

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 9/11/2021

Inspection Period: 9/5/2021 thru 9/11/2021



**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: 69.0 F	Secchi: 6.0 Ft.
NORTH FISHWAY							
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	High setting	High setting is normal				
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	Mid setting is normal				
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.)	9.4			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.80			
N. Entrance PH(Bay 19)differential	1	1.0' - 2.0'	AVG (Ft.)	1.9			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.3			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.3			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	Next Visual Inspection 9/27-9/30				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.5', wkly					
Spill volume	0	per FPP	Avg (kcfs)	1.6	Avg %	2.0	
Spill pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

Fisheries Related Operations

Smolt Monitoring Operations:

Water temperatures dropped below 69.5F on 8/31 and the Smolt Monitoring Facility returned to sampling every other day on 9/1.

Adult Ladder Operations:

North and South fish ladders are operating within criteria. Entered shad mode on 6/3/21. Returned ladders to salmon mode on 7/20/21.

Project Operations:

Current outages: MU7, MU8, MU5-8 (8/17-9/19 BPA line 2 reconductor), MU12, MU13, MU13-16 (BPA mod work), MU15, MU16. Summer Spill ended on 8/31 and TSW's were removed. Adult attraction flow for the North fish ladder is provided through spill bay #2 open one stop during daylight hours through November 30th.

Tailwater Average Weekly TDG: 104.0

Maintenance:

JD North Fishway's pump 4 has been pulled for maintenance (RTS to be determined). Spillway #10 will be operated manually until further notice. Spillway #3 failed on 6/5/21 at 0503, the motor for spill gate #3 will need to be replaced.

Calibration:

All gauges within the 0.3' criteria.

Bird Data:

Cormorants have returned mainly roosting on PHFB towers and Preacher's Island. Gull numbers increasing with high numbers resting on the wing wall in the SWFB and modest numbers foraging in the tailrace mainly in the morning. Pelican numbers decreasing, few foraging in the tailrace, mostly seen resting on Preacher's Island. Slight increase of grebes in PHFB. (see 'Bird Count' tab for details).

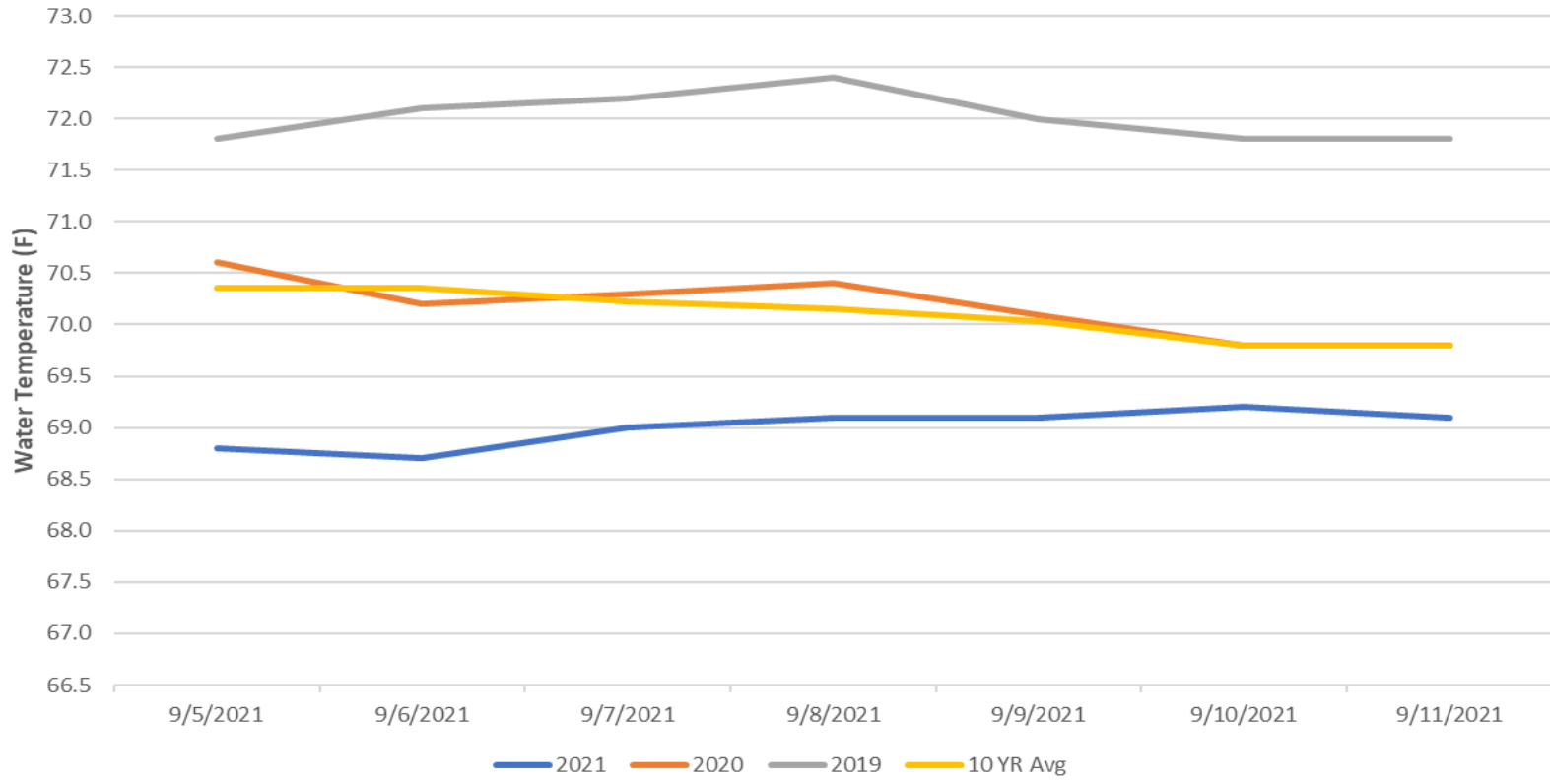
1 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 23 per day

