

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 8/8/2020

Inspection Period: 8/2/2020 thru 8/8/2020



**US Army Corps  
of Engineers**  
Portland District

JD/WC Project-Fisheries  
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Rufus, Oregon 97050  
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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:	70.8 F
							Secchi:	6.0 Ft.
<b>NORTH FISHWAY</b>								
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				
<b>SOUTH FISHWAY</b>								
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.)	1.4				
Entrance weir SE1	1	depth (≥ 8')	AVG (Ft.)	8.1				
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.76				
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.5				
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.6				
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.6				
<b>JUVENILE PASSAGE</b>								
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6				
Submersible traveling screens	0	visual inspect	Last Visual Inspection 7/20-7/23		Next Visual Inspection			
Turbine trashrack drawdown	0	<1.5', wkly						
Vert barrier screen drawdown	0	<1.5', wkly						
Spill volume	0	per FPP	AVG (kcfs)	61.0	Avg %	34.8		
Spill pattern	0	per FPP						
Turbine Unit Priority	0	per FPP						
Turbine 1% Efficiency	0	per FPP						

## Fisheries Related Operations

### **Smolt Monitoring Operations:**

Condition sampling started 4/01/2020 and with COVID-19 restrictions, Oregon and Washington stay at home orders, and USACE limited staffing levels, the SMF will continue limited conditioning sampling (every other day) until further notice. River temperatures have reached 70 degrees and sampling will now be Mondays and Thursdays (as per FPP).

### **Adult Ladder Operations:**

JD South Adult Fishway is operating within criteria.  
JD North Adult Fishway is operating within criteria.

### **Project Operations:**

Currently 7 of 16 units are unavailable (1,6,7,9,10,11,12)  
Forebay Average weekly TDG-106.9, Tailwater Average Weekly TDG-115.0

### **Maintenance:**

SMF SCADA update completed 17 March 2020. JD Electricians are working on SCADA programming and controls. Slowed by COVID-19 availability JD North Fishway's pump 4 has been pulled for maintenance. - JD Maintenance continue repairs of AWS fish pump 4. RTS has yet TBD.  
Calibration - All gauges within the 0.3' criteria. However NE-1, NE-2, Bay 19 tw, and Bay 19 ch sensors OOC - Running in manual mode (0 out of criteria inspections). These OOC are believed to be related to the unfinished SCADA upgrades (lack of comms)

