

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/23/2021

Inspection Period: 10/17/2021 thru 10/23/2021



**US Army Corps  
of Engineers**  
Portland District

JD/WC Project-Fisheries  
P.O. Box 823  
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.

<b>John Day Dam</b>	Inspection OOC	Criteria Limit	Total Number of Inspections: 14				Temperature:	60.0 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.)	1.7					
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.6					
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.73					
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.9					
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.0					
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.0					

### 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							
Vert barrier screen drawdown	0	<1.5', wkly							
Spill volume	0	per FPP	AVG (kcfs)	1.6	Avg %	1.9			
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: MU1-4 (BPA Line 1 outage), MU2, MU7, MU8, MU12, MU13-16, MU13, 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).

### **Calibration:**

All gauges within the 0.3' criteria.

### **Bird Data:**

Steady number of cormorants mainly roosting on PHFB towers, or rocks in SW2 and SW3. Gull numbers increasing with high numbers resting on the wing wall in the SWFB and modest numbers foraging in the tailrace mainly PH1 and PH3 in the morning. Pelican numbers decreasing, mostly seen resting on Preacher's Island. Increase in number of grebes in PHFB. (see 'Bird Count' tab for details).

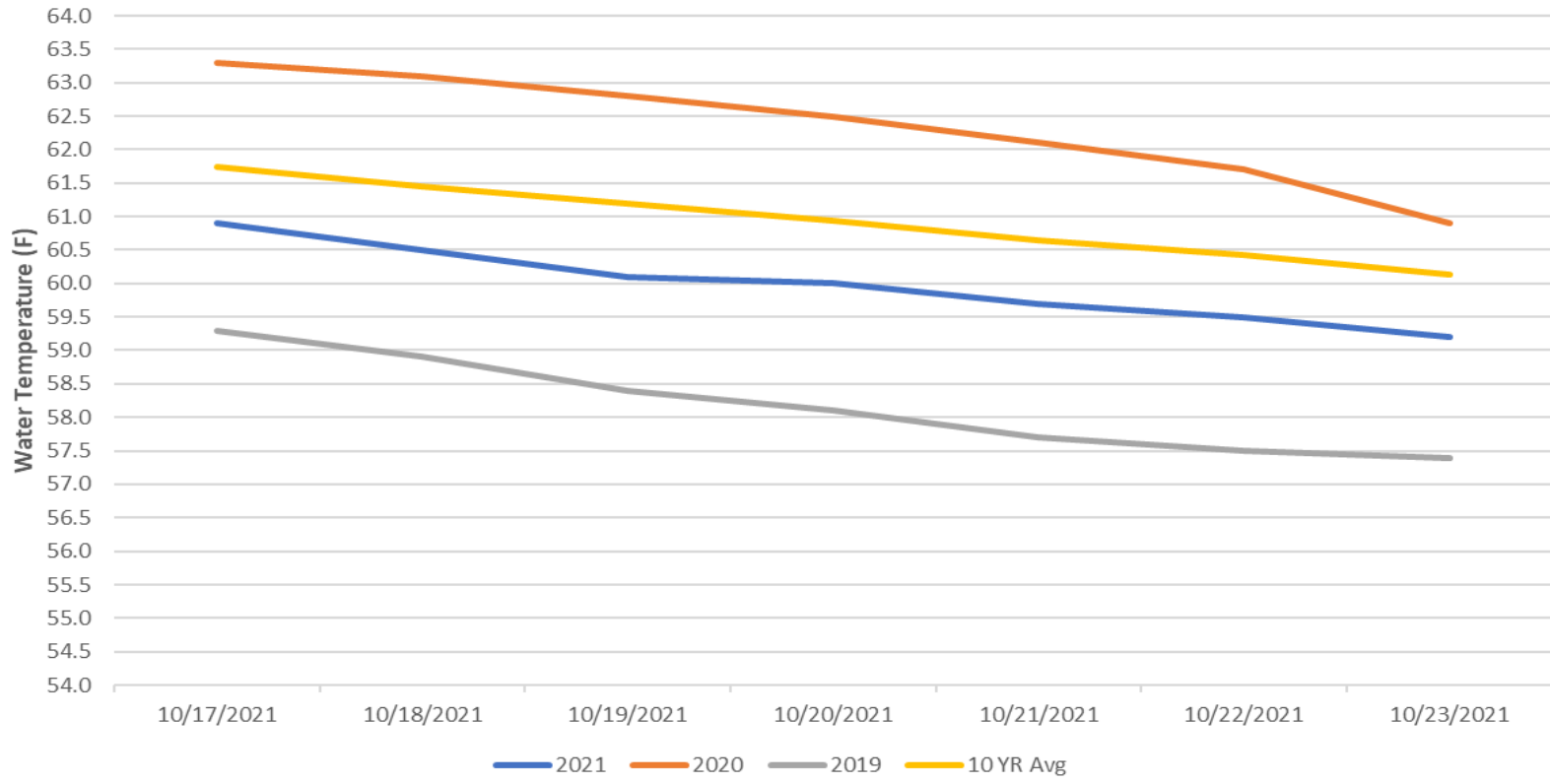
8 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 3 per day