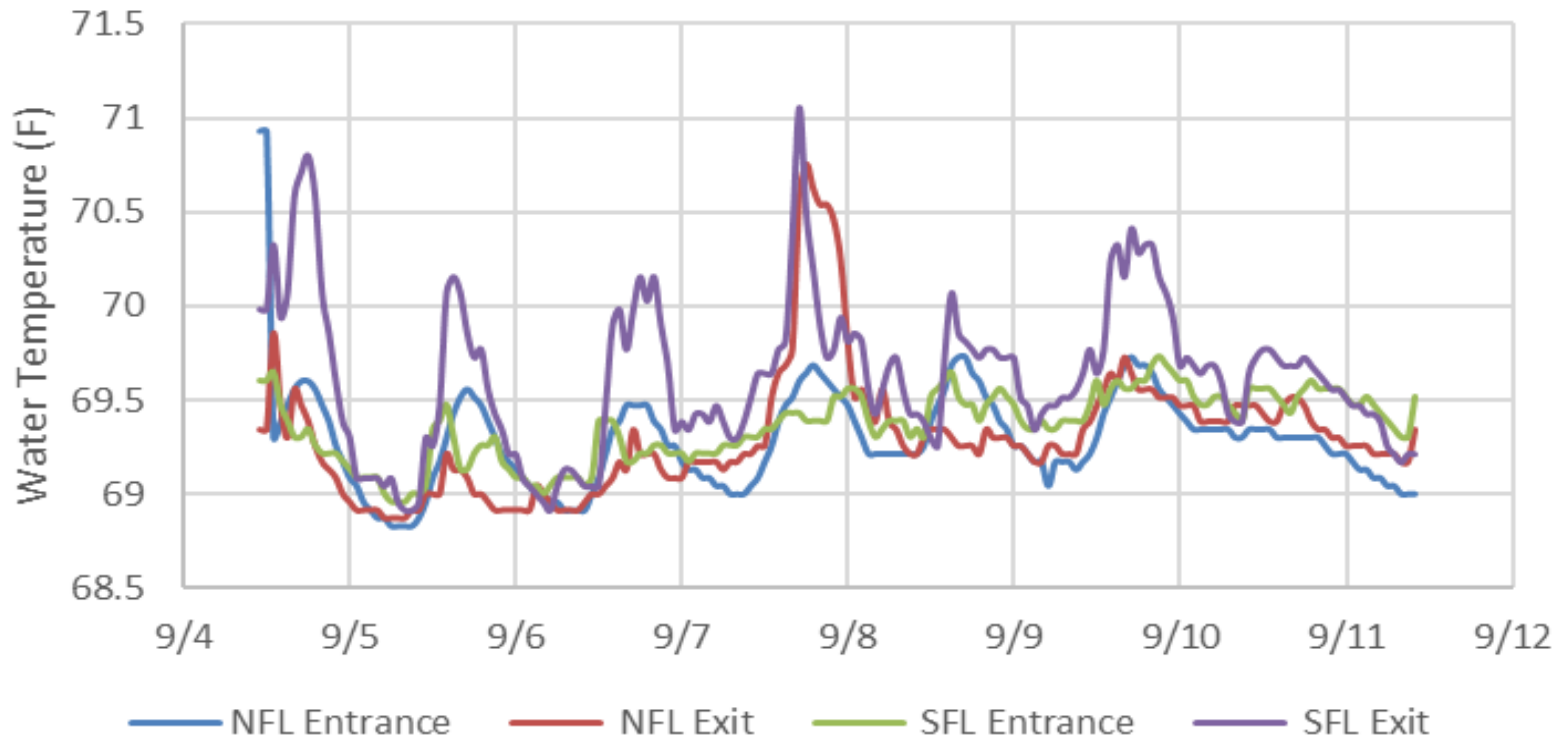
Research:

