

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 7/11/2020

Inspection Period: 7/5/2020 thru 7/11/2020



**US Army Corps  
of Engineers**  
Portland District

JD/WC Project-Fisheries  
P.O. Box 823  
Rufus, Oregon 97050  
Phone: 541-506-7860

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:	63.1 F
							Secchi:	5.7 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.)	1.5				
<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.)	1.3				
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.2				
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.)	1.6				
Entrance weir NE1	1	depth (≥ 8')	AVG (Ft.)	9.1				
Entrance weir NE2	1	depth (≥ 8')	AVG (Ft.)	9.1				
<b>JUVENILE PASSAGE</b>								
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6				
Submersible traveling screens	0	visual inspect						
Turbine trashrack drawdown	0	<1.5', wkly						
Vert barrier screen drawdown	0	<1.5', wkly						
Spill volume	0	per FPP	Avg (kcfs)	83.3		Forebay Avg Weekly TDG:	106.19	
Spill pattern	0	per FPP	Avg %	35.2		Tailwater Avg Weekly TDG:	117.29	
Turbine Unit Priority	0	per FPP	# Spillbays	19		Unit Priority with TSW: 5,1,3,16,14,12,10,8,15,2,11,7,4,13,9,6		
Turbine 1% Efficiency	0	per FPP						

## Fisheries Related Operations

### **Smolt Monitoring Operations:**

Condition sampling started 4/01/2020 and with COVID-19 restrictions, Oregon and Washington stay at home orders, and USACE limited staffing levels, the SMF will continue limited conditioning sampling (every other day) until further notice.

### **Adult Ladder Operations:**

JD South Adult Fishway was out of criteria (NE 1 and NE 2) July 6th  
JD North Adult Fishway is operating within criteria.

### **Project Operations:**

Currently 6 of 16 units are unavailable (6,7,8,10,12,15)  
Spillbay #11 went OOS on July 9th. RTS to be determined

### **Maintenance:**

SMF SCADA update completed 17 March 2020. JD Electricians are working on SCADA programming and controls. Slowed by COVID-19 availability  
JD North Fishway's pump 4 has been pulled for maintenance. - JD Maintenance continue repairs of AWS fish pump 4. RTS has yet TBD.  
Calibration - All gauges within the 0.3' criteria. However NE-1, NE-2, Bay 19 tw, and Bay 19 ch sensors OOC - Running in manual mode (0 out of criteria inspections). These OOC are believed to be related to the unfinished SCADA upgrades (lack of comms)

