

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/21/2023

Inspection Period: 10/15/2023 thru 10/21/2023



**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.

John Day Dam	Inspection OOC	Criteria Limit	Total Number of Inspections: 14				Temperature: 63.3 F	Secchi: 6.0 Ft.
<b>NORTH FISHWAY</b>								
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.)	1.4				
<b>SOUTH FISHWAY</b>								
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.)	8.2				
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.55				
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.7				
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.4				
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.4				
<b>JUVENILE PASSAGE</b>								
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6				
Submersible traveling screens	0	visual inspect	next inspection 10/23-10/26					
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 2023 sampling season on September 15th.

### **Adult Ladder Operations:**

NFL is operating in criteria.

SFL turbine #2 RTS 3/20 @ reduced RPMs (55 RPMs) to prolong the repairs. SFL turbine #3 OOS (Philadelphia gear inspected on 2/22 and recommended FOOS - See 23JDA03) - Funding awarded (RTS-Unknown). FOG's removed

### **Project Operations:**

Current outages: MU4 (ETR: 11/2/23), MU5 (ETR: 10/26/23), MU6 (ETR: 10/26/23), MU7 (ETR: 7/31/28), MU8 (ETR: 10/26/23), MU10 (ETR: 11/15/23), MU15 (ETR: 11/30/23)

Spillbay Outages: #1-missing brake/motor (ETR Unknown), #6 and #10-operates in manual/local mode only (ETR: Unknown)

From Aug. 15 - Nov. 30, spillbay #2 will be open 1-stop (approximately 1.6 kcfs), during daylight hours, for NFL adult fish attraction.

Weekly Average Tailwater TDG: 99.91

### **Maintenance:**

NFL AWS pump #4 is OOS with an unknown RTS date (see 21JDA02). NFL AWS pump #2 has a failed RTD sensor that keeps it from reading an accurate temperature on the lower bearing (occurred 4/22/23). Therefore, there is no overheat fail safe and it is being run as a last on first off pump (the pump will need to be unstacked to repair the sensor). The repair date is unknown.

Calibration: All gauges within the 0.3' criteria.

### **Bird Data:**

Decrease in pelican foraging within the tailrace this week with zero sightings, foraging gull numbers have increased steady this week (~104/inspection), foraging grebes increased this week (~46/inspection), and foraging cormorants stayed steady this week (~3/inspection).

There are ~13 pelicans hanging around Preacher's Island

20 of 125 avian lines down

### **Research:**

Four Peaks started ladder counts on 3/1/23 and will be performing year-round counts for 2023 (Day video 11/1/23 - 2/29/24)

