

# FISHWAY STATUS REPORT

**Date:** 10/6/2018  
**Inspection Period:** 9/30/2018 thru 10/6/2018



**US Army Corps  
of Engineers**  
Portland District

## JOHN DAY DAM

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.  
Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspections	Criteria	Total Number of Inspections:	14	Temperature:	65 F
	Out of Criteria	Limit			Secchi:	6.0 Ft.
<b>NORTH FISHWAY</b>			In service with all 6 AWS pumps total available.			
Exit differential	0	≤ 0.5'				
Exit Control weirs	0	High setting	High setting is normal for JDN			
Count station differential	0	≤ 0.3'				
Weir crest depth (DS gauge)	0	1.0' ± 0.1'				
Entrance differential	0	1.0' - 2.0'	AVG	1.5		
<b>SOUTH FISHWAY</b>	0		In service with two AWS turbines and two FOGs.			
Exit differential	0	≤ 0.5'				
Exit Control weirs	0	Mid setting	Mid setting is normal for JDS			
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	1.5		
Entrance weir SE1	0	depth (≥ 8')	AVG	8.4		
Collection channel velocity	0	1.5 - 4 fps	AVG	2.22		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.6		
Entrance weir NE1	0	depth (≥ 8')	AVG	8.8		
Entrance weir NE2	0	depth (≥ 8')	AVG	8.8		
<b>JUVENILE PASSAGE</b>	0		In service since 2/28.			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.6		
Submersible traveling screens	0	visual inspect	Monthly STS inspection was completed 9/25. All STSs found in good working order.			
Turbine trashrack drawdown	0	<1.5', wkly	Monthly trashrack raking completed on 9/27. Very low river debris found.			
Vert barrier screen drawdown	0	<1.5', wkly	Trashrack and VBS differentials are below the criterion of 1.5'.			
Spill volume	0	per FPP	Spill Season ended on 8/31. Bay 2 open at 1.6K for adult attraction to North Entrance on 9/1.			
Spill pattern	0	per FPP	Bay 2 open at 1.6K during daylight hours for adult attraction to North Entrance since 9/1.			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

## SMOLT MONITORING FACILITY

**Operation:**

2018 SMF Sampling Season ended on 9/15. Bypass at Switch Gate for full flow PIT detections will continue thru 30 November.  
SMF SCADA update/mods' planning by JD Electrical/ Portland District Engineers is underway. Implementation during this coming winter's outage season.

**Research:** None

**Fallbacks:** AVG: 0 MAX: 0 MIN: 0

**Birds :**

Typical fall water birds feeding on the abundant juvenile shad. See Avian Numbers tab for details.  
All 125 avian lines in place without any deficiencies.

**Operations:**

JD South Fishway in service, with two AWS turbines and two FOGs since 2/28/18. Awaiting special funding to overhaul turbines 1 & 2 ( \$ 3 million each.)  
JD North Ladder in service since 12/21/17. 6 out of 6 AWS pumps available again since 4/18/18.  
MU Gatewell Drawdowns: All MUs trashrack differentials are 1.5' or below according to twice a week inspections.