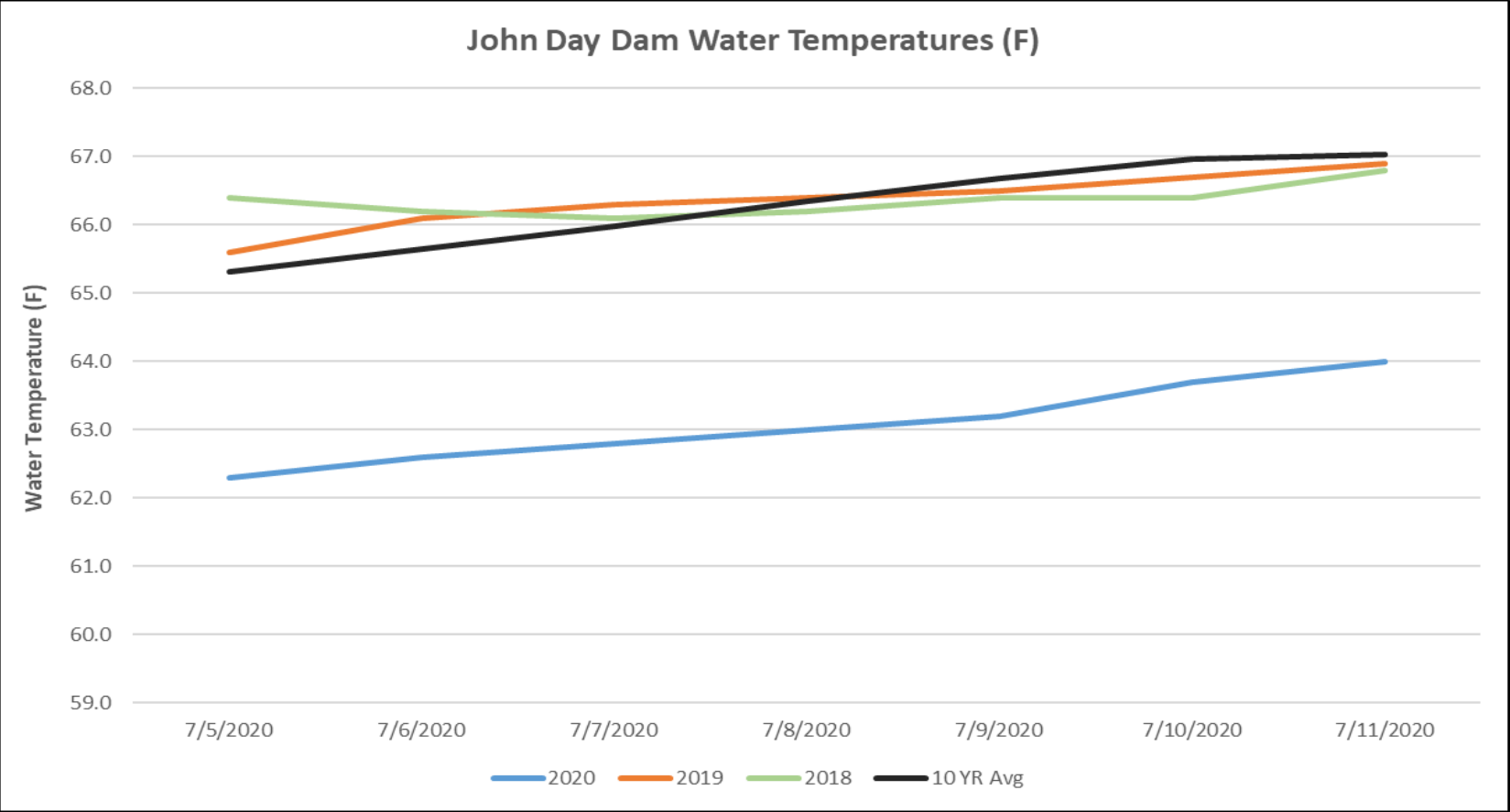
### **Bird Data:**

Few foraging gulls this week, high number of foraging pelicans (see 'Bird Count' tab for details).  
All 125 avian lines in place without any deficiencies.  
Pelicans on Preacher's Island: averaged 300-500 per day

### **Research:**

CRITFC genetics study at SMF

Approved by: Ron Twiner, Acting OPM



JDA Fishladder Temperatures (F) (7/1/20 - 7/7/20)



## 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)
7/7/2020	Unit 4	2.60	0,68,68	162.10
7/7/2020	Unit 12	2.48	0,68,68	162.10
7/10/2020	Unit 4	2.56	0,68,68	162.20
7/10/2020	Unit 12	2.61	0,68,68	162.20
7/11/2020	Unit 4	2.49	0,68,68	161.80
7/11/2020	Unit 12	2.57	0,68,68	161.80

Average Weekly Velocity (ft/sec)

2.55

## 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	8.3	8.5	1.5	8.9	1.5	4.5	2.0	85.9	34.7	19
Sunday	8.2	8.4	1.2	8.9	1.6	4.6	2.0	90.8	35.2	19
Monday	7.5	7.5	1.5	9.4	1.5	4.6	1.8	70.4	35.1	19
Monday	9.1	9.1	1.2	9.5	1.5	4.6	1.7	74.9	35.4	19
Tuesday	9.6	9.6	1.2	9.6	1.6	4.6	1.5	77.0	35.0	19
Tuesday	9.3	9.3	1.4	9.2	1.6	4.5	1.6			19
Wednesday	9.0	9.0	1.4	8.1	1.5	4.5	1.8	80.4	34.3	19
Wednesday	9.5	9.5	1.3	9.1	1.6	4.5	1.5	84.1	36.1	19
Thursday	9.4	9.4	1.3	9.2	1.5	4.5	1.2	85.9	35.0	18
Thursday	9.0	9.0	1.2	9.4	1.5	4.7	1.7	85.9	35.1	18
Friday	9.5	9.5	1.2	9.1	1.5	4.7	1.5	84.0	34.8	18
Friday	9.9	9.9	1.7	9.6	1.5	4.6	1.6	91.0	34.9	18
Saturday	9.3	9.3	1.2	9.2	1.5	4.5	1.6	79.9	34.6	18
Saturday	10.0	10.0	1.2	9.8	1.6	4.5	1.4	92.9	37.9	18
<b>AVG:</b>	<b>9.1</b>	<b>9.1</b>	<b>1.3</b>	<b>9.2</b>	<b>1.5</b>	<b>4.6</b>	<b>1.6</b>	<b>83.3</b>	<b>35.2</b>	<b>18.6</b>

