

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 9/25/2021

Inspection Period: 9/19/2021 thru 9/25/2021



**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:	67.8 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.)	1.6			
<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.)	1.6			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.0			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.81			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.8			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.5			
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 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 %	1.8	
Spill pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

## Fisheries Related Operations

### **Smolt Monitoring Operations:**

The Smolt Monitoring Program concluded the 2021 sampling season on 9/15.

### **Adult Ladder Operations:**

North and South fish ladders are operating within criteria.

### **Project Operations:**

Current outages: MU7, MU8, MU12, MU13, MU13-16 (Line 4 BPA mod work), MU14, MU15, MU16. Adult attraction flow for the North fish ladder is provided through spill bay #2 open one stop (1.6kcfs) during daylight hours through November 30th

### **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.

### **Calibration:**

All gauges within the 0.3' criteria.

### **Bird Data:**

Steady number of cormorants mainly roosting on PHFB towers, Preacher's Island, or rocks in SW2. Gull numbers increasing with high numbers resting on the wing wall in the SWFB and modest numbers foraging in the tailrace mainly PH3 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).

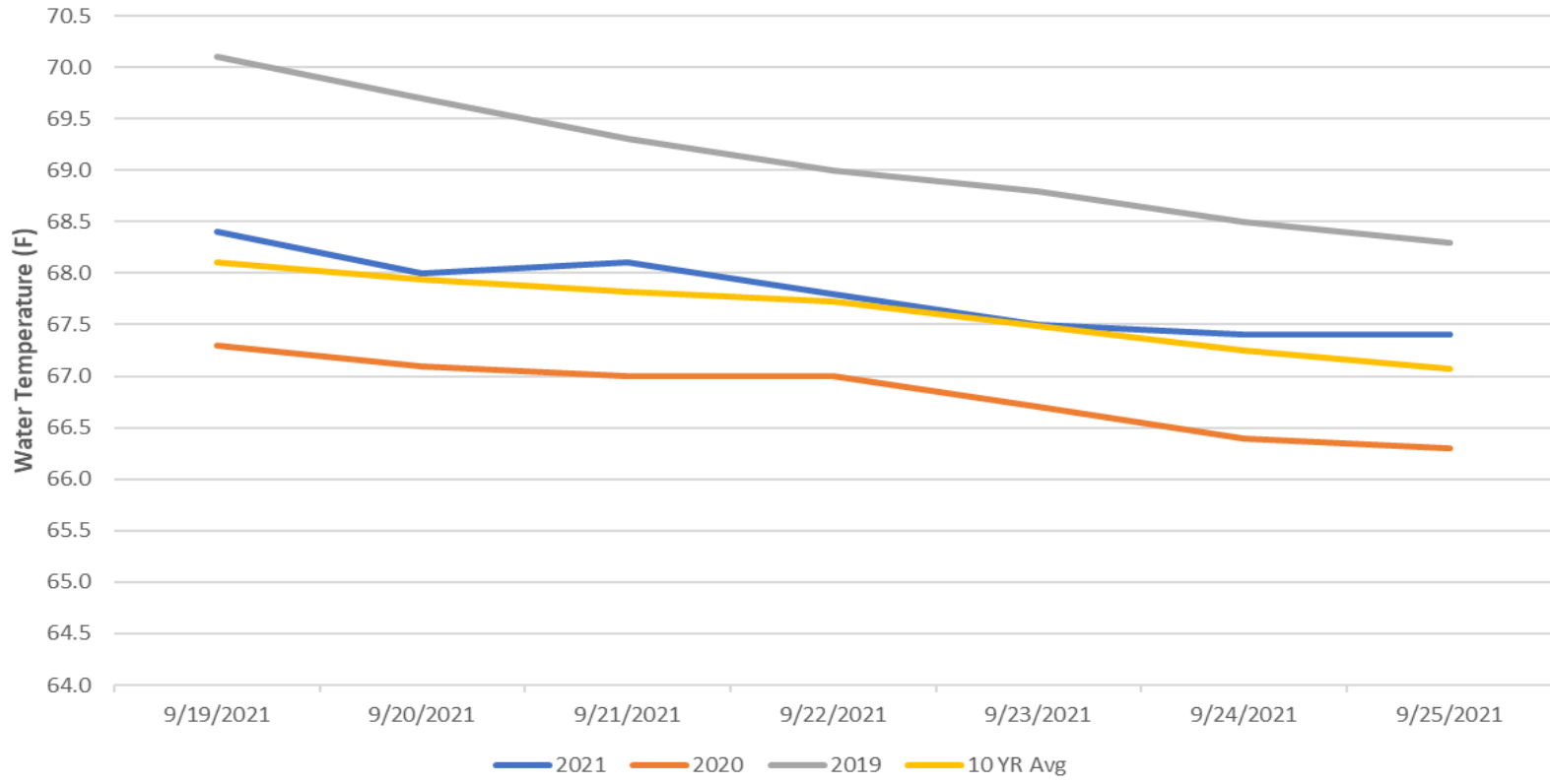
1 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 8 per day