**Maintenance:**

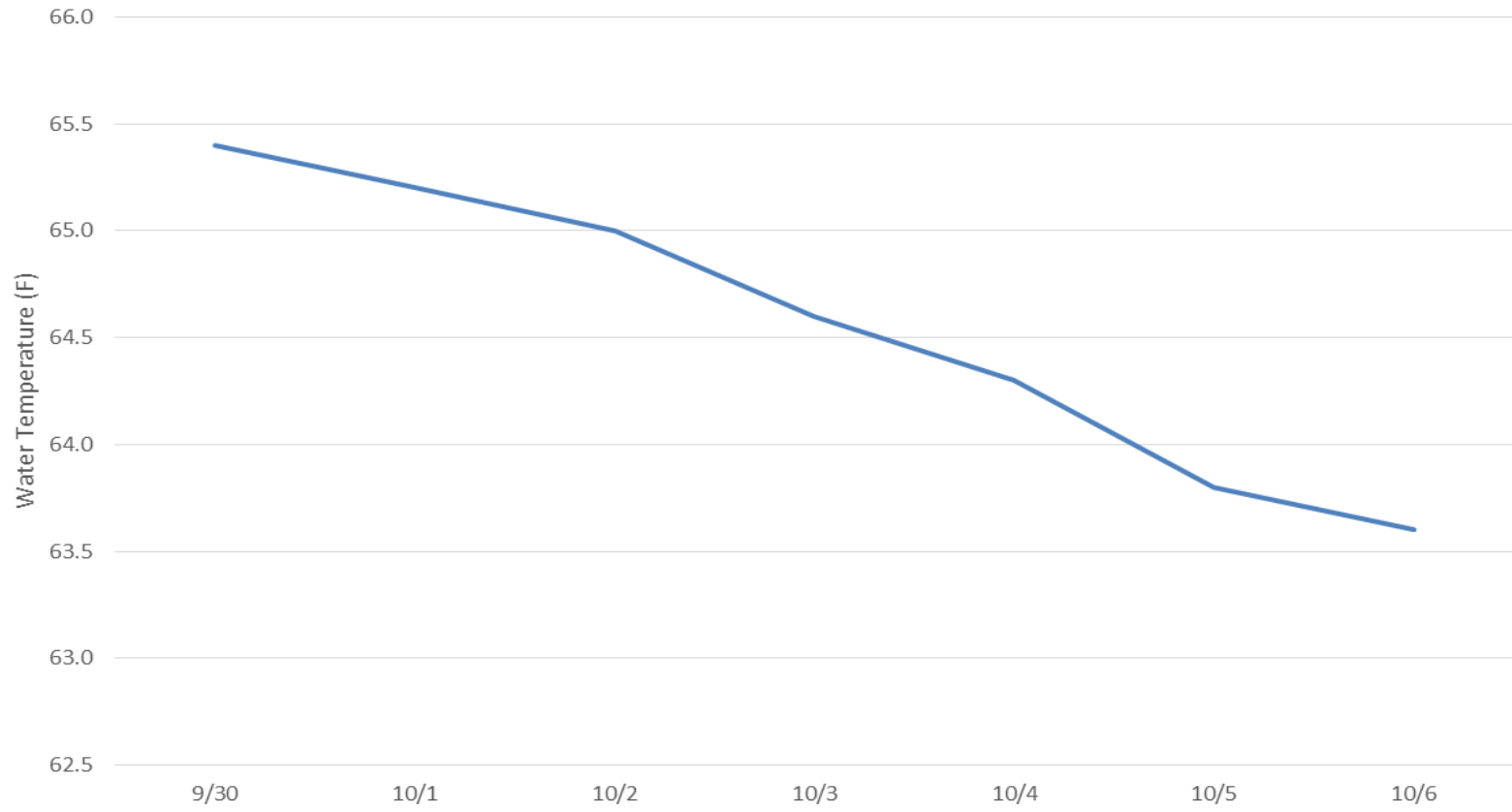
JD South AWS turbine 1 is OOS, in poor condition and urgently awaiting its overhaul as soon as \$ 3 million becomes available (hopefully in a year or two ?)  
Calibration: All gauges/ sensors are within the criteria of 0.3' .

**Research:**

JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18.  
WDFW NPM angling from JD PH Tailrace deck continues since 5/1. Catches continue slow in September, but with great seasonal total of 3,089 NPM thru 10/07.  
Uof I crew continues monitoring the RT Adult Lamprey passage at both JD Adult Fishways.

E-Signed by MOYNAHAN, KEVIN, PATRICK, 1393959157  
VERIFY authenticity with ApproveIt