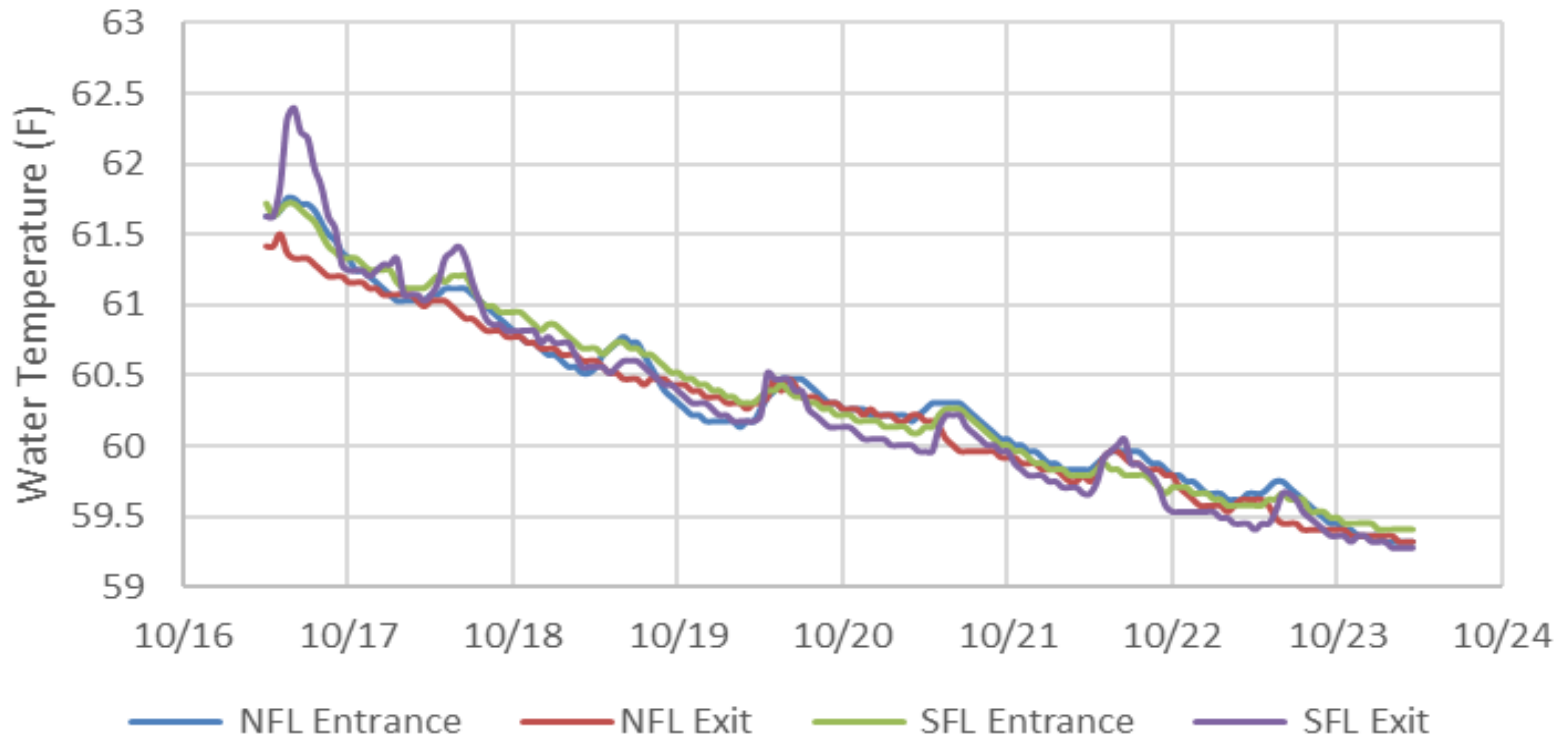
### **Research:**

None

### John Day Dam Water Temperatures (F)



### JDA Ladder Temperatures (10/17 - 10/23)



# 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)
10/17/2021	Unit 4	2.64	0,68,68	159.5
10/17/2021	Unit 12	2.83	0,68,68	159.5
10/21/2021	Unit 4	2.68	0,68,68	159.6
10/21/2021	Unit 12	2.78	0,68,68	159.6
10/22/2021	Unit 4	2.70	0,68,68	159.5
10/22/2021	Unit 12	2.78	0,68,68	159.5

