

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 9/4/2021

Inspection Period: 8/29/2021 thru 9/4/2021



**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:	69.3 F
						Secchi:	6.0 Ft.	

### NORTH FISHWAY

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					

### SOUTH FISHWAY

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.)	1.5					
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.2					
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.77					
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.8					
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.3					
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.3					

### JUVENILE PASSAGE

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							
	0	<1.5', wkly							
	0	per FPP	AVG (kcfs)	9.8	Avg %	9.1			
Spill pattern	0	per FPP							
Turbine Unit Priority	0	per FPP							
Turbine 1% Efficiency	0	per FPP							

## Fisheries Related Operations

### **Smolt Monitoring Operations:**

Water temperatures dropped below 69.5F on 8/31 and the Smolt Monitoring Facility returned to sampling every other day on 9/1.

### **Adult Ladder Operations:**

North and South fish ladders are operating within criteria. Entered shad mode on 6/3/21. Returned ladders to salmon mode on 7/20/21.

### **Project Operations:**

Current outages: MU7, MU8, MU5-8 (8/17-9/19 BPA line 2 reconductor), MU12, MU13, MU13-15 (BPA mod work), MU16. Summer Spill ended on 8/31 and TSW's were removed. Adult attraction flow for the North fish ladder is provided through spill bay #2 open one stop during daylight hours through November 30th.

Tailwater Average Weekly TDG: 106.9

### **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. Spillway #3 failed on 6/5/21 at 0503, the motor for spill gate #3 will need to be replaced.

### **Calibration:**

All gauges within the 0.3' criteria.

### **Bird Data:**

Cormorants have returned mainly roosting on PHFB towers and Preacher's Island. Gull numbers increasing with high numbers resting on the wing wall in the SWFB and modest numbers foraging in the tailrace mainly 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).

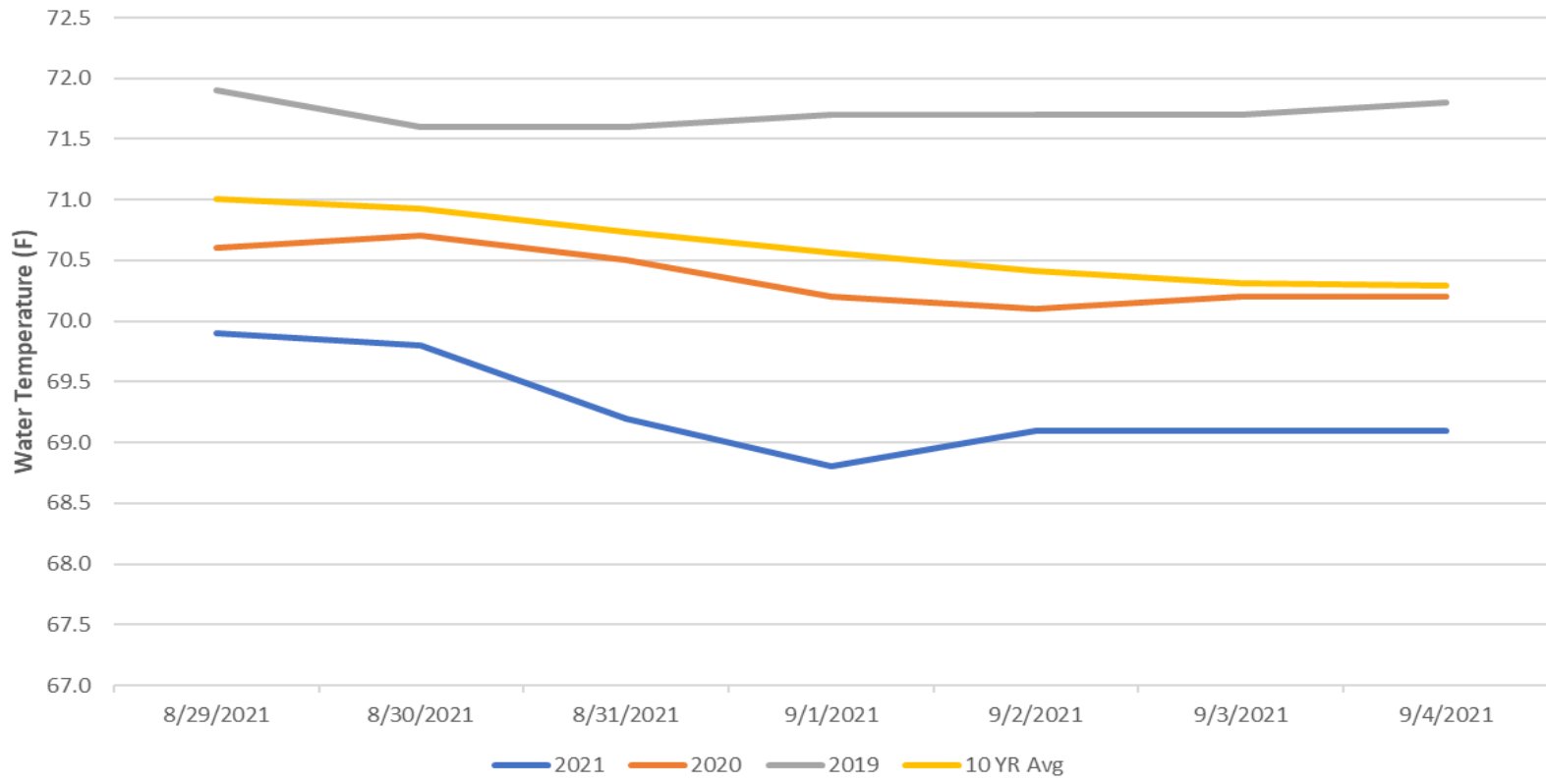
1 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 36 per day