JDA Water Temperature (F) 9/30/18 - 10/6/18



## JDA Collection Channel Velocity

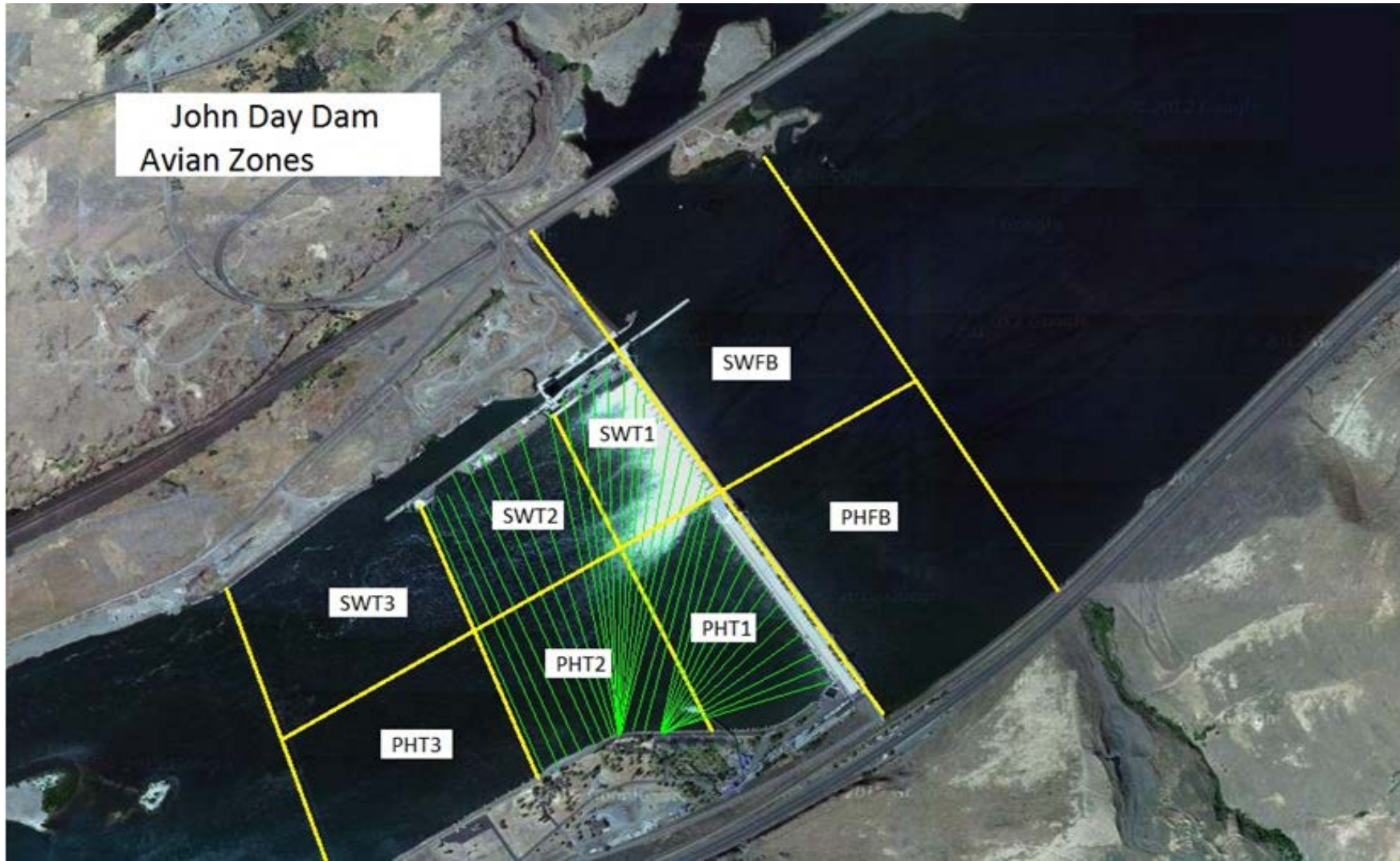
<b>Date</b>	<i>4-Oct-18</i>
<b>By:</b>	<i>MDL</i>

<b>Bay(s)</b>	<b>Time</b>	<b>Sec.</b>	<b>Velocity (f/s)</b>
<i>0-2</i>	<i>1:29</i>	<i>89</i>	<i>2.02</i>
<i>2 - 4</i>	<i>2:43</i>	<i>163</i>	<i>2.43</i>
<i>4 - 6</i>	<i>4:04</i>	<i>244</i>	<i>2.22</i>
<i>6 - 8</i>	<i>5:25</i>	<i>325</i>	<i>2.22</i>
<i>8 - 10</i>	<i>6:39</i>	<i>399</i>	<i>2.43</i>
<i>10 - 12</i>	<i>8:01</i>	<i>481</i>	<i>2.20</i>
<i>12 - 14</i>	<i>9:23</i>	<i>563</i>	<i>2.20</i>
<i>14 - 16</i>	<i>10:45</i>	<i>645</i>	<i>2.20</i>
<i>16 - 18</i>	<i>11:51</i>	<i>711</i>	<i>2.73</i>
			<b>2.29</b>