	Temp (F)	Secchi (Ft)	Fallbacks	Pelicans on Island
Sunday	62.3	5.0	N/A	200
Monday	62.6	5.0	32	75
Tuesday	62.8	6.0	NA	125
Wednesday	63.0	6.0	55	120
Thursday	63.2	6.0	N/A	120
Friday	63.7	6.0	47	80
Saturday	64.0	6.0	N/A	50

<b>AVG</b>	<b>63.1</b>	<b>5.7</b>	<b>45</b>	<b>110</b>
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John Day Dam  
Avian Zones



**JDA Bird Counts: 7/5/20 to 7/11/20**

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)	
5-Jul	PHFB	0	0	27	32	0	0	0	0	0	0	0	0	5	18	0	0	18	17	0	0	117
5-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	35	12	0	0	0	0	0	0	47
5-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	27	33	0	0	0	0	0	0	60
5-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	13	54	0	0	0	0	0	0	67
5-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	27	27	0	0	0	0	0	0	54
5-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	16	8	0	0	0	0	0	0	24
5-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	44	10	0	0	0	0	0	0	54
<b>Avg/Survey</b>		<b>0</b>		<b>30</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>165</b>		<b>0</b>		<b>18</b>		<b>0</b>		<b>423</b>
6-Jul	PHFB	22	0	0	24	0	0	0	0	0	0	0	0	7	8	0	0	0	19	0	0	80
6-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	12	13	0	0	0	0	0	0	25
6-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	28	45	0	0	0	0	0	0	73
6-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	21	55	0	0	0	0	0	0	76
6-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	62	5	0	0	0	0	0	0	67
6-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	34	8	0	0	0	0	0	0	42
6-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	74	5	0	0	0	0	0	0	79
<b>Avg/Survey</b>		<b>11</b>		<b>12</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>189</b>		<b>0</b>		<b>10</b>		<b>0</b>		<b>442</b>
7-Jul	PHFB	0	0	10	16	0	0	0	0	0	0	0	0	7	7	0	0	15	11	0	0	66
7-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jul	PH1	1	0	0	0	0	0	0	0	0	0	0	0	31	3	0	0	0	0	0	0	35
7-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	37	17	0	0	0	0	0	0	54
7-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	7	11	0	0	0	0	0	0	18
7-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0	0	37
7-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	29	28	0	0	0	0	0	0	57
7-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	21	68	0	0	0	0	0	0	89
<b>Avg/Survey</b>		<b>1</b>		<b>13</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>152</b>		<b>0</b>		<b>13</b>		<b>0</b>		<b>356</b>
8-Jul	PHFB	0	0	3	2	0	0	0	0	0	0	0	0	8	17	0	0	17	9	0	0	56
8-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	30	14	0	0	0	0	0	0	44
8-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	23	23	0	0	0	0	0	0	46
8-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	42	17	0	0	0	0	0	0	59
8-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	5	43	0	0	0	0	0	0	48
8-Jul	SW2	0	1	0	0	0	0	0	0	0	0	0	0	44	29	0	0	0	0	0	0	74
8-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	17	27	0	0	0	0	0	0	44
<b>Avg/Survey</b>		<b>1</b>		<b>3</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>170</b>		<b>0</b>		<b>13</b>		<b>0</b>		<b>371</b>