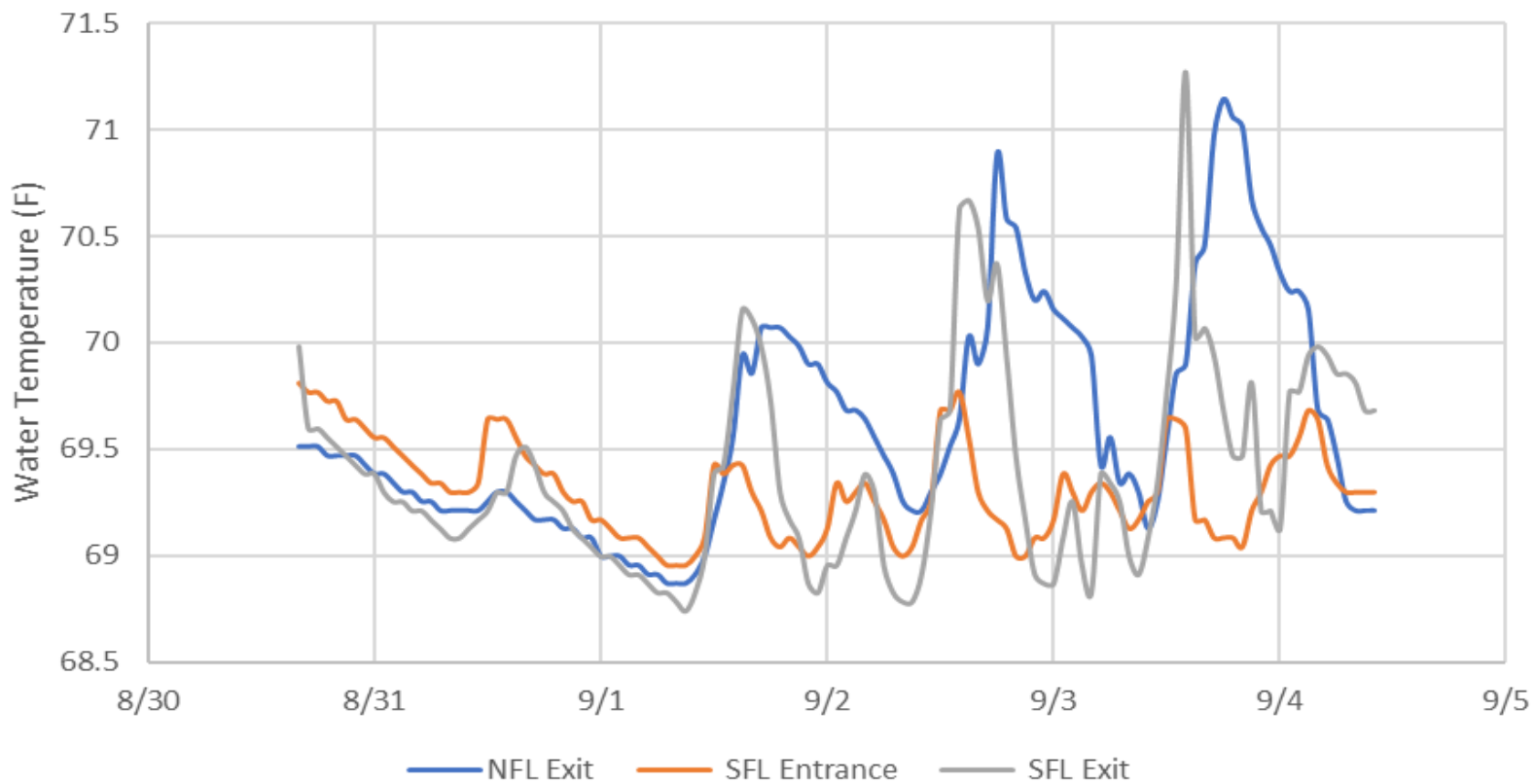
### **Research:**

PSMFC Juvenile lamprey genetic work continues.

### John Day Dam Water Temperatures (F)



### JDA Ladder Temperatures (8/30 - 9/4)



# 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)
9/1/2021	Unit 4	2.79	0,68,68	159.8
9/1/2021	Unit 12	2.90	0,68,68	159.8
9/3/2021	Unit 4	2.74	0,68,68	160.1
9/3/2021	Unit 12	2.77	0,68,68	160.1
9/4/2021	Unit 4	2.67	0,68,68	160.0
9/4/2021	Unit 12	2.75	0,68,68	160.0

Average Weekly Velocity (ft/sec)	2.77
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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	9.4	9.3	1.5	8.9	1.5	4.5	1.9	20.8	16.7	3
Sunday	10.6	10.6	1.3	10.0	1.4	4.7	1.4	20.8	12.8	3
