

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 7/27/2024

Inspection Period: 7/21/2024 thru 7/27/2024



**US Army Corps  
of Engineers**  
Portland District

JD/WC Project-Fisheries  
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All JDA 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:	71.0 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'					
Weir Crest Depth (DS Gauge)	0	Per FPP	"Salmon Mode" on 7/15/24 (water depth over weirs switched from 1.3' ± 0.1' to 1.0' ± 0.1')				
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					
Count Station Differential	0	≤ 0.3'					
Weir Crest Depth (US Gauge)	0	Per FPP	"Salmon Mode" on 7/15/24 (water depth over weirs switched from 1.3' ± 0.1' to 1.0' ± 0.1')				
South Entrance Differential	0	1.0' - 2.0'	Avg. (Ft.)	1.1			
Entrance Weir SE1	0	Depth (≥ 8')	Avg. (Ft.)	8.2			
Collection Channel Velocity	0	1.5' - 4.0' FPS	Avg. (Ft.)	1.94	<i>(2 FPS is optimal)</i>		
N. Entrance PH (Bay 19) Differential	0	1.0' - 2.0'	Avg. (Ft.)	1.4			
Entrance Weir NE1	0	Depth (≥ 8')	Avg. (Ft.)	9.0			
Entrance Weir NE2	0	Depth (≥ 8')	Avg. (Ft.)	8.8			
<b>JUVENILE PASSAGE</b>							
Forebay/Bypass Conduit Differential	0	4.0' - 5.0'	Avg. (Ft.)	4.6			
Submersible Traveling Screens	0	Per FPP	next inspection 07/22-07/25				
Turbine Trashrack Drawdown	0	<1.5'					
Vert. Barrier Screen Drawdown	0	<1.2'					
Spill Volume	0	Per FPP	Avg. (kcfs)	45.7	Avg. (%)	35.6	
Spill Pattern	0	Per FPP					
Turbine Unit Priority	0	Per FPP					
Turbine 1% Efficiency	0	Per FPP					

## Fisheries Related Operations

### **Smolt Monitoring Operations (SMF):**

The 2024 SMF sampling season started April 1st for condition monitoring only.

High water temperature protocol went into effect on 7/16 (Monday and Thursday sampling) and returns to normal sampling when daily water temperatures drop below <69.5°F. All samples will run from approximately 0700-1300 or until the target of 100 fish of the predominant species is reached.

### **Adult Ladder Operations:**

NFL is operating in criteria.

SFL FOG's removed. Operating 2 SFL turbines @ reduced RPMs (SFT-1 or 2: 55 RPMs and SFT-3: 60 RPMs).

Switched to "Salmon Mode" on 7/15/24

### **Project Operations:**

Summer spill started 6/16/24 ([Late Summer Spill begins: 8/1/24], [Spillbay 2 adult attraction begins: 8/1/24]).

Current outages: MU2: (ETR: 9/19/24), MU3 (ETR: 8/1/24), MU7 (ETR: 10/1/25), MU10 (ETR: 1/16/25), MU 12 (ETR: 07/30/24), MU14 (ETR: 04/30/26).

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

Weekly Average Tailwater TDG: 106.8

### **Maintenance:**

NFL AWS pump #4 is OOS, with an unknwn 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 (occured 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:**

Slight decrease pelican foraging (~111/inspection from 130), decrease in gull foraging (~1/inspection from 3), no foraging grebes or cormorants.

There are ~350 pelicans hanging around Preacher's Island.

10 of 125 avian lines are down

Lethal take season total @ JDA: 46-California Gulls, 1-Ring-billed gull, and 1- Double Crested Cormorant

### **Research:**

Four Peaks started ladder counts on 4/1/24 (ends 10/31/24).