### **Bird Data:**

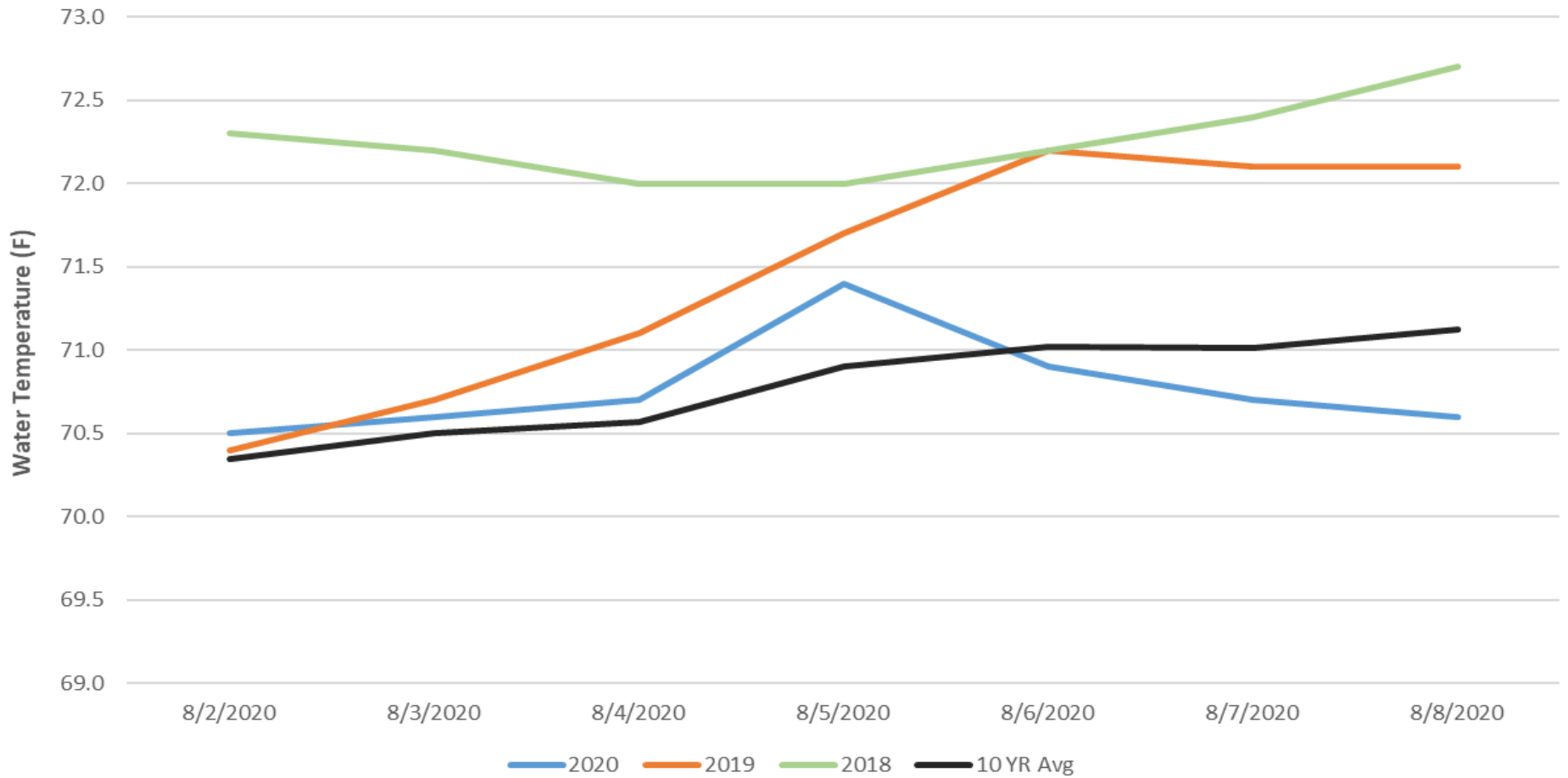
Few foraging gulls this week, high number of foraging pelicans (see 'Bird Count' tab for details).  
All 125 avian lines in place without any deficiencies.  
Pelicans on Preacher's Island: averaged 136 per day (see Pelicans tab)