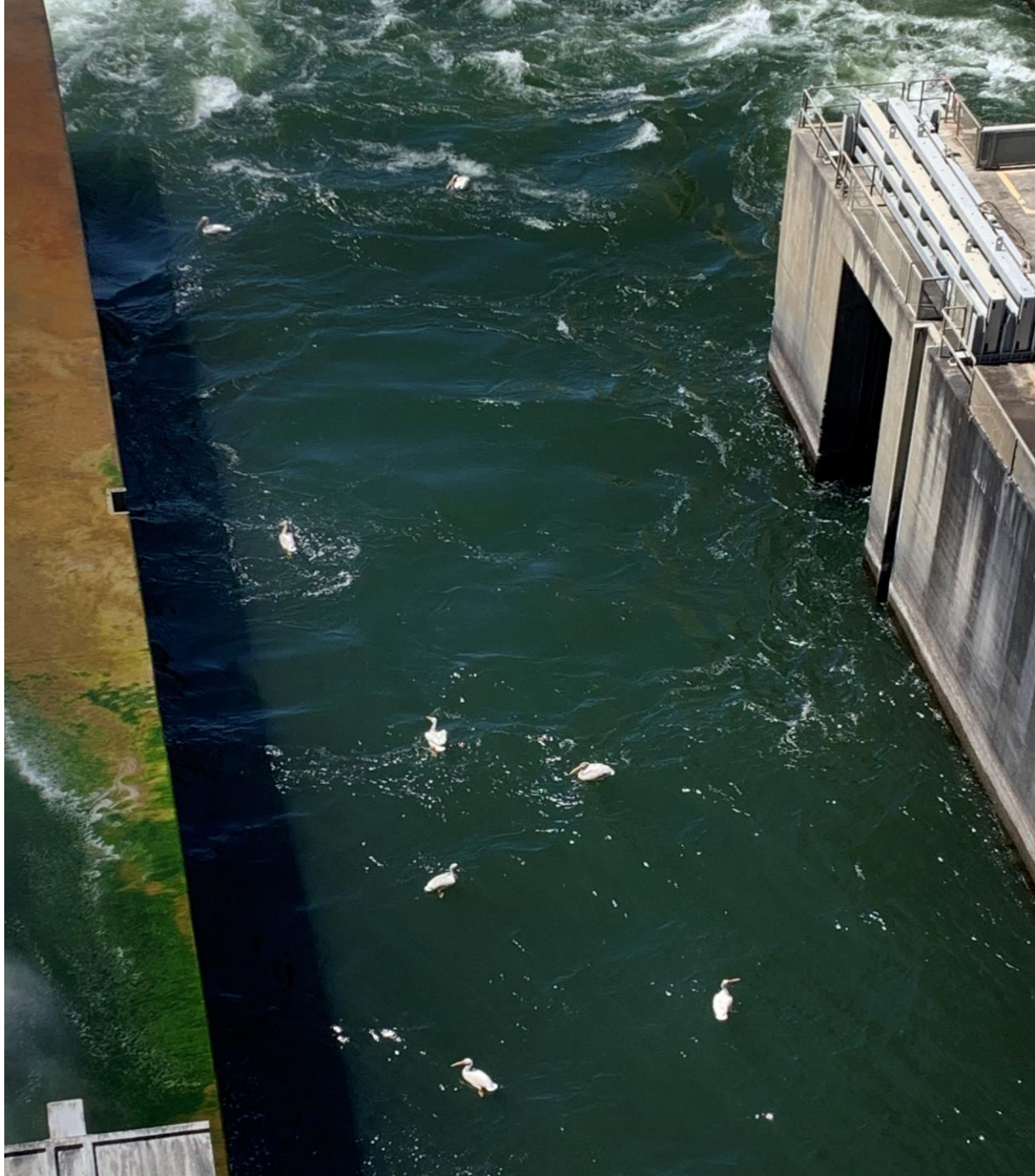


**JDA Bird Counts: 7/5/20 to 7/11/20**

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)	
9-Jul	PHFB	0	0	11	0	0	0	0	0	0	0	0	0	16	27	0	0	21	18	0	0	93
9-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	14	17	0	0	0	0	0	0	0	31
9-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	14	7	0	0	0	0	0	0	0	21
9-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	20	4	0	0	0	0	0	0	0	24
9-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	35	39	0	0	0	0	0	0	0	74
9-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	8	20	0	0	0	0	0	0	0	28
9-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	24	2	0	0	0	0	0	0	0	26
<b>Avg/Survey</b>		<b>0</b>	<b>0</b>	<b>6</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>124</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>297</b>				
10-Jul	PHFB	6	1	0	0	0	0	0	0	0	0	0	7	8	0	0	17	19	0	0	58	
10-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	20	25	30	0	0	0	0	0	0	75
10-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	50	20	0	0	0	0	0	0	0	70
10-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	70	25	0	0	0	0	0	0	0	95
<b>Avg/Survey</b>		<b>4</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>0</b>	<b>113</b>	<b>15</b>	<b>18</b>	<b>0</b>	<b>298</b>						
11-Jul	PHFB	7	14	0	0	0	0	0	0	0	0	0	13	18	0	0	10	12	0	0	74	
11-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
11-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	77	50	0	0	0	0	0	0	0	127
11-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	101	20	0	0	0	0	10	0	131	
11-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	82	15	0	25	0	0	0	0	122	
<b>Avg/Survey</b>		<b>11</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>0</b>	<b>188</b>	<b>13</b>	<b>12</b>	<b>5</b>	<b>455</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>52</b>	<b>125</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2196</b>	<b>55</b>	<b>204</b>	<b>10</b>	<b>2642</b>							
<b>Avg/Survey</b>	<b>4</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>157</b>	<b>4</b>	<b>15</b>	<b>1</b>	<b>189</b>							



Pelicans in Spillbay 1.