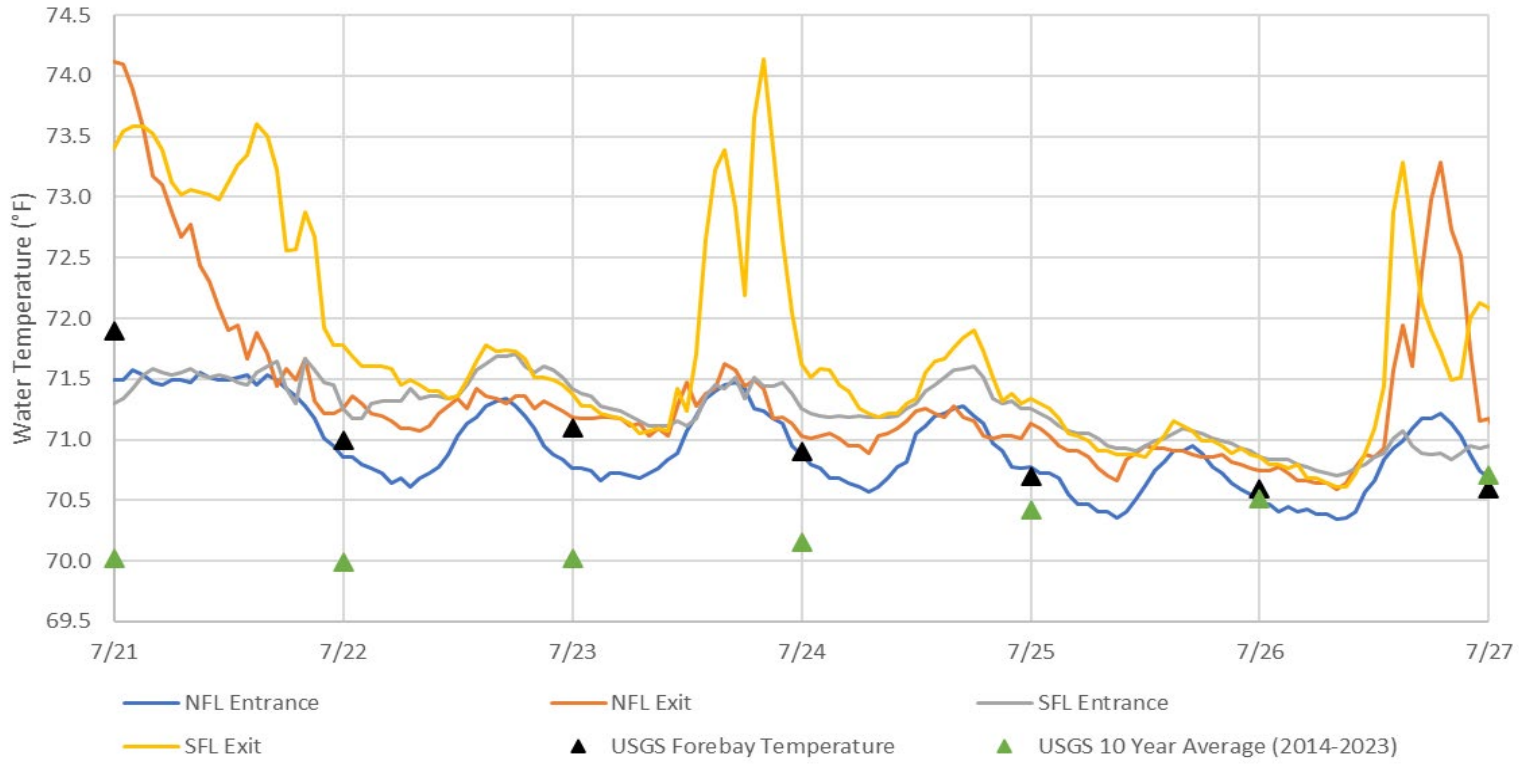
PNNL juvenile lamprey passage behavior and survival study is ongoing.

USDA started boat hazing on 04/18/24 (ends 7/31/24)

WDFW dam angling started fishing on 5/1/24.