None

John Day Dam Water Temperatures (F)



JDA Ladder Temperatures (9/5 - 9/11)



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)
9/6/2021	Unit 4	2.67	0,68,68	160.4
9/6/2021	Unit 12	2.88	0,68,68	160.4
9/11/2021	Unit 4	2.74	0,68,68	160.0
9/11/2021	Unit 12	2.92	0,68,68	160.0

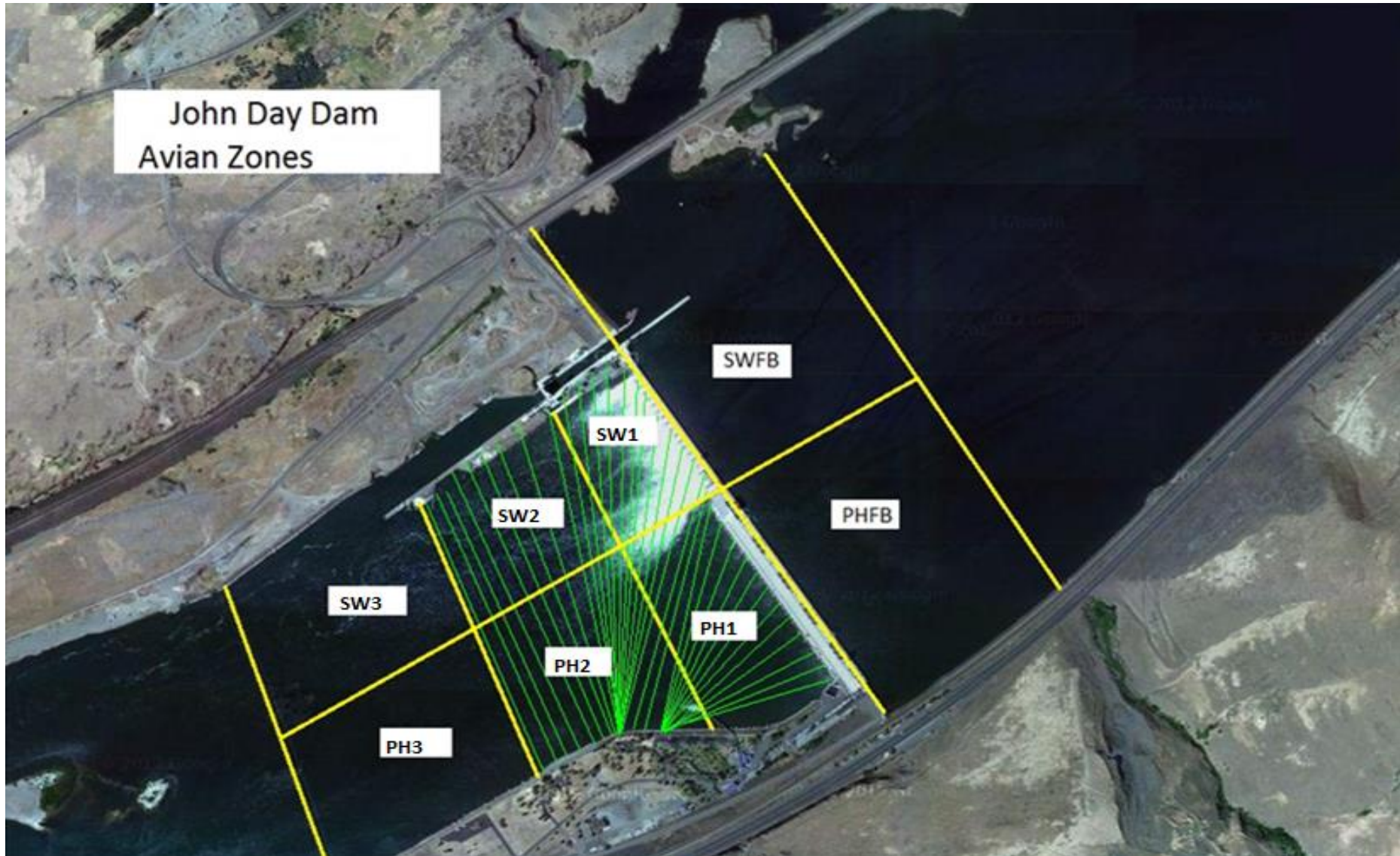
Average Weekly Velocity (ft/sec)	2.80
----------------------------------	------