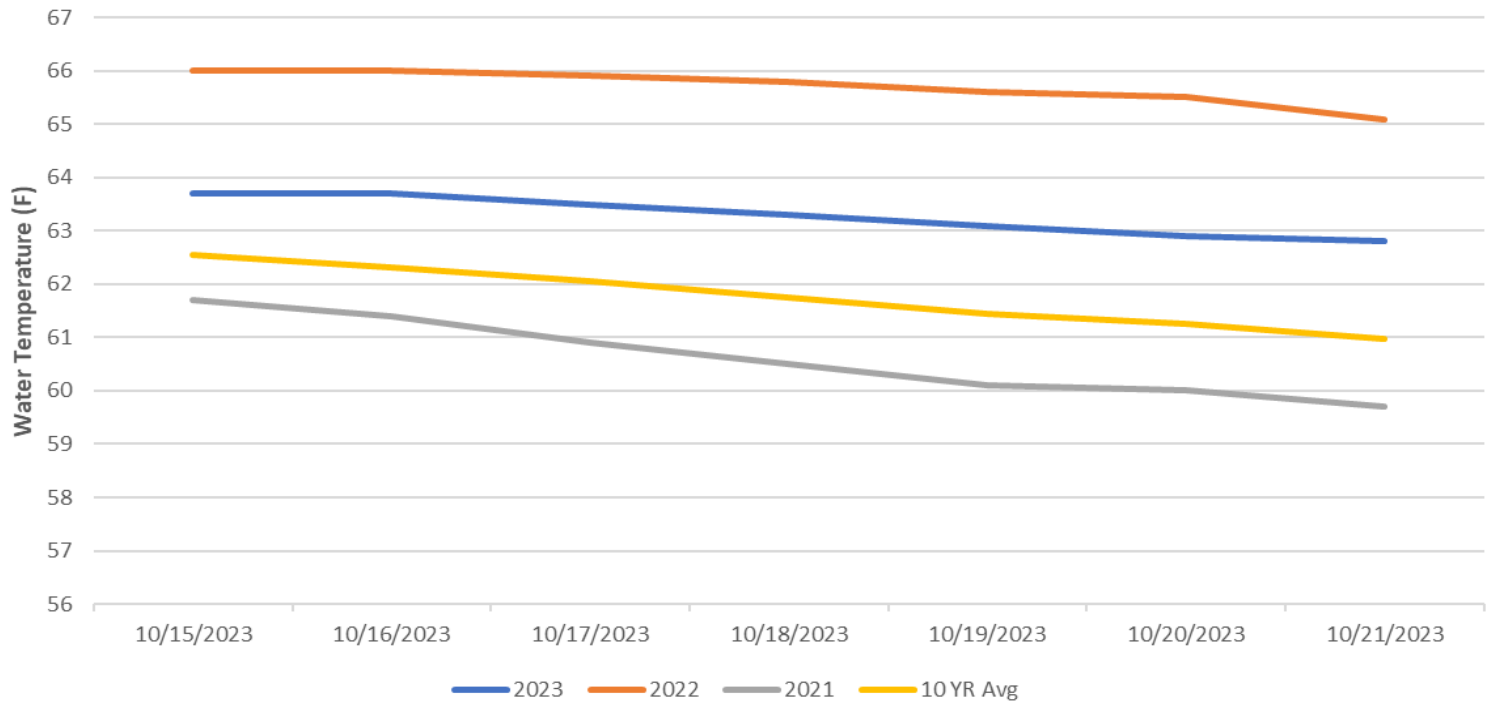
PSMFC smolt condition monitoring ended 9/15/23.