CRITFC started collecting lamprey for translocation on 6/5/24

### JDA Water 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)
7/22/2024	Unit 4	1.90	55,0,60	159.6
7/22/2024	Unit 12	1.88	55,0,60	159.6
7/24/2024	Unit 4	1.99	55,0,60	159.6
7/24/2024	Unit 12	1.99	55,0,60	159.6
7/27/2024	Unit 4	1.97	55,0,60	159.6
7/27/2024	Unit 12	1.89	55,0,60	159.6

Average Weekly Velocity (ft/sec)	1.94
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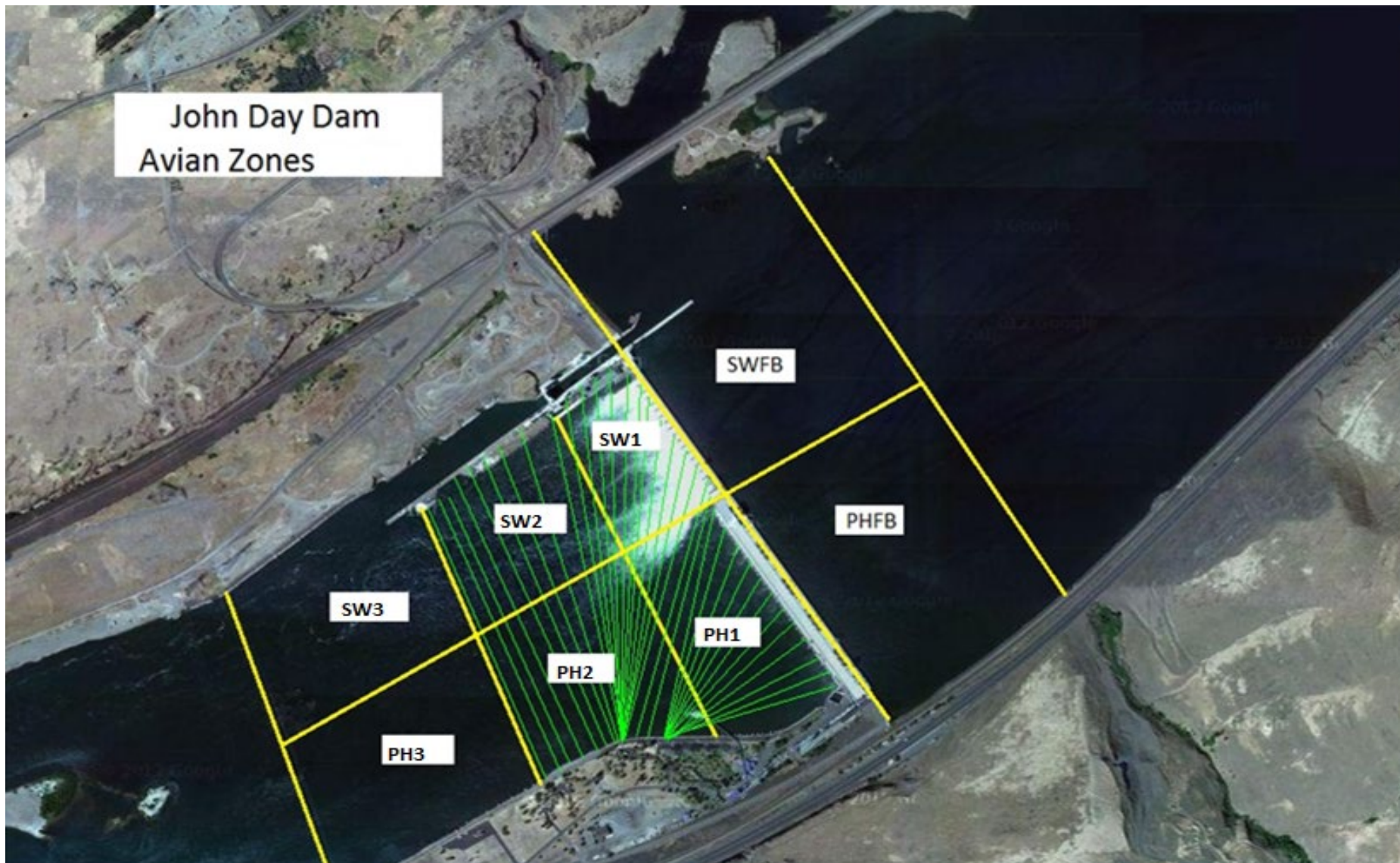
## JOHN DAY WEEKLY AVERAGES

