

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 6/25/2022

Inspection Period: 6/19/2022 thru 6/25/2022



**US Army Corps  
of Engineers**  
Portland District

JD/WC Project-Fisheries  
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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.

<b>John Day Dam</b>	Inspection OOC	Criteria Limit	Total Number of Inspections: 14				Temperature:	57.6 F
							Secchi:	2.8 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.)	9.3				
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.)	1.7				
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	12.2				
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	11.7				

### 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)	175.4	Avg %	44.4		
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.

Tailwater average weekly TDG: 123.4

### **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:**

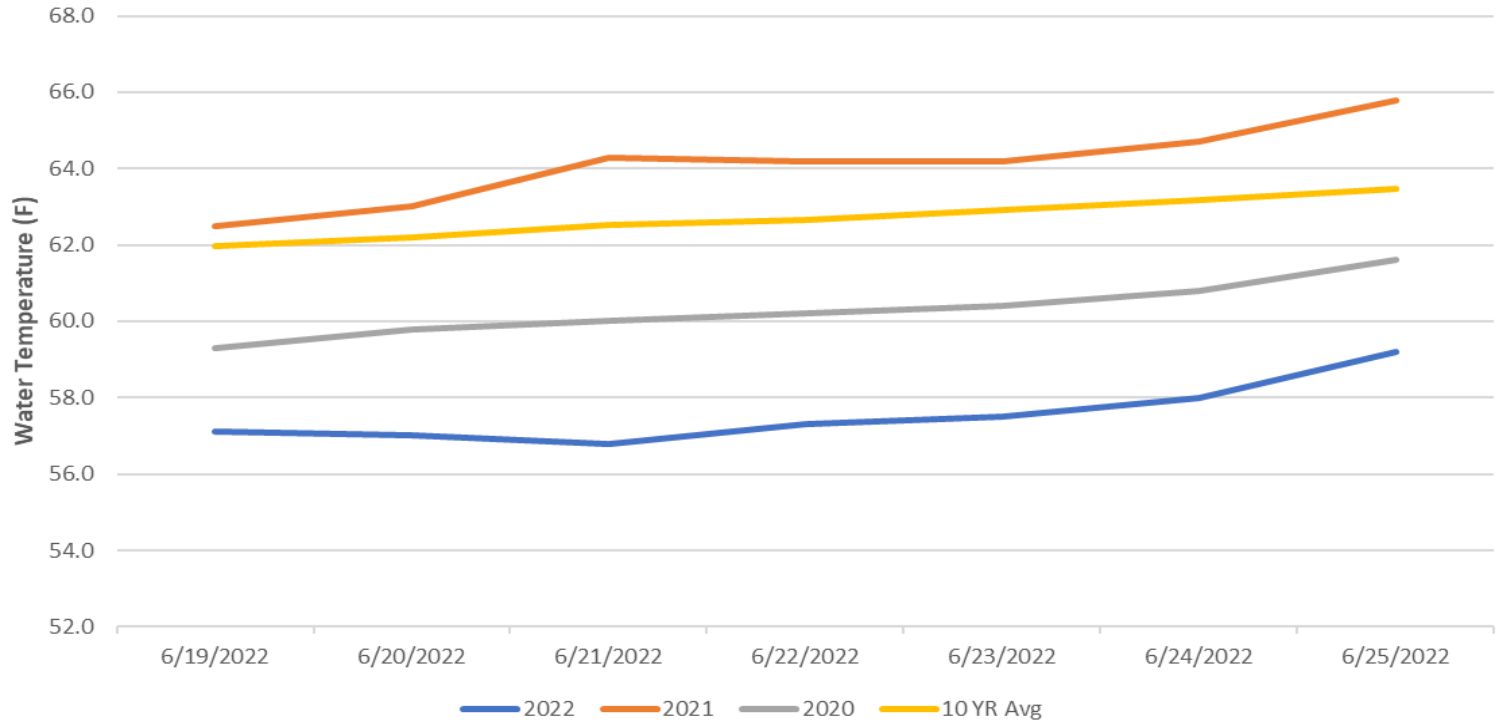
Cormorants have dispersed. Gull numbers have decreased slightly. Grebe numbers are steady. Pelican numbers are increasing with more foraging in tailrace being observed. Pelicans on Preacher's Island: averaged 129 per day. (see 'Bird Count' tab for details).

4 of 125 avian lines down.