### **Research:**

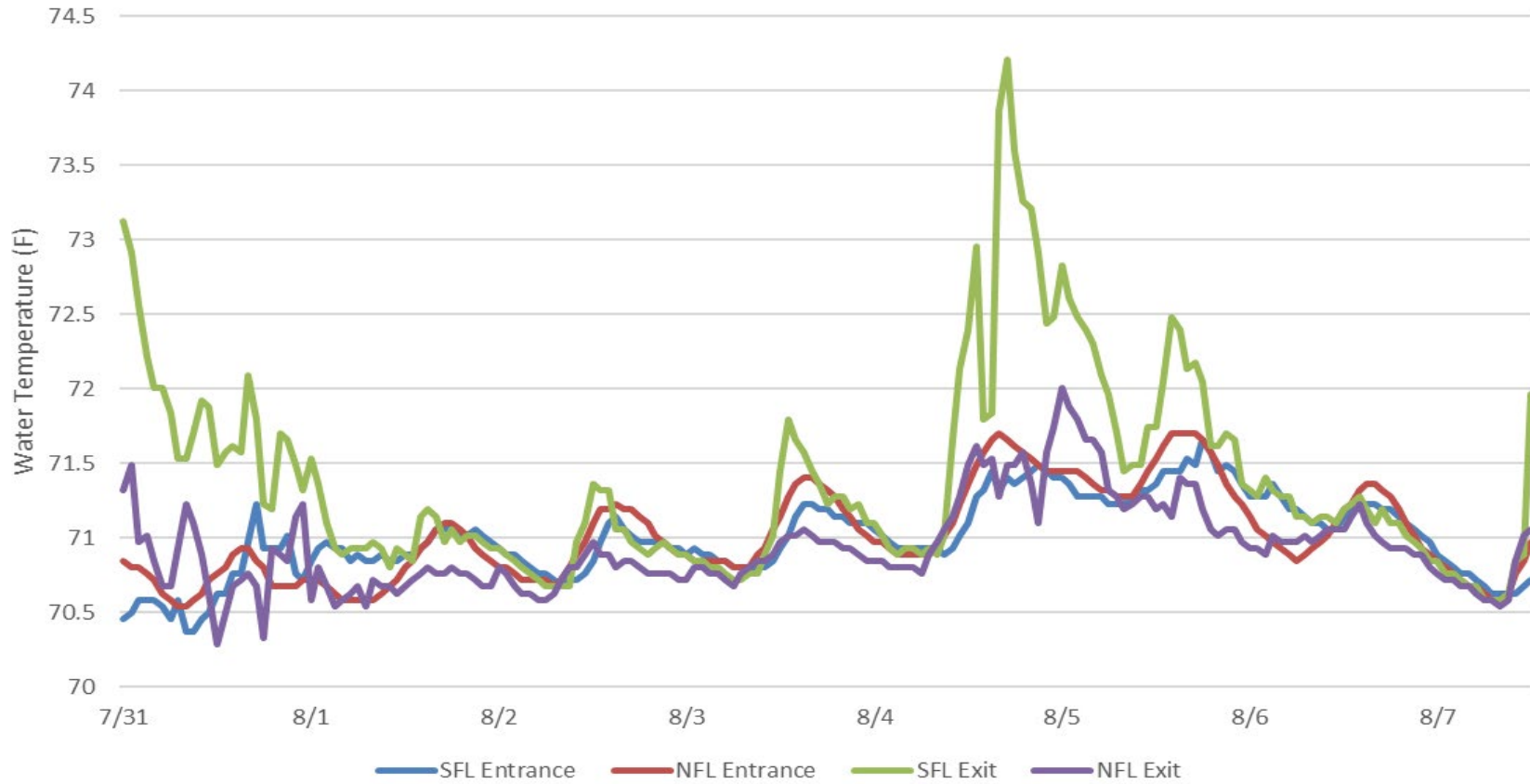
CRITFC genetics study at SMF

Approved by: Ron Twiner, Acting OPM

### John Day Dam Water Temperatures (F)



JDA Fish Ladder Water Temperatures (F) [7/31/20 - 8/7/20]



## 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)
8/2/2020	Unit 4	2.66	0,68,68	161.0
8/2/2020	Unit 12	2.61	0,68,68	161.0
8/4/2020	Unit 4	2.98	0,68,68	163.8
8/4/2020	Unit 12	3.04	0,68,68	163.8
8/5/2020	Unit 4	2.55	0,68,68	160.3
8/5/2020	Unit 12	2.72	0,68,68	160.3

Average Weekly Velocity (ft/sec)