	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	8.1	1.0	8.7	8.6	1.3	1.6	4.5	39.2	36.0	14
Sunday	8.2	1.1	9.3	9.1	1.4	1.4	4.6	53.6	35.8	18
Monday	8.1	1.1	8.7	8.6	1.3	1.6	4.6	39.5	35.2	14
Monday	8.3	1.0	10.1	9.9	1.3	1.5	4.6	63.0	34.5	19
Tuesday	8.2	1.1	9.2	9.1	1.4	1.6	4.6	42.1	35.3	15
Tuesday	8.6	1.0	9.1	9.0	1.8	1.4	4.5	56.0	34.5	19
Wednesday	8.1	1.0	8.6	8.5	1.4	1.6	4.5	49.3	34.7	18
Wednesday	8.1	1.1	9.0	8.8	1.2	1.5	4.5	49.3	34.9	19
Thursday	8.2	1.0	8.2	8.0	1.3	1.4	4.5	39.0	34.9	13
Thursday	8.0	1.2	8.7	8.5	1.4	1.4	4.5	39.0	34.3	18
Friday	8.0	1.0	8.8	8.7	1.3	1.5	4.8	39.1	39.0	14
Friday	8.0	1.0	9.5	9.5	1.4	1.4	4.8	38.8	39.0	13
Saturday	8.1	1.0	8.7	8.5	1.2	1.5	4.6	39.1	35.7	14
Saturday	8.2	1.1	9.0	9.0	1.3	1.4	4.8	52.3	34.2	18
<b>AVG:</b>	<b>8.2</b>	<b>1.1</b>	<b>9.0</b>	<b>8.8</b>	<b>1.4</b>	<b>1.5</b>	<b>4.6</b>	<b>45.7</b>	<b>35.6</b>	<b>16.1</b>

	*River Temp (°F)	Secchi (Ft)	Notes
Sunday	71.9	6.0	
Monday	71.0	6.0	
Tuesday	71.1	6.0	
Wednesday	70.9	6.0	
Thursday	70.7	6.0	
Friday	70.6	6.0	
Saturday	70.6	6.0	
<b>AVG</b>	<b>71.0</b>	<b>6.0</b>	

\*Note: River temperatures are the 'average' taken at the time of inspection and are not a true daily average temperature

John Day Dam  
Avian Zones



**JDA Bird Counts: 7/21/24 to 7/27/24**

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)	
21-Jul	PHFB	0	2	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	0	8
21-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	16
21-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	30
21-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	20	25	5	0	0	0	0	0	50
21-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	0	11
21-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	40
21-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	40	10	30	0	0	0	0	0	80
<b>Avg/Survey</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>99</b>		<b>18</b>		<b>0</b>		<b>0</b>		<b>118</b>
22-Jul	PHFB	6	0	0	52	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	61
22-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10
22-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
22-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	20	1	0	0	0	0	0	0	21
22-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	0	15
22-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	30	10	0	0	0	0	0	0	40
22-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	40	10	0	0	0	0	0	0	50
<b>Avg/Survey</b>		<b>3</b>		<b>26</b>		<b>0</b>		<b>2</b>		<b>0</b>		<b>0</b>		<b>69</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>99</b>
23-Jul	PHFB	1	0	0	30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	32
23-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
23-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
23-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	15	95	0	0	0	0	0	0	110
23-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	10
23-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	30	43	0	0	0	0	0	0	73
23-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	35	41	0	0	0	0	0	0	76
<b>Avg/Survey</b>		<b>1</b>		<b>15</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>138</b>		<b>2</b>		<b>0</b>		<b>0</b>		<b>155</b>
24-Jul	PHFB	0	0	1	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	7
24-Jul	SWFB	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
24-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	31	7	0	0	0	0	0	0	38
24-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	62	0	0	0	0	0	0	0	62
24-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	23	15	0	0	0	0	0	0	38
24-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	130	41	0	23	0	0	0	0	194
24-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	18	18	0	0	0	0	0	0	36
<b>Avg/Survey</b>		<b>0</b>		<b>26</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>174</b>		<b>12</b>		<b>0</b>		<b>0</b>		<b>211</b>