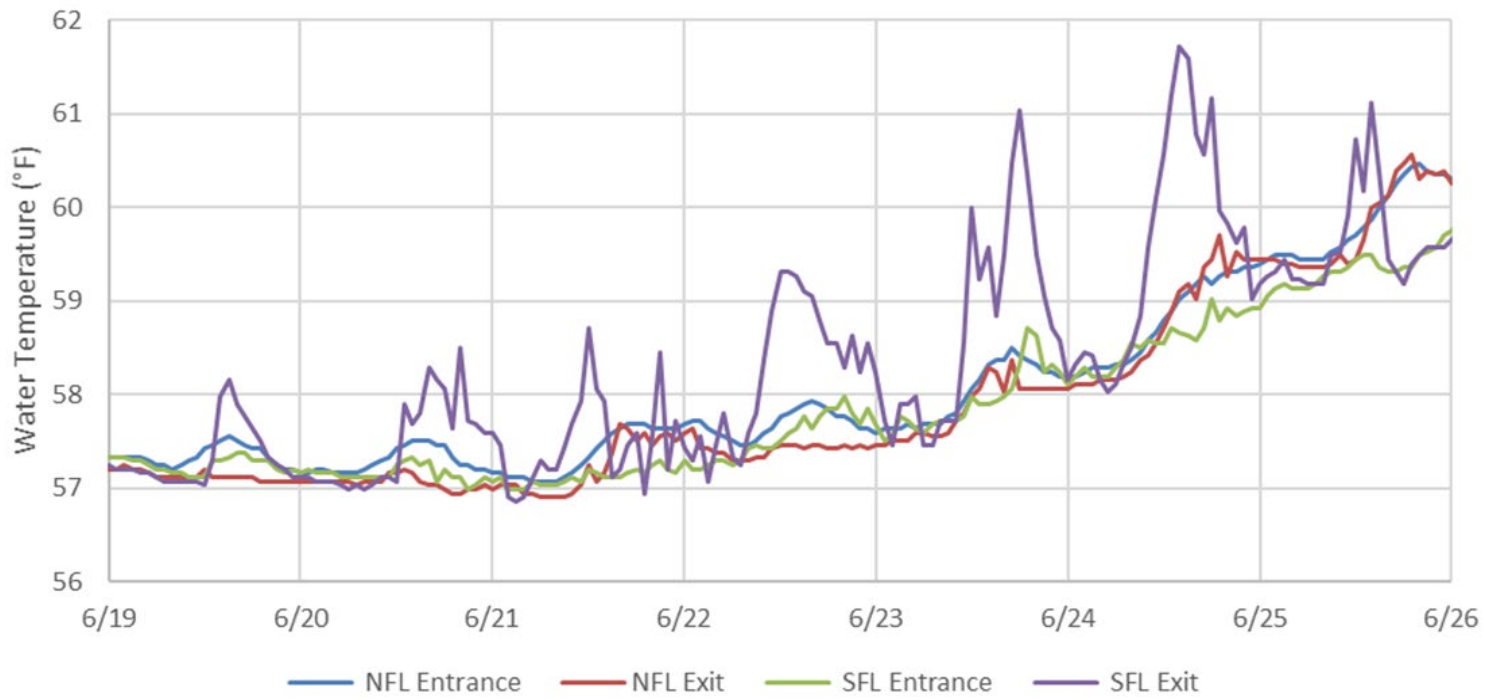
### **Research:**

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

### 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)
6/22/2022	Unit 4	3.02	68,0,68	166.3
6/22/2022	Unit 12	3.13	68,0,68	166.3
6/23/2022	Unit 4	2.99	68,0,68	166.5
6/23/2022	Unit 12	3.06	68,0,68	166.5
6/25/2022	Unit 4	2.99	68,0,68	165.0
6/25/2022	Unit 12	3.03	68,0,68	165.0