Average Weekly Velocity (ft/sec)	2.73
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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	8.8	8.7	1.7	8.6	1.6	4.6	1.9	1.6	2.2	1
Sunday	9.0	8.9	1.5	8.8	1.5	4.6	1.8	1.6	2.2	1
Monday	9.3	9.2	1.8	9.1	1.4	4.6	1.6	1.6	2.0	1
Monday	9.2	9.2	1.5	9.1	1.6	4.6	1.9	1.6	2.3	1
Tuesday	9.2	9.1	1.6	8.8	1.5	4.6	1.8	1.6	1.7	1
Tuesday	9.3	9.3	1.6	8.8	1.5	4.6	1.7	1.6	1.7	1
Wednesday	9.0	8.9	1.8	8.2	1.6	4.7	1.8	1.6	1.6	1
Wednesday	9.1	9.1	1.6	8.5	1.5	4.6	1.9	1.6	1.7	1
Thursday	9.1	9.1	1.7	8.3	1.5	4.7	1.9	1.6	1.7	1
Thursday	9.4	9.4	1.6	8.8	1.6	4.5	1.9	1.6	2.3	1
Friday	8.7	8.7	1.7	8.5	1.5	4.7	2.0	1.6	1.7	1
Friday	8.4	8.3	1.7	8.0	1.7	4.6	1.9	1.6	2.2	1
Saturday	9.2	9.1	1.6	8.5	1.4	4.6	1.9	1.6	1.6	1
Saturday	8.8	8.7	1.8	8.0	1.6	4.6	2.0	1.6	1.7	1
<b>AVG:</b>	<b>9.0</b>	<b>9.0</b>	<b>1.7</b>	<b>8.6</b>	<b>1.5</b>	<b>4.6</b>	<b>1.9</b>	<b>1.6</b>	<b>1.9</b>	<b>1.0</b>

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	60.9	6.0	N/A	5
Monday	60.5	6.0	N/A	5
Tuesday	60.1	6.0	N/A	4
Wednesday	60.0	6.0	N/A	0
Thursday	59.7	6.0	N/A	3
Friday	59.5	6.0	N/A	4
Saturday	59.2	6.0	N/A	3
<b>AVG</b>	<b>60.0</b>	<b>6.0</b>	<b>N/A</b>	<b>3</b>

John Day Dam  
Avian Zones



**JDA Bird Counts: 10/17/21 to 10/23/21**

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)	
17-Oct	PHFB	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	56	0	0	60
17-Oct	SWFB	0	0	352	587	0	0	5	0	0	0	0	0	0	0	0	0	85	0	0	0	1029
17-Oct	PH1	2	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
17-Oct	PH2	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
17-Oct	PH3	14	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
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	0	11	23	0	0	0	0	0	0	0	0	0	0	0	0	34
17-Oct	SW3	0	0	9	9	0	0	27	31	0	0	0	0	0	0	0	0	0	0	0	0	76
<b>Avg/Survey</b>		<b>27</b>		<b>479</b>		<b>1</b>		<b>51</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>71</b>		<b>0</b>		<b>627</b>
18-Oct	PHFB	0	0	88	153	0	0	0	0	0	0	0	0	0	0	0	0	73	175	0	0	489
18-Oct	SWFB	0	0	550	650	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	1225
18-Oct	PH1	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
18-Oct	PH2	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
18-Oct	PH3	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Oct	SW3	0	0	4	0	0	0	25	20	0	0	0	0	0	0	0	0	0	0	0	0	49
<b>Avg/Survey</b>		<b>50</b>		<b>723</b>		<b>0</b>		<b>23</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>137</b>		<b>0</b>		<b>932</b>
19-Oct	PHFB	0	0	23	0	0	0	21	0	0	0	0	0	0	0	0	0	118	53	0	0	215
19-Oct	SWFB	0	0	387	201	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	588
19-Oct	PH1	5	38	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
19-Oct	PH2	23	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
19-Oct	PH3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
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	0	43	0	0	0	0	0	0	0	0	0	0	0	0	43
19-Oct	SW3	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
<b>Avg/Survey</b>		<b>47</b>		<b>311</b>		<b>1</b>		<b>32</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>86</b>		<b>0</b>		<b>476</b>
20-Oct	PHFB	10	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	97	88	0	0	218
20-Oct	SWFB	0	0	327	227	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	554
20-Oct	PH1	4	132	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141
20-Oct	PH2	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
20-Oct	PH3	17	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
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	0	37	0	0	0	0	0	0	0	0	0	0	0	0	37
20-Oct	SW3	0	0	0	0	0	0	11	4	0	0	0	0	0	0	0	0	0	0	0	0	15
<b>Avg/Survey</b>		<b>117</b>		<b>289</b>		<b>3</b>		<b>26</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>93</b>		<b>0</b>		<b>526</b>