Monday	8.9	8.8	1.3	9.0	1.6	4.6	1.9	20.7	18.6	3
Monday	10.9	10.9	1.4	10.0	1.4	4.3	1.7	20.8	16.4	3
Tuesday	8.5	8.5	1.8	8.0	1.7	4.5	1.8	20.7	26.0	3
Tuesday	8.3	8.3	1.8	8.1	1.4	4.6	1.9	20.5	24.0	3
Wednesday	9.1	9.0	1.5	9.0	1.5	4.6	1.8	1.6	1.4	1
Wednesday	8.9	8.9	1.5	9.3	1.5	4.6	1.8	1.6	1.4	1
Thursday	9.3	9.2	1.5	9.6	1.5	4.5	1.8	1.6	1.5	1
Thursday	9.2	9.2	1.5	9.3	1.5	4.6	1.8	1.6	1.5	1
Friday	9.4	9.3	1.4	9.4	1.7	4.6	1.9	1.7	1.7	1
Friday	9.2	9.2	1.5	9.3	1.7	4.6	2.0	1.7	1.7	1
Saturday	9.3	9.2	1.5	9.3	1.6	4.6	2.0	1.6	1.9	1
Saturday	9.2	9.2	1.6	9.3	1.5	4.7	2.0	1.6	1.7	1
<b>AVG:</b>	<b>9.3</b>	<b>9.3</b>	<b>1.5</b>	<b>9.2</b>	<b>1.5</b>	<b>4.6</b>	<b>1.8</b>	<b>9.8</b>	<b>9.1</b>	<b>1.9</b>