Average Weekly Velocity (ft/sec)	3.04
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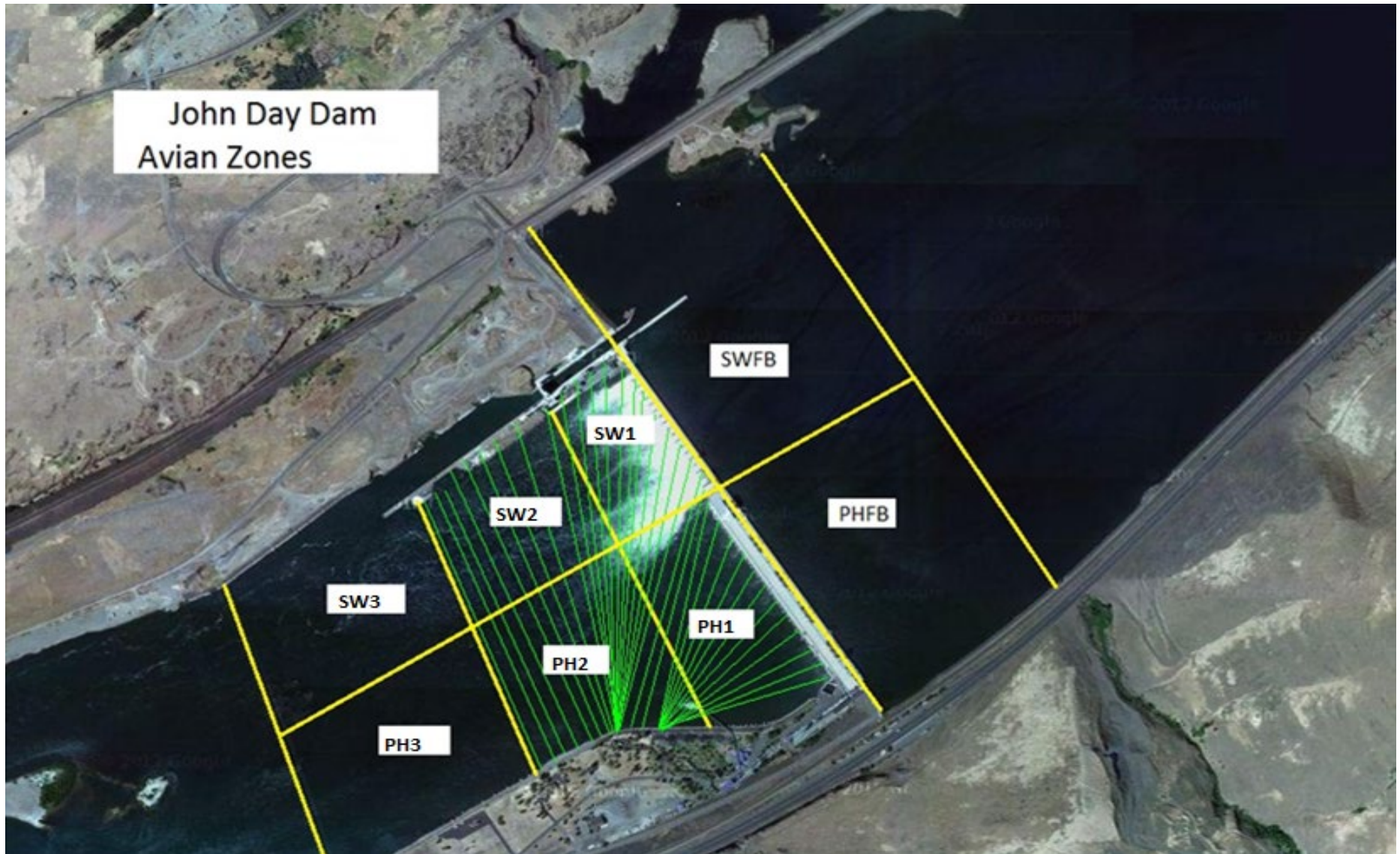
## JOHN DAY WEEKLY AVERAGES

	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	9.1	1.6	12.8	12.3	1.9	1.6	4.5	204.7	46.7	19
Sunday	9.0	1.8	12.7	12.2	2.0	1.5	4.5	198.1	47.3	19
Monday	9.3	1.8	12.7	12.2	2.0	1.5	4.6	199.9	45.8	19
Monday	8.9	1.9	12.3	11.8	2.0	1.6	4.6	195.0	45.1	19
Tuesday	9.7	1.1	12.9	12.4	1.3	1.5	4.6	215.0	49.8	19
Tuesday	9.2	1.4	11.8	11.4	2.0	1.5	4.6	189.9	47.8	19
Wednesday	9.0	1.1	12.0	11.5	1.1	1.5	4.6	17.1	42.1	19
Wednesday	9.1	1.2	12.1	11.6	1.1	1.6	4.5	175.1	41.8	19
Thursday	9.3	1.3	12.1	11.6	1.2	1.4	4.6	175.5	42.3	19
Thursday	9.6	1.2	12.1	11.7	1.1	1.5	4.6	184.9	43.4	19
Friday	9.0	1.3	11.4	10.9	1.8	1.4	4.6	170.3	42.8	19
Friday	9.7	1.5	12.3	11.9	1.8	1.4	4.6	179.8	42.9	19
Saturday	9.8	1.3	11.4	10.9	1.9	1.6	4.7	179.6	42.7	19
Saturday	10.0	1.5	11.5	11.1	2.4	1.5	4.6	170.1	41.4	19
<b>AVG:</b>	<b>9.3</b>	<b>1.4</b>	<b>12.2</b>	<b>11.7</b>	<b>1.7</b>	<b>1.5</b>	<b>4.6</b>	<b>175.4</b>	<b>44.4</b>	<b>19.0</b>