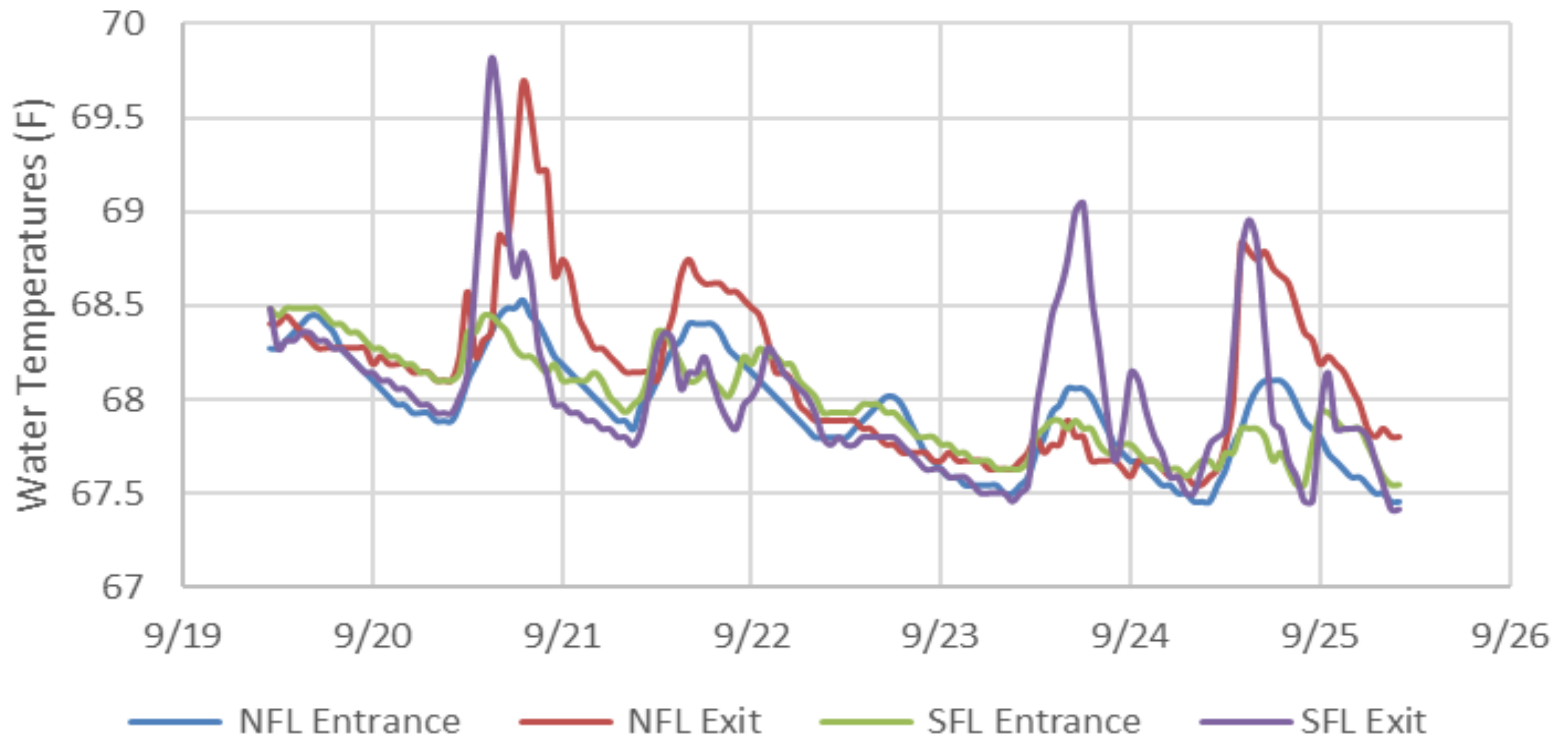
### **Research:**

None

### John Day Dam Water Temperatures (F)



### JDA Ladder Temperatures (9/19 - 9/25)



# 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)
9/23/2021	Unit 4	2.89	0,68,68	160.1
9/23/2021	Unit 12	2.65	0,68,68	160.1
9/24/2021	Unit 4	2.77	0,68,68	160.1
9/24/2021	Unit 12	2.81	0,68,68	160.1
9/25/2021	Unit 4	2.79	0,68,68	159.5
9/25/2021	Unit 12	2.97	0,68,68	159.5