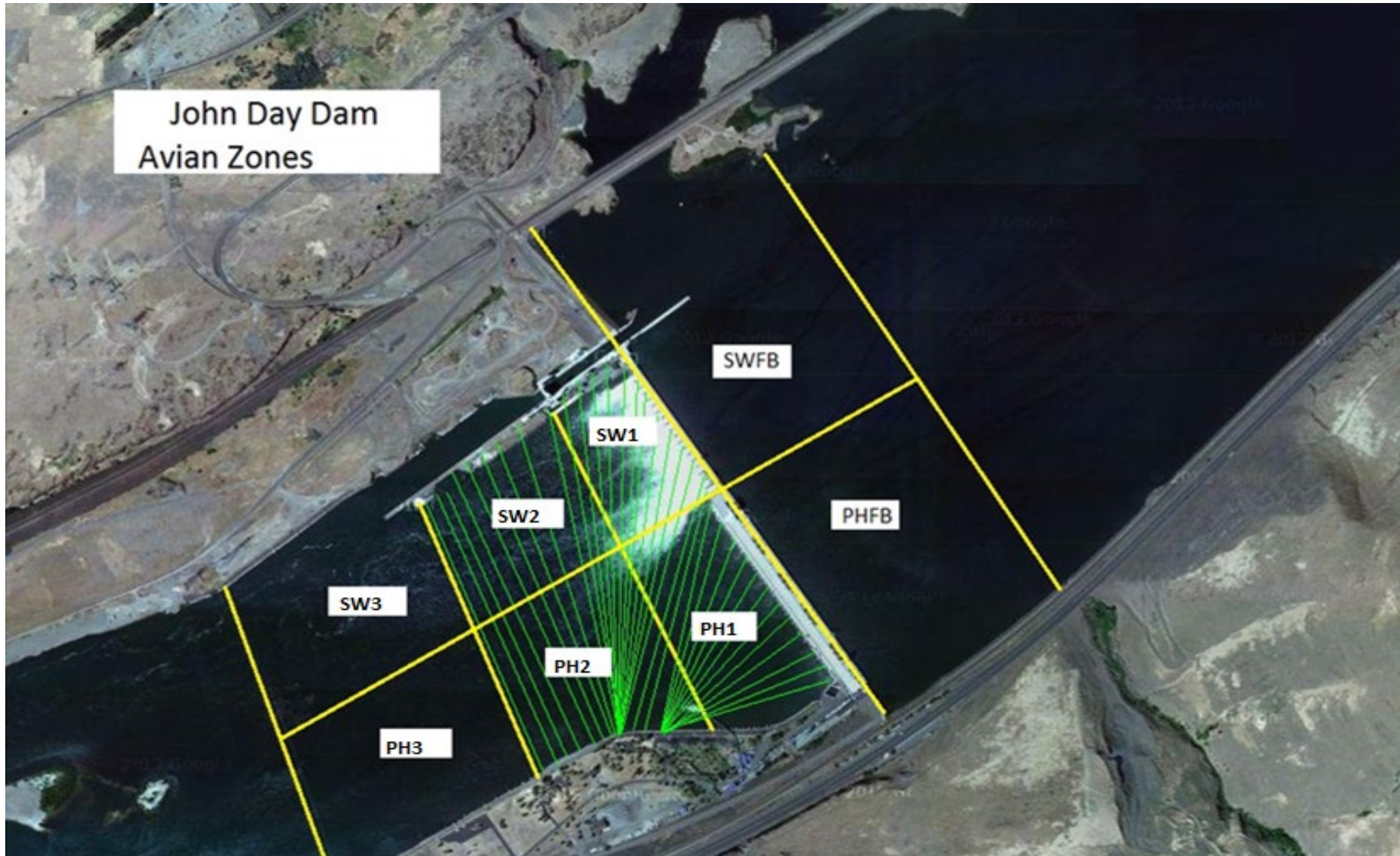
2.76

## 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	9.5	9.5	1.4	8.2	1.6	4.5	1.6	59.9	35.4	19
Sunday	9.5	9.5	1.2	8.2	1.6	4.6	1.2	60.0	35.4	19
Monday	9.0	9.0	1.5	8.0	1.5	4.6	1.8	45.2	34.5	19
Monday	9.9	9.9	1.4	8.2	1.4	4.7	1.6	70.0	34.1	19
Tuesday	9.1	9.1	1.5	8.0	1.5	4.6	1.6	53.0	35.1	19
Tuesday	12.3	12.3	1.4	8.5	1.5	4.6	1.6	91.2	34.5	19
Wednesday	8.8	8.8	1.4	7.9	1.6	4.6	1.6	51.1	33.5	18
Wednesday	10.3	10.3	1.4	8.1	1.4	4.6	1.6	78.8	34.6	19
Thursday	8.6	8.6	1.4	8.0	1.3	4.6	1.8	50.2	35.5	18
Thursday	10.0	10.0	1.1	8.3	1.5	4.7	1.2	60.1	35.5	19
Friday	8.7	8.7	1.4	8.0	1.6	4.7	1.4	49.9	35.3	18
Friday	9.9	9.9	1.5	8.0	1.6	4.6	1.5	71.9	34.7	19
Saturday	8.9	8.9	1.4	8.2	1.6	4.6	1.7	51.0	34.4	18
Saturday	9.8	9.8	1.5	8.0	1.5	4.7	1.3	62.0	34.9	19
<b>AVG:</b>	<b>9.6</b>	<b>9.6</b>	<b>1.4</b>	<b>8.1</b>	<b>1.5</b>	<b>4.6</b>	<b>1.5</b>	<b>61.0</b>	<b>34.8</b>	<b>18.7</b>