USDA hazing started on 04/16/23 and ended 07/31/23

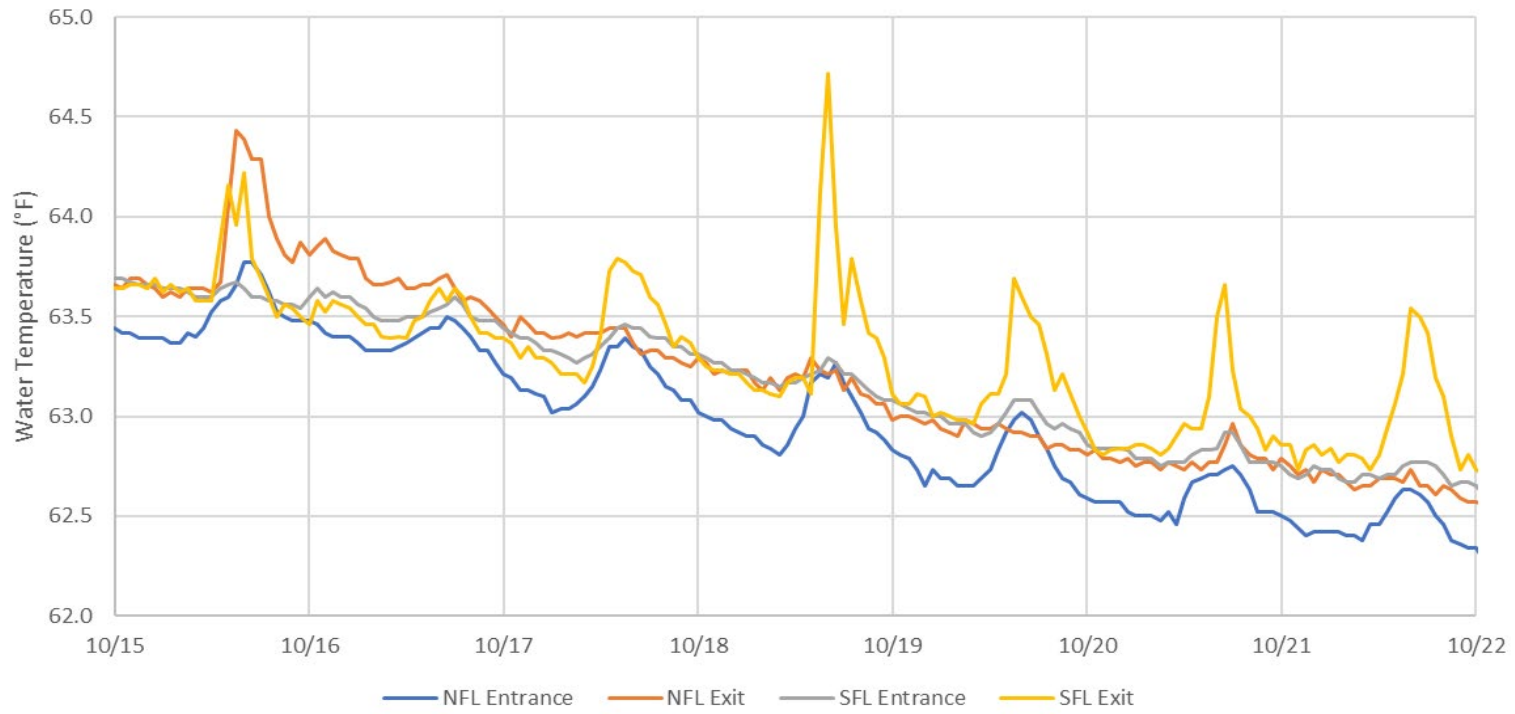
WDFW performing NPMP dam angling started 5/8/23 and ended 10/12/23

CRITFC translocation ended on 9/6/23.

### 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)
10/16/2023	Unit 4	2.58	55,55,0	159.9
10/16/2023	Unit 12	2.52	55,55,0	159.9
10/18/2023	Unit 4	2.56	55,55,0	159.7
10/18/2023	Unit 12	2.55	55,55,0	159.7
10/21/2023	Unit 4	2.55	55,55,0	159.8
10/21/2023	Unit 12	2.51	55,55,0	159.8