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	69.9	6.0	N/A	41
Monday	69.8	6.0	23	43
Tuesday	69.2	6.0	N/A	
Wednesday	68.8	6.0	19	25
Thursday	69.1	6.0	N/A	57
Friday	69.1	6.0	19	22
Saturday	69.1	6.0	N/A	27
<b>AVG</b>	<b>69.3</b>	<b>6.0</b>	<b>20</b>	<b>36</b>

John Day Dam  
Avian Zones



**JDA Bird Counts: 8/29/21 to 9/4/21**

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)	
29-Aug	PHFB	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	10	6	0	0	37
29-Aug	SWFB	0	0	70	164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	234
29-Aug	PH1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
29-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
29-Aug	PH3	22	10	46	0	0	0	0	0	0	0	0	0	11	5	0	0	0	0	0	0	94
29-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Aug	SW2	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
29-Aug	SW3	0	3	6	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	12
<b>Avg/Survey</b>		<b>19</b>		<b>143</b>		<b>1</b>		<b>11</b>		<b>0</b>		<b>0</b>		<b>11</b>		<b>0</b>		<b>8</b>		<b>0</b>		<b>192</b>
30-Aug	PHFB	0	0	0	2	0	0	23	0	0	0	0	0	6	0	0	0	0	10	0	0	41
30-Aug	SWFB	0	0	197	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	314
30-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
30-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	PH3	35	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	41
30-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	SW2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
30-Aug	SW3	17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
<b>Avg/Survey</b>		<b>31</b>		<b>158</b>		<b>0</b>		<b>12</b>		<b>0</b>		<b>0</b>		<b>7</b>		<b>0</b>		<b>5</b>		<b>0</b>		<b>212</b>
31-Aug	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6
31-Aug	SWFB	0	0	73	118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	191
31-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
31-Aug	PH3	0	7	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	10
31-Aug	SW1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
31-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
31-Aug	SW3	33	8	0	0	0	0	0	0	0	0	0	0	0	0	8	7	0	0	0	0	56
<b>Avg/Survey</b>		<b>26</b>		<b>96</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>4</b>		<b>8</b>		<b>3</b>		<b>0</b>		<b>136</b>
1-Sep	PHFB	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	9	0	0	0	12
1-Sep	SWFB	0	0	0	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71
1-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Sep	PH2	93	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	94
1-Sep	PH3	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
1-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Sep	SW2	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	15
1-Sep	SW3	10	0	0	17	0	0	0	0	0	0	0	0	0	1	7	0	0	0	0	0	35
<b>Avg/Survey</b>		<b>63</b>		<b>44</b>		<b>0</b>		<b>9</b>		<b>0</b>		<b>0</b>		<b>1</b>		<b>4</b>		<b>5</b>		<b>0</b>		<b>125</b>