	Temp (F)	Secchi (Ft)	Fallbacks	Pelicans on Island
Sunday	70.5	6.0	N/A	50
Monday	70.6	6.0	14	200
Tuesday	70.7	6.0	N/A	150
Wednesday	71.4	6.0	N/A	250
Thursday	70.9	6.0	17	175
Friday	70.7	6.0	N/A	75
Saturday	70.6	6.0	N/A	50
<b>AVG</b>	<b>70.8</b>	<b>6.0</b>	<b>16</b>	<b>136</b>

John Day Dam  
Avian Zones



**JDA Bird Counts: 8/2/20 to 8/8/20**

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-Aug	PHFB	2	0	0	30	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0	46	
2-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	5	
2-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	25	3	0	0	0	0	0	0	28	
2-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	25	1	0	0	0	0	0	0	26	
2-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9	
2-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	20	3	0	0	0	0	0	0	23	
2-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	30	2	0	0	0	0	0	0	32	
<b>Avg/Survey</b>		<b>1</b>		<b>15</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>	<b>62</b>		<b>0</b>		<b>7</b>		<b>0</b>		<b>169</b>	
3-Aug	PHFB	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	2	5	0	0	15	
3-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
3-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	
3-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	14	24	0	0	0	0	0	0	38	
3-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	8	19	0	0	0	0	0	0	27	
3-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	0	0	0	11	
3-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	42	7	0	0	0	0	0	0	49	
3-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	21	17	0	0	0	0	0	0	38	
<b>Avg/Survey</b>		<b>0</b>		<b>4</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>	<b>84</b>		<b>0</b>		<b>4</b>		<b>0</b>		<b>184</b>	
4-Aug	PHFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7	2	0	0	10	
4-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8	
4-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	20	6	0	0	0	0	0	0	26	
4-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	17	
4-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	11	17	9	0	0	0	0	0	37	
4-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	19	12	23	88	0	0	0	0	142	
4-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	37	24	0	0	0	0	0	0	61	
<b>Avg/Survey</b>		<b>0</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>	<b>86</b>		<b>60</b>		<b>5</b>		<b>0</b>		<b>301</b>	
5-Aug	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2	0	0	8	
5-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7	
5-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	17	6	0	0	0	0	0	0	23	
5-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	16	3	0	0	0	0	0	0	19	
5-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	12	3	0	0	0	0	0	0	15	
5-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	19	22	0	0	0	0	0	0	41	
5-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	26	17	0	0	0	0	0	0	43	
<b>Avg/Survey</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>	<b>74</b>		<b>0</b>		<b>4</b>		<b>0</b>		<b>156</b>	



**JDA Bird Counts: 8/2/20 to 8/8/20**

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)	
6-Aug	PHFB	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	14	
6-Aug	SWFB	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
6-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	
6-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	
6-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	
6-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	14	
6-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	20	4	0	0	0	0	0	0	24	
6-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	9	6	0	0	0	0	0	0	15	
<b>Avg/Survey</b>		<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>87</b>	
7-Aug	PHFB	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	3	0	0	8	
7-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	
7-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	9	3	0	0	0	0	0	0	12	
7-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	
7-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	28	
7-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	17	
<b>Avg/Survey</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>71</b>	
8-Aug	PHFB	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	8	
8-Aug	SWFB	0	0	0	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	
8-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	
8-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	20	7	0	0	0	0	0	0	27	
8-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	25	41	0	0	0	0	0	0	66	
8-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	15	8	0	0	0	0	0	0	23	
8-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	20	12	0	0	0	0	0	0	32	
<b>Avg/Survey</b>		<b>1</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>75</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>221</b>	

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			
<b>Weekly Total</b>	<b>4</b>	<b>114</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>894</b>	<b>120</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1189</b>	
<b>Avg/Survey</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>9</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>85</b>	



Pelicans on Preacher's Island