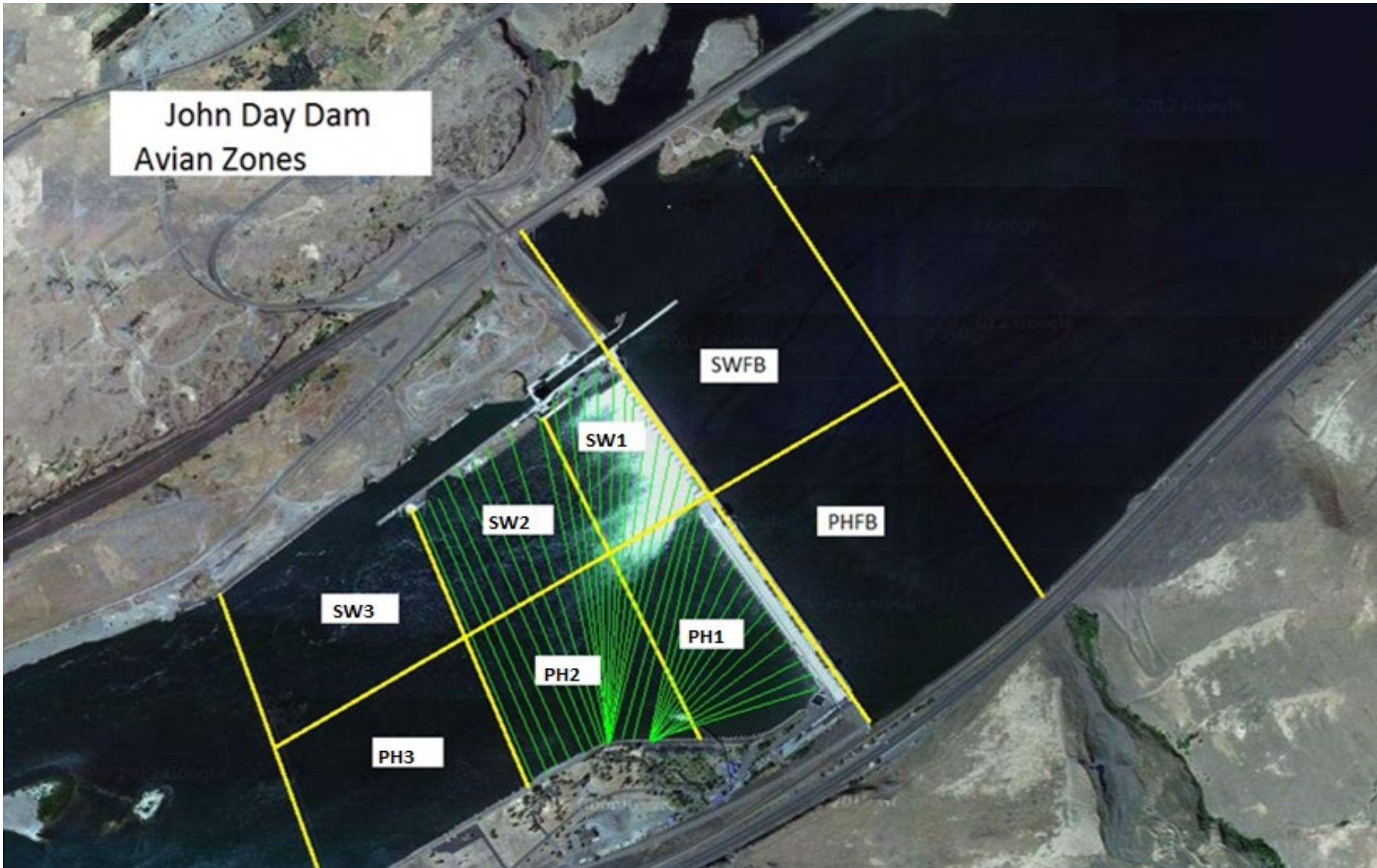
Average Weekly Velocity (ft/sec)	2.55
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## JOHN DAY WEEKLY AVERAGES

	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	8.2	1.4	9.4	9.4	1.7	1.5	4.6	1.6	2.4	1
Sunday	8.4	1.4	9.4	9.4	1.9	1.5	4.5	1.6	2.0	1
Monday	8.2	1.4	9.6	9.6	1.7	1.4	4.6	1.6	1.8	1
Monday	8.1	1.4	9.6	9.6	1.8	1.4	4.7	1.6	2.2	1
Tuesday	8.3	1.2	9.5	9.5	1.8	1.5	4.7	1.6	1.9	1
Tuesday	8.2	1.2	9.5	9.5	1.6	1.1	4.6	1.6	2.2	1
Wednesday	8.1	1.4	9.1	9.1	1.6	1.6	4.5	1.6	2.3	1
Wednesday	8.1	1.3	9.1	9.1	1.5	1.5	4.5	1.6	2.3	1
Thursday	8.6	1.3	9.3	9.3	1.5	1.5	4.6	1.6	1.5	1
Thursday	8.5	1.4	9.1	9.1	1.6	1.5	4.7	1.6	2.0	1
Friday	8.0	1.3	9.3	9.2	1.6	1.4	4.6	1.6	2.3	1
Friday	8.2	1.4	9.6	9.6	1.7	1.4	4.6	1.6	2.4	1
Saturday	8.3	1.4	9.5	9.5	1.7	1.4	4.6	1.6	1.8	1
Saturday	8.2	1.4	9.4	9.4	1.7	1.4	4.6	1.6	1.8	1
<b>AVG:</b>	<b>8.2</b>	<b>1.4</b>	<b>9.4</b>	<b>9.4</b>	<b>1.7</b>	<b>1.4</b>	<b>4.6</b>	<b>1.6</b>	<b>2.1</b>	<b>1.0</b>

