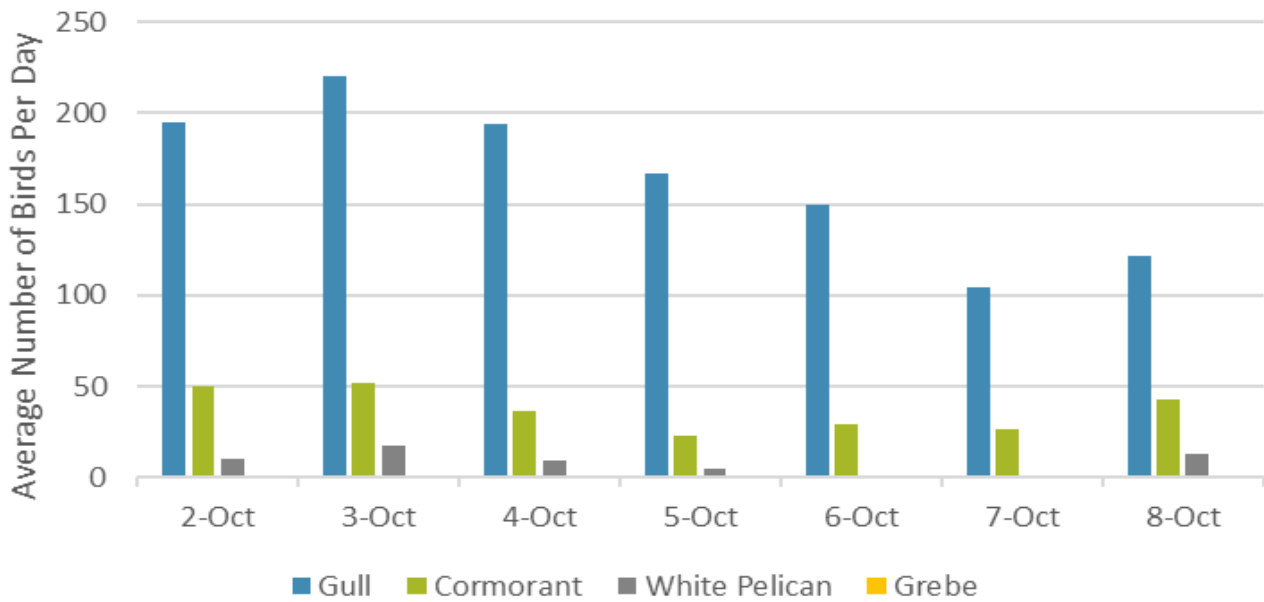
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Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
6-Oct	PHFB	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	48	0	0	0	62
6-Oct	SWFB	0	0	168	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	300
6-Oct	PH1	109	24	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	135
6-Oct	PH2	8	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
6-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Oct	SW2	0	0	0	0	0	0	8	22	0	0	0	0	0	0	0	0	0	0	0	0	30
6-Oct	SW3	0	0	0	0	0	0	7	8	0	0	0	0	0	0	0	0	0	0	0	0	15
Total/Survey		74		150		1		30		0		0		0		0		24		0		278
7-Oct	PHFB	0	0	1	0	0	0	23	0	0	0	0	0	0	0	0	0	43	41	0	0	108
7-Oct	SWFB	0	0	110	97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	207
7-Oct	PH1	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
7-Oct	PH2	18	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
7-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Oct	SW2	0	0	0	0	0	0	3	23	0	0	0	0	0	0	0	0	0	0	0	0	26
7-Oct	SW3	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Total/Survey		19		104		0		27		0		0		0		0		42		0		192
8-Oct	PHFB	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	53	37	0	0	93
8-Oct	SWFB	0	0	77	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	232
8-Oct	PH1	7	1	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
8-Oct	PH2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
8-Oct	PH3	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	6
8-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Oct	SW2	0	0	0	0	0	0	36	47	0	0	0	0	0	0	0	0	0	0	0	0	83
8-Oct	SW3	0	0	12	0	0	0	0	0	0	0	0	0	0	0	16	10	0	0	0	0	38
Total/Survey		9		122		4		43		0		0		2		13		45		0		238
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		561		2305		28		523		0		0		6		108		443		0		1987
Avg/Survey		40		165		2		37		0		0		0		8		32		0		284

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds





Peregrine Falcon spotted at JDA on top of spillway gate on 10/8/22. Sightings are infrequent, but tend to occur more in the fall/winter months.