Average Weekly Velocity (ft/sec)	2.81
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## 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	9.3	9.2	1.7	8.6	1.7	4.6	1.9	1.6	2.2	1
Sunday	9.2	9.2	1.6	8.8	1.7	4.6	1.9	1.6	2.2	1
Monday	9.5	9.4	1.8	10.8	1.6	4.6	1.8	1.6	1.8	1
Monday	9.4	9.4	1.6	9.0	1.5	4.6	1.8	1.6	1.7	1
Tuesday	9.3	9.3	1.6	8.8	1.6	4.6	1.9	1.6	2.0	1
Tuesday	10.7	10.7	1.5	10.1	1.6	4.5	1.0	1.6	1.6	1
Wednesday	9.3	9.2	1.7	8.6	1.6	4.5	1.8	1.6	2.1	1
Wednesday	9.6	9.6	1.6	9.0	1.5	4.7	1.7	1.6	1.5	1
Thursday	9.3	9.3	1.6	8.7	1.7	4.5	1.9	1.6	2.0	1
Thursday	9.8	9.8	1.3	9.2	1.6	4.7	1.5	1.6	1.4	1
Friday	9.2	9.1	1.7	8.4	1.6	4.6	1.9	1.6	1.7	1
Friday	9.8	9.7	1.2	9.6	1.5	4.6	1.9	1.6	1.3	1
Saturday	9.1	9.0	1.9	8.4	1.7	4.5	2.0	1.6	1.6	1
Saturday	8.8	8.8	1.6	8.3	1.6	4.5	2.0	1.6	1.7	1
<b>AVG:</b>	<b>9.5</b>	<b>9.4</b>	<b>1.6</b>	<b>9.0</b>	<b>1.6</b>	<b>4.6</b>	<b>1.8</b>	<b>1.6</b>	<b>1.8</b>	<b>1.0</b>

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	68.4	6.0	N/A	13
Monday	68.0	6.0	N/A	11
Tuesday	68.1	6.0	N/A	0
Wednesday	67.8	6.0	N/A	0
Thursday	67.5	6.0	N/A	10
Friday	67.4	6.0	N/A	10
Saturday	67.4	6.0	N/A	10
<b>AVG</b>	<b>67.8</b>	<b>6.0</b>	<b>N/A</b>	<b>8</b>

John Day Dam  
Avian Zones



**JDA Bird Counts: 9/19/21 to 9/25/21**

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)	
19-Sep	PHFB	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	33	34	0	0	72
19-Sep	SWFB	0	0	117	211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	328
19-Sep	PH1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19-Sep	PH2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
19-Sep	PH3	72	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	73
19-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Sep	SW2	0	0	0	0	0	0	20	31	0	0	0	0	0	0	0	0	0	0	0	0	51
19-Sep	SW3	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
<b>Avg/Survey</b>		<b>46</b>		<b>164</b>		<b>1</b>		<b>28</b>		<b>0</b>		<b>0</b>		<b>1</b>		<b>0</b>		<b>34</b>		<b>0</b>		<b>272</b>
20-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Sep	SWFB	47	9	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96
20-Sep	PH1	15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
20-Sep	PH2	7	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
20-Sep	PH3	30	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
20-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Sep	SW2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
20-Sep	SW3	0	0	0	0	0	0	3	30	0	0	0	0	0	3	0	0	0	0	0	0	36
<b>Avg/Survey</b>		<b>67</b>		<b>20</b>		<b>0</b>		<b>17</b>		<b>0</b>		<b>0</b>		<b>2</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>105</b>
21-Sep	PHFB	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
21-Sep	SWFB	0	0	71	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	74
21-Sep	PH1	4	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
21-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Sep	PH3	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141
21-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Sep	SW2	0	0	0	1	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	26
21-Sep	SW3	39	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	43
<b>Avg/Survey</b>		<b>95</b>		<b>45</b>		<b>1</b>		<b>14</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>155</b>
22-Sep	PHFB	7	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	21	0	0	0	46
22-Sep	SWFB	0	0	132	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	134
22-Sep	PH1	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
22-Sep	PH2	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
22-Sep	PH3	45	15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	61
22-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Sep	SW2	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
22-Sep	SW3	9	14	0	0	0	0	11	0	0	0	0	0	0	0	3	0	0	0	0	0	37
<b>Avg/Survey</b>		<b>61</b>		<b>66</b>		<b>0</b>		<b>19</b>		<b>0</b>		<b>0</b>		<b>1</b>		<b>2</b>		<b>11</b>		<b>0</b>		<b>158</b>