	Temp (F)	Secchi (Ft)	Notes
Sunday	63.7	6.0	
Monday	63.7	6.0	
Tuesday	63.5	6.0	
Wednesday	63.3	6.0	
Thursday	63.1	6.0	
Friday	62.9	6.0	
Saturday	62.8	6.0	
<b>AVG</b>	<b>63.3</b>	<b>6.0</b>	

John Day Dam  
Avian Zones



**JDA Bird Counts: 10/15/23 to 10/21/23**

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)	
15-Oct	PHFB	0	0	75	0	0	0	2	0	0	0	0	0	0	0	0	0	90	88	0	0	255
15-Oct	SWFB	0	0	0	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200
15-Oct	PH1	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
15-Oct	PH2	20	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
15-Oct	PH3	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64
15-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Oct	SW2	0	0	0	0	0	0	60	50	0	0	0	0	0	0	0	0	0	0	0	0	110
15-Oct	SW3	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
<b>Avg/Survey</b>		<b>65</b>		<b>138</b>		<b>0</b>		<b>66</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>89</b>		<b>0</b>		<b>357</b>
16-Oct	PHFB	0	0	200	220	0	0	10	0	0	0	0	0	0	0	0	0	70	70	0	0	570
16-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Oct	PH1	100	35	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	145
16-Oct	PH2	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
16-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Oct	SW2	0	0	0	0	0	0	50	50	0	0	0	0	0	0	0	0	0	0	0	0	100
16-Oct	SW3	0	0	0	0	0	0	25	15	0	0	0	0	0	0	0	0	0	0	0	0	40
<b>Avg/Survey</b>		<b>80</b>		<b>210</b>		<b>5</b>		<b>75</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>70</b>		<b>0</b>		<b>440</b>
17-Oct	PHFB	0	0	150	457	0	0	6	0	0	0	0	0	0	0	0	0	70	36	0	0	719
17-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Oct	PH1	52	22	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
17-Oct	PH2	25	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
17-Oct	PH3	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
17-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Oct	SW2	0	0	0	0	0	5	40	52	0	0	0	0	0	0	0	0	0	0	0	0	97
17-Oct	SW3	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	12
<b>Avg/Survey</b>		<b>63</b>		<b>304</b>		<b>6</b>		<b>55</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>53</b>		<b>0</b>		<b>480</b>
18-Oct	PHFB	0	0	134	195	0	0	28	0	0	0	0	0	0	0	0	0	40	40	0	0	437
18-Oct	SWFB	0	0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	139
18-Oct	PH1	150	41	0	13	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210
18-Oct	PH2	15	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
18-Oct	PH3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
18-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Oct	SW2	0	0	0	33	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	45
18-Oct	SW3	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
<b>Avg/Survey</b>		<b>110</b>		<b>257</b>		<b>3</b>		<b>23</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>40</b>		<b>0</b>		<b>433</b>