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	9.2	9.2	1.6	9.2	1.5	4.6	2.0	1.6	2.0	1
Sunday	9.0	9.0	1.6	9.2	1.5	4.5	2.0	1.6	2.0	1
Monday	9.6	9.6	1.5	9.7	1.5	4.6	1.9	1.6	2.4	1
Monday	9.2	9.2	1.5	9.4	1.5	4.7	1.7	1.6	1.8	1
Tuesday	9.3	9.3	1.8	10.2	1.5	4.5	2.2	1.6	2.6	1
Tuesday	10.2	10.2	1.0	10.2	1.5	4.6	1.9	1.6	1.4	1
Wednesday	9.1	9.1	1.5	9.2	1.6	4.6	1.8	1.6	2.2	1
Wednesday	10.0	10.0	1.2	10.0	1.6	4.5	1.6	1.6	1.5	1
Thursday	9.1	9.1	1.7	8.9	1.3	4.6	1.9	1.6	2.0	1
Thursday	9.4	9.4	1.6	9.4	1.5	4.7	1.8	1.6	1.6	1
Friday	9.2	9.2	1.6	9.0	1.5	4.5	1.8	1.6	2.0	1
Friday	9.4	9.3	1.5	9.1	1.6	4.6	1.8	1.6	2.0	1
Saturday	9.3	9.2	1.7	9.0	1.6	4.6	2.0	1.6	2.4	1
Saturday	8.8	8.8	1.7	8.9	1.7	4.5	2.0	1.6	2.3	1
AVG:	9.3	9.3	1.5	9.4	1.5	4.6	1.9	1.6	2.0	1.0

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	68.8	6.0	32	41
Monday	68.7	6.0	N/A	30
Tuesday	69.0	6.0	25	18
Wednesday	69.1	6.0	N/A	
Thursday	69.1	6.0	37	17
Friday	69.2	6.0	N/A	13
Saturday	69.1	6.0	32	16
AVG	69.0	6.0	32	23

John Day Dam
Avian Zones



JDA Bird Counts: 9/5/21 to 9/11/21

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-Sep	PHFB	0	0	0	0	0	0	24	8	0	0	0	0	0	0	0	0	22	15	0	0	69
5-Sep	SWFB	0	0	192	156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	348
5-Sep	PH1	10	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
5-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep	PH3	0	10	0	0	2	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	16
5-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep	SW2	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
5-Sep	SW3	4	5	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	11
Avg/Survey		15		174		3		18		0		0		3		0		19		0		231
6-Sep	PHFB	0	0	0	0	0	0	24	13	0	0	0	0	0	0	0	0	17	16	0	0	70
6-Sep	SWFB	0	0	191	233	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	424
6-Sep	PH1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
6-Sep	PH2	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
6-Sep	PH3	10	4	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	19
6-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep	SW2	0	0	0	0	0	0	4	18	0	0	0	0	0	0	0	0	0	0	0	0	22
6-Sep	SW3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Avg/Survey		10		212		0		30		0		0		4		0		17		0		272
7-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5
7-Sep	SWFB	0	0	20	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85
7-Sep	PH1	5	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
7-Sep	PH2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7-Sep	PH3	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
7-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	SW2	0	0	0	0	0	0	0	30	0	0	0	0	2	0	0	0	0	0	0	0	32
7-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
Avg/Survey		7		43		1		15		0		0		4		0		3		0		71
8-Sep	PHFB	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19
8-Sep	SWFB	0	0	57	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114
8-Sep	PH1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8-Sep	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8-Sep	PH3	11	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	16
8-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Sep	SW2	0	0	0	0	0	0	0	30	0	0	0	0	1	0	0	0	0	0	0	0	31
8-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		7		57		0		25		0		0		3		0		0		0		92