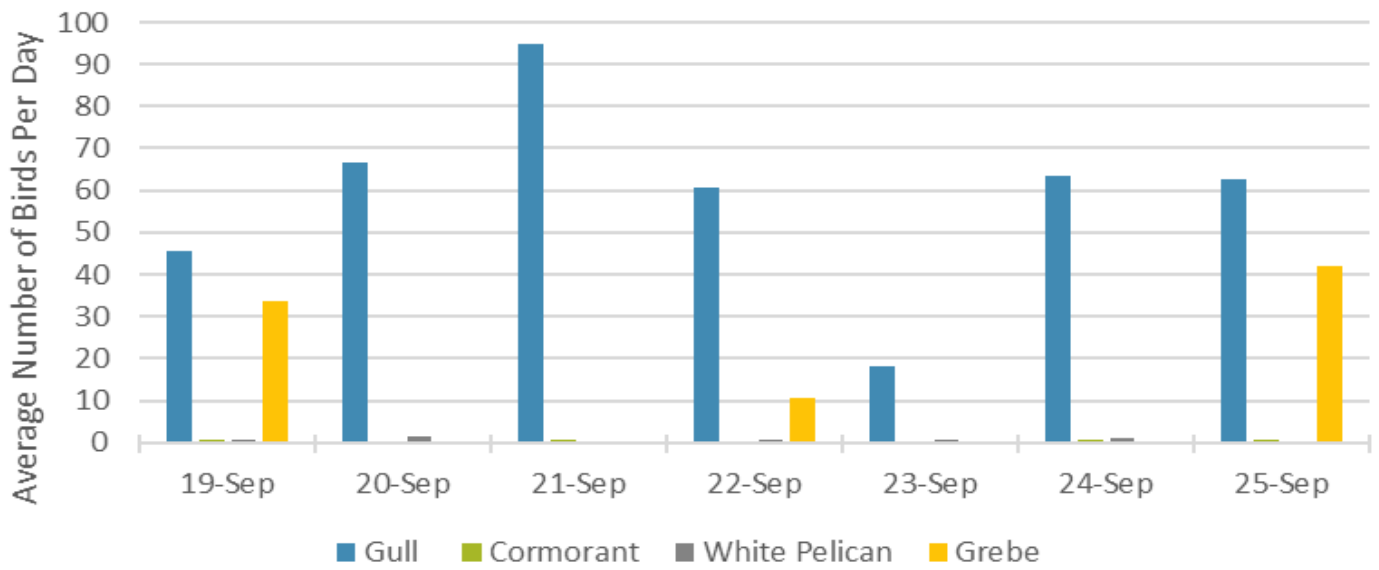
**JDA Bird Counts: 9/19/21 to 9/25/21**

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)	
23-Sep	PHFB	0	0	0	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140
23-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Sep	PH1	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
23-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Sep	PH3	3	16	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	20
23-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Sep	SW2	0	0	0	0	0	0	27	23	0	0	0	0	0	0	0	0	0	0	0	0	50
23-Sep	SW3	0	0	0	0	0	0	10	3	0	0	0	0	0	0	0	0	0	0	0	0	13
<b>Avg/Survey</b>		<b>18</b>	<b>70</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>120</b>	
24-Sep	PHFB	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
24-Sep	SWFB	0	0	41	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	124
24-Sep	PH1	91	32	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	124
24-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Sep	PH3	0	4	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	6
24-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Sep	SW2	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	23
24-Sep	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>64</b>	<b>62</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>145</b>	
25-Sep	PHFB	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	42	0	0	53
25-Sep	SWFB	0	0	94	176	0	0	0	0	0	0	0	0	0	0	0	0	42	0	0	0	312
25-Sep	PH1	24	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
25-Sep	PH2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
25-Sep	PH3	93	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	96
25-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Sep	SW2	0	0	0	0	0	0	13	33	0	0	0	0	0	0	0	0	0	0	0	0	46
25-Sep	SW3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
<b>Avg/Survey</b>		<b>63</b>	<b>135</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>270</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>823</b>	<b>1123</b>	<b>4</b>	<b>309</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>7</b>	<b>172</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>								
<b>Avg/Survey</b>	<b>59</b>	<b>80</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>								

### Foraging Piscivorous Birds



### Non-Foraging Piscivorous Birds