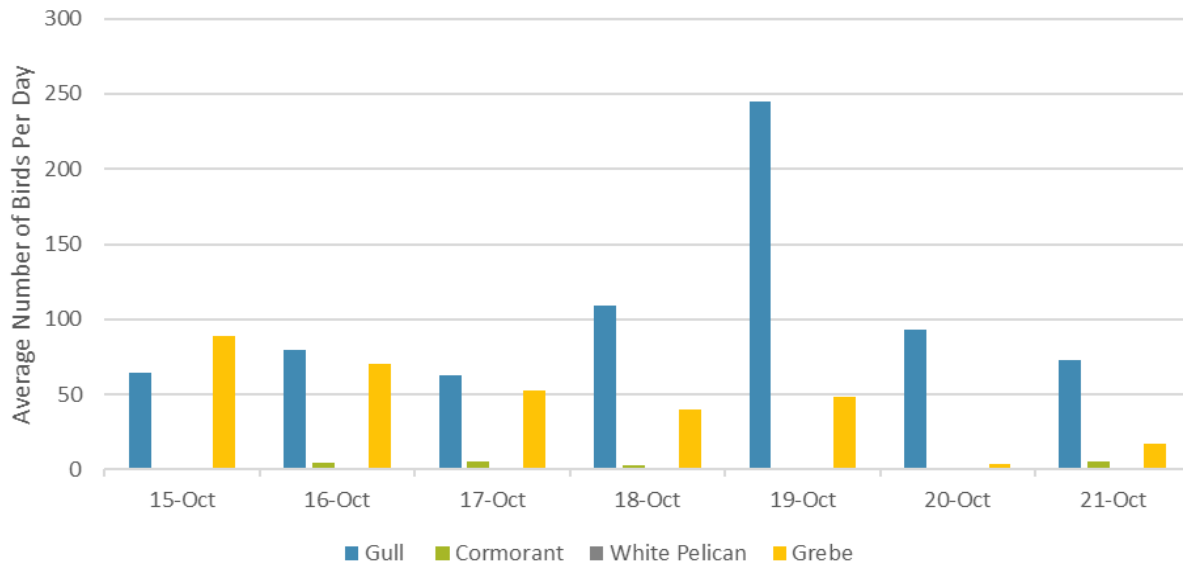
**JDA Bird Counts: 10/15/23 to 10/21/23**

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-Oct	PHFB	0	0	110	151	0	0	51	0	0	0	0	0	0	0	0	0	40	57	0	0	409
19-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Oct	PH1	171	297	11	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	482
19-Oct	PH2	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
19-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Oct	SW2	0	0	0	0	0	0	13	43	0	0	0	0	0	0	0	0	0	0	0	0	56
19-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Avg/Survey</b>		<b>245</b>		<b>136</b>		<b>2</b>		<b>54</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>49</b>		<b>0</b>		<b>485</b>
20-Oct	PHFB	0	0	65	82	0	0	17	3	0	0	0	0	0	0	0	0	4	3	0	0	174
20-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Oct	PH1	10	143	220	270	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	648
20-Oct	PH2	23	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
20-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Oct	SW2	0	0	0	0	0	0	17	44	0	0	0	0	0	0	0	0	0	0	0	0	61
20-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Avg/Survey</b>		<b>94</b>		<b>319</b>		<b>1</b>		<b>43</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>4</b>		<b>0</b>		<b>459</b>
21-Oct	PHFB	0	0	80	200	0	0	5	0	0	0	0	0	0	0	0	22	12	0	0	0	319
21-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Oct	PH1	76	40	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121
21-Oct	PH2	30	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
21-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Oct	SW2	0	0	0	0	0	0	40	60	0	0	0	0	0	0	0	0	0	0	0	0	100
21-Oct	SW3	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
<b>Avg/Survey</b>		<b>73</b>		<b>145</b>		<b>6</b>		<b>53</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>17</b>		<b>0</b>		<b>293</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>1456</b>	<b>3015</b>	<b>42</b>	<b>735</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>642</b>	<b>0</b>	<b>5890</b>						
<b>Avg/Survey</b>	<b>104</b>	<b>215</b>	<b>3</b>	<b>53</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>421</b>						

### Foraging Piscivorous Birds



### Non-Foraging Piscivorous Birds