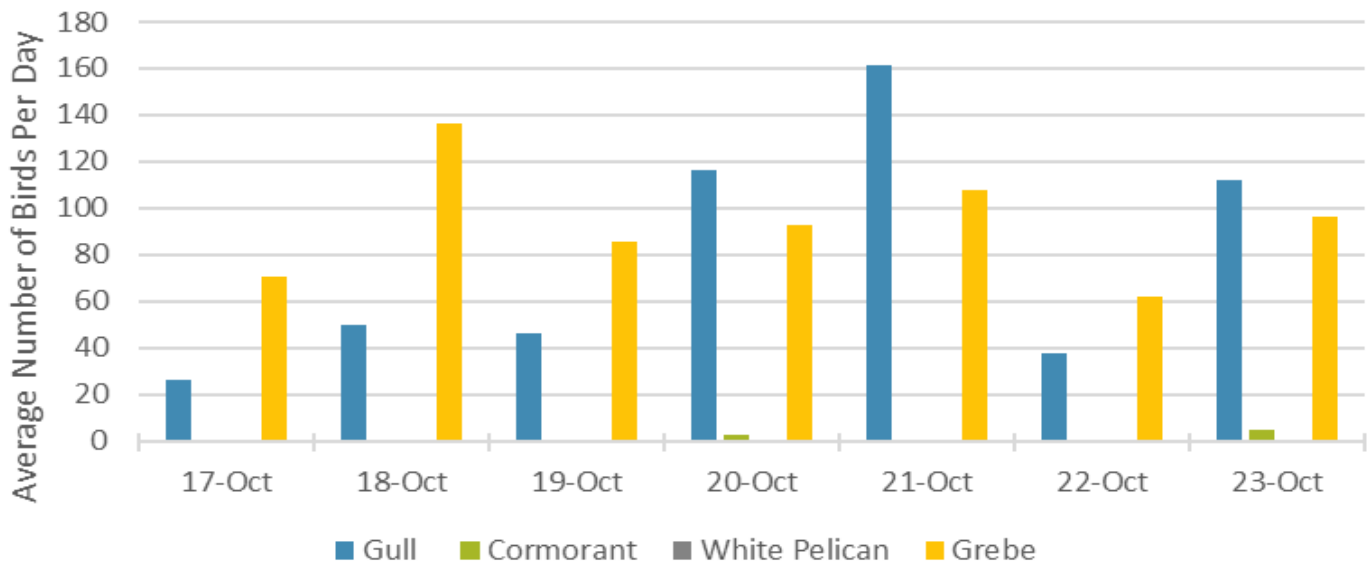
**JDA Bird Counts: 10/17/21 to 10/23/21**

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)	
21-Oct	PHFB	0	0	501	18	0	0	0	0	0	0	0	0	0	0	0	0	148	67	0	0	734
21-Oct	SWFB	0	0	237	612	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	849
21-Oct	PH1	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
21-Oct	PH2	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
21-Oct	PH3	40	233	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	273
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	27	32	0	0	0	0	0	0	0	0	0	0	0	0	59
21-Oct	SW3	10	0	47	0	0	0	41	41	0	0	0	0	0	0	0	0	0	0	0	0	139
<b>Avg/Survey</b>		<b>162</b>		<b>708</b>		<b>0</b>		<b>71</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>108</b>		<b>0</b>		<b>1047</b>
22-Oct	PHFB	0	0	0	144	0	0	0	0	0	0	0	0	0	0	0	0	76	48	0	0	268
22-Oct	SWFB	0	0	878	618	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1496
22-Oct	PH1	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
22-Oct	PH2	4	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
22-Oct	PH3	23	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
22-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Oct	SW2	0	0	0	0	0	0	47	29	0	0	0	0	0	0	0	0	0	0	0	0	76
22-Oct	SW3	0	0	14	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	31
<b>Avg/Survey</b>		<b>38</b>		<b>827</b>		<b>1</b>		<b>47</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>62</b>		<b>0</b>		<b>974</b>
23-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122	70	0	0	192
23-Oct	SWFB	0	0	761	818	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1579
23-Oct	PH1	11	11	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
23-Oct	PH2	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
23-Oct	PH3	156	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	178
23-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Oct	SW2	8	0	0	0	0	0	13	39	0	0	0	0	0	0	0	0	0	0	0	0	60
23-Oct	SW3	0	0	0	0	0	3	34	0	0	0	0	0	0	0	0	0	0	0	0	0	37
<b>Avg/Survey</b>		<b>112</b>		<b>790</b>		<b>5</b>		<b>43</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>96</b>		<b>0</b>		<b>1046</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>1102</b>	<b>8249</b>	<b>18</b>	<b>582</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1301</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>						
<b>Avg/Survey</b>	<b>79</b>	<b>589</b>	<b>1</b>	<b>42</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>0</b>	<b>0</b>						

## Foraging Piscivorous Birds



## Non-Foraging Piscivorous Birds