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	57.1	2.5	N/A	125
Monday	57.0	2.5	37	
Tuesday	56.8	2.5	25	130
Wednesday	57.3	2.5	16	150
Thursday	57.5	2.5	18	
Friday	58.0	3.5	23	165
Saturday	59.2	3.5	N/A	76
<b>AVG</b>	<b>57.6</b>	<b>2.8</b>	<b>24</b>	<b>129</b>



John Day Dam  
Avian Zones





**JDA Bird Counts: 6/19/22 to 6/25/22**

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)	
19-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	29	0	0	70
19-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	41	9	0	0	0	0	0	0	50
19-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jun	SW3	17	0	0	0	0	0	0	0	0	0	0	0	4	5	0	0	0	0	0	0	26
<b>Total/Survey</b>		<b>9</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>30</b>		<b>0</b>		<b>35</b>		<b>0</b>		<b>73</b>
20-Jun	PHFB	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	37	33	0	0	72
20-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9
20-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	83	0	0	0	0	0	0	83
20-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jun	SW3	10	10	0	0	0	0	0	0	0	0	0	0	20	5	0	0	0	0	0	0	45
<b>Total/Survey</b>		<b>10</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>59</b>		<b>0</b>		<b>35</b>		<b>0</b>		<b>105</b>
21-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	27	29	0	0	57
21-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
21-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	6	53	0	0	0	0	0	0	59
21-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	22
21-Jun	SW3	13	0	0	0	0	0	0	0	0	0	0	0	43	6	0	0	0	0	0	0	62
<b>Total/Survey</b>		<b>7</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>66</b>		<b>0</b>		<b>30</b>		<b>0</b>		<b>102</b>
22-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	0	0	40
22-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	30
22-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	67	0	0	0	0	0	0	67
22-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
22-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	15	10	0	0	0	0	0	0	25
22-Jun	SW3	0	20	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	55
<b>Total/Survey</b>		<b>10</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>83</b>		<b>0</b>		<b>20</b>		<b>0</b>		<b>113</b>

**JDA Bird Counts: 6/23/22 to 6/25/22**

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)	
23-Jun PHFB		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	30	32	0	0	64	
23-Jun SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23-Jun PH1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23-Jun PH2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23-Jun PH3		0	0	0	0	0	0	0	0	0	0	0	0	75	0	0	0	0	0	0	75	
23-Jun SW1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23-Jun SW2		0	0	0	0	0	0	0	0	0	0	0	4	15	0	0	0	0	0	0	19	
23-Jun SW3		0	0	0	0	0	0	0	0	0	0	0	40	50	0	0	0	0	0	0	90	
<b>Total/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>93</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>124</b>	
24-Jun PHFB		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	19	4	0	0	26	
24-Jun SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
24-Jun PH1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
24-Jun PH2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
24-Jun PH3		0	0	0	0	0	0	0	0	0	0	0	17	61	0	0	0	0	0	0	78	
24-Jun SW1		0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	
24-Jun SW2		0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	
24-Jun SW3		16	51	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	72	
<b>Total/Survey</b>		<b>34</b>	<b>2</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>46</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>93</b>	
25-Jun PHFB		0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	15	16	0	0	38	
25-Jun SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25-Jun PH1		0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	
25-Jun PH2		0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	
25-Jun PH3		0	0	0	0	0	0	0	0	0	0	0	0	61	0	0	0	0	0	0	61	
25-Jun SW1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25-Jun SW2		0	0	0	0	0	0	0	0	0	0	0	37	15	0	0	0	0	0	0	52	
25-Jun SW3		0	55	0	0	0	0	0	0	0	0	0	24	11	0	0	0	0	0	0	90	
<b>Total/Survey</b>		<b>28</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>82</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>125</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						
	<b>Weekly Total</b>	<b>192</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>914</b>	<b>0</b>	<b>356</b>	<b>0</b>	<b>734</b>							
<b>Avg/Survey</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>65</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>105</b>									

# Foraging Piscivorous Birds