**JDA Bird Counts: 7/21/24 to 7/27/24**

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

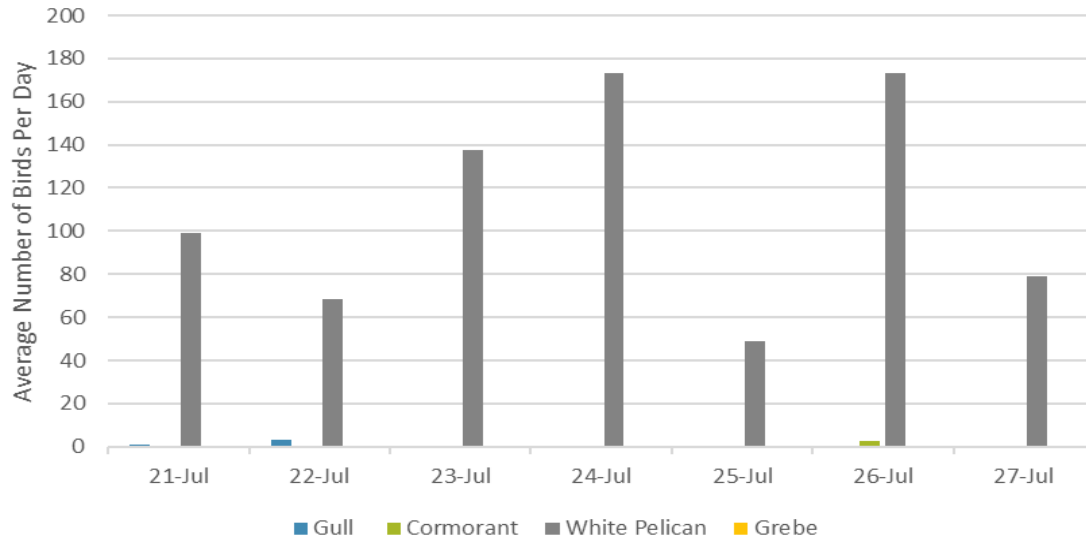
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
25-Jul	PHFB	0	0	0	4	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	7
25-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	15
25-Jul	SW1	0	0	3	0	0	0	0	0	0	0	0	0	1	7	0	0	0	0	0	0	11
25-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	37	12	0	0	0	0	0	0	49
25-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	12	11	70	14	0	0	0	0	107
<b>Avg/Survey</b>		<b>0</b>		<b>4</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>49</b>		<b>42</b>		<b>0</b>		<b>0</b>		<b>95</b>
26-Jul	PHFB	0	0	2	1	0	0	17	0	0	0	0	0	0	0	0	1	0	0	0	0	21
26-Jul	SWFB	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
26-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	0	12
26-Jul	PH2	0	0	0	0	3	0	0	0	0	0	0	0	30	15	0	0	0	0	0	0	48
26-Jul	PH3	0	0	0	0	2	0	0	0	0	0	0	0	50	10	0	0	0	0	0	0	62
26-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
26-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	105	15	0	0	0	0	0	0	120
26-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	80	25	40	0	0	0	0	0	145
<b>Avg/Survey</b>		<b>0</b>		<b>6</b>		<b>3</b>		<b>9</b>		<b>0</b>		<b>0</b>		<b>174</b>		<b>21</b>		<b>0</b>		<b>0</b>		<b>211</b>
27-Jul	PHFB	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
27-Jul	SWFB	0	0	33	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	34
27-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	11	8	0	0	0	0	0	0	19
27-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10
27-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	15	20	0	0	0	0	0	0	35
27-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	31	15	20	0	0	0	0	0	66
27-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	32	16	30	0	0	0	0	0	78
<b>Avg/Survey</b>		<b>0</b>		<b>18</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>79</b>		<b>26</b>		<b>0</b>		<b>0</b>		<b>123</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>9</b>	<b>187</b>	<b>5</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1560</b>	<b>237</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>							
<b>Avg/Survey</b>	<b>1</b>	<b>13</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>111</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>							



### Foraging Piscivorous Birds



### Non-Foraging Piscivorous Birds