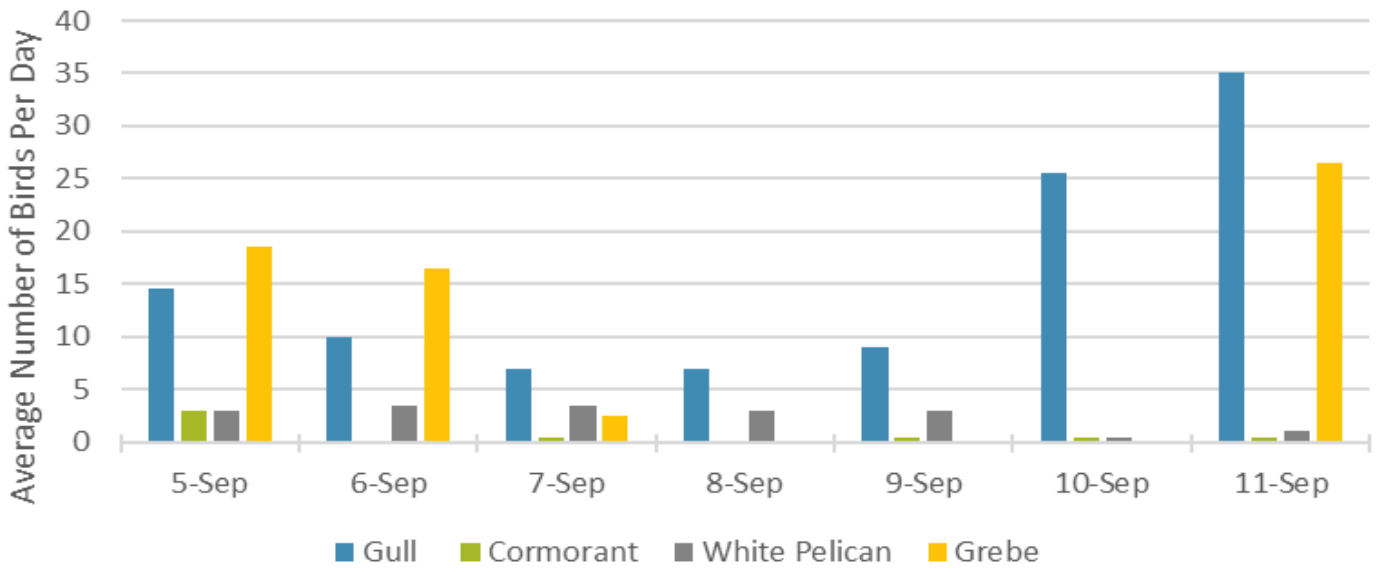
JDA Bird Counts: 9/5/21 to 9/11/21

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-Sep	PHFB	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	23
9-Sep	SWFB	0	0	0	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	103
9-Sep	PH1	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
9-Sep	PH2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9-Sep	PH3	0	7	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	12
9-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Sep	SW2	0	0	0	0	0	0	9	15	0	0	0	0	0	0	0	0	0	0	0	0	24
9-Sep	SW3	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	6
Avg/Survey		9		54		1		24		0		0		3		0		0		0		90
10-Sep	PHFB	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	23
10-Sep	SWFB	0	0	170	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	269
10-Sep	PH1	35	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
10-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Sep	PH3	0	11	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
10-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Sep	SW3	0	0	0	0	0	0	8	12	0	0	0	0	1	0	0	0	0	0	0	0	21
Avg/Survey		26		137		1		22		0		0		1		0		0		0		185
11-Sep	PHFB	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	29	24	0	0	70
11-Sep	SWFB	0	0	220	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	361
11-Sep	PH1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11-Sep	PH2	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
11-Sep	PH3	49	5	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	56
11-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Sep	SW2	0	0	0	0	0	0	14	24	0	0	0	0	0	0	0	0	0	0	0	0	38
11-Sep	SW3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Avg/Survey		35		181		1		28		0		0		1		0		27		0		271

Totals	Gulls		Cormorant		Caspian tern		White Pelican		Grebe		Total
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	216	1714	10	319	0	0	35	0	128	0	1211
Avg/Survey	15	122	1	23	0	0	3	0	9	0	173

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