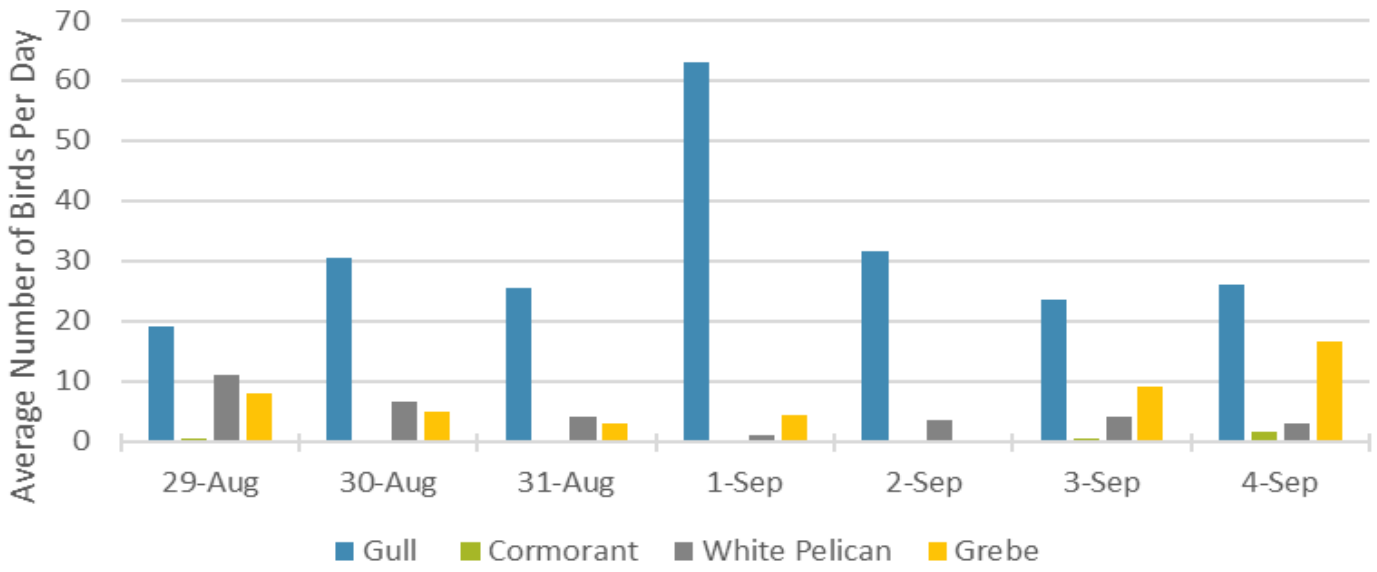


**JDA Bird Counts: 8/29/21 to 9/4/21**

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)	
2-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Sep	PH1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2-Sep	PH2	63	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	64
2-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Sep	SW2	0	0	0	0	0	0	0	17	0	0	0	0	0	0	7	0	0	0	0	0	24
2-Sep	SW3	0	0	0	14	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	0	20
<b>Avg/Survey</b>		<b>32</b>		<b>8</b>		<b>0</b>		<b>9</b>		<b>0</b>		<b>0</b>		<b>4</b>		<b>4</b>		<b>0</b>		<b>0</b>		<b>55</b>
3-Sep	PHFB	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	15	3	0	0	35
3-Sep	SWFB	0	0	75	178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	253
3-Sep	PH1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3-Sep	PH2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
3-Sep	PH3	38	0	87	0	0	0	0	0	0	0	0	0	4	3	0	0	0	0	0	0	132
3-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Sep	SW2	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	9
3-Sep	SW3	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
<b>Avg/Survey</b>		<b>24</b>		<b>172</b>		<b>1</b>		<b>13</b>		<b>0</b>		<b>0</b>		<b>4</b>		<b>0</b>		<b>9</b>		<b>0</b>		<b>221</b>
4-Sep	PHFB	0	0	0	0	0	0	8	6	0	0	0	0	0	0	0	0	15	18	0	0	47
4-Sep	SWFB	0	0	87	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	232
4-Sep	PH1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4-Sep	PH2	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
4-Sep	PH3	32	7	55	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	98
4-Sep	SW1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4-Sep	SW2	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
4-Sep	SW3	5	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	7
<b>Avg/Survey</b>		<b>26</b>		<b>144</b>		<b>2</b>		<b>12</b>		<b>0</b>		<b>0</b>		<b>3</b>		<b>0</b>		<b>17</b>		<b>0</b>		<b>203</b>
Totals		Gulls		Cormorant		Caspian tern		White Pelican		Grebe		Total										
		F	NF	F	NF	F	NF	F	NF	F	NF											
<b>Weekly Total</b>		<b>438</b>	<b>1526</b>	<b>5</b>	<b>128</b>	<b>0</b>	<b>0</b>	<b>66</b>	<b>29</b>	<b>92</b>	<b>0</b>	<b>1142</b>										
<b>Avg/Survey</b>			<b>109</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>7</b>	<b>0</b>	<b>163</b>										

### Foraging Piscivorous Birds



### Non-Foraging Piscivorous Birds