<b>Bay 19 TW:</b>	159.5
<b>Turbine 2-3:</b>	68 RPM

FPP Criteria: 1.5–4.0 feet per second (2 fps optimum)

John Day Dam  
Avian Zones



## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	65	6.0	
Mon	65	6.0	
Tue	65	6.0	
Wed	65	6.0	
Thur	64	6.0	
Fri	64	6.0	
Sat	64	6.0	
<b>AVG:</b>	<b>65</b>	<b>AVG: 6.0</b>	<b>AVG/Sample #DIV/0!</b>
			<b>MAX 0</b>
			<b>MIN 0</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.8	8.8	1.5	8.2	1.4	4.6	1.6
Sun	8.7	8.7	1.6	8.4	1.4	4.6	1.8
Mon	8.6	8.6	1.4	8.1	1.5	4.6	1.7
Mon	8.6	8.6	1.4	8.1	1.5	4.6	1.5
Tues	8.5	8.5	1.5	8.0	1.5	4.6	1.6
Tues	8.7	8.7	1.5	8.0	1.5	4.6	1.3
Wed	8.6	8.6	1.5	8.1	1.6	4.6	1.5
Wed	9.0	9.0	1.4	8.6	1.5	4.6	1.7
Thur	8.5	8.5	1.5	8.3	1.6	4.5	1.5
Thur	8.7	8.7	1.3	8.8	1.5	4.6	1.6
Fri	9.3	9.2	1.4	9.0	1.5	4.6	1.5
Fri	8.9	8.9	1.6	8.6	1.6	4.5	1.7
Sat	8.8	8.8	1.5	8.4	1.5	4.6	1.5
Sat	9.0	9.0	1.4	8.6	1.5	4.6	1.6
AVG:	8.8	8.8	1.5	8.4	1.5	4.6	1.6

**JDA Bird Counts: 9/30/18 to 10/6/18**

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)			
30-Sep	PHFB	0	0	0	0	0	0	12	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
30-Sep	SWFB	0	0	122	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	196
30-Sep	PH1	14	8	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
30-Sep	PH2	19	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
30-Sep	PH3	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
30-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Sep	SW2	0	0	0	0	0	0	11	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
30-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		26		98		1		33		0		0		0		0		0		0		0		315
1-Oct	PHFB	0	0	0	0	0	0	18	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
1-Oct	SWFB	0	0	98	104	0	0	0	0	0	0	0	0	0	0	0	0	0	47	61	0	0	0	310
1-Oct	PH1	16	9	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
1-Oct	PH2	24	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
1-Oct	PH3	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
1-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Oct	SW2	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
1-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		25		101		3		33		0		0		0		0		24		31				431
2-Oct	PHFB	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	11
2-Oct	SWFB	0	15	98	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	170
2-Oct	PH1	28	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
2-Oct	PH2	31	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
2-Oct	PH3	2	1	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
2-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		55		78		0		12		0		0		0		0		5		0				298
3-Oct	PHFB	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
3-Oct	SWFB	0	0	147	244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	391
3-Oct	PH1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
3-Oct	PH2	3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
3-Oct	PH3	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
3-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Oct	SW2	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
3-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		17		196		2		14		0		0		0		0		0		0				455

**JDA Bird Counts: 9/30/18 to 10/6/18**

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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)	
4-Oct	PHFB	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	32	45	0	45	141
4-Oct	SWFB	0	0	173	311	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	484
4-Oct	PH1	5	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
4-Oct	PH2	23	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
4-Oct	PH3	0	0	2	0	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	39
4-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Oct	SW2	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4-Oct	SW3	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Avg/Survey		18		260		1		30		0		0		0		0		39		23		737
5-Oct	PHFB	0	0	2	270	0	0	0	0	0	0	0	0	0	0	0	0	31	3	31	3	340
5-Oct	SWFB	0	0	352	330	0	0	0	0	0	0	0	0	0	0	0	0	8	0	7	0	697
5-Oct	PH1	15	31	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
5-Oct	PH2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
5-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		27		477		3		0		0		0		0		0		21		21		1095
6-Oct	PHFB	0	0	0	244	0	0	0	0	0	0	0	0	0	0	0	0	62	23	62	22	413
6-Oct	SWFB	0	0	111	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	286
6-Oct	PH1	13	35	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
6-Oct	PH2	10	3	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
6-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Oct	SW3	0	0	0	0	0	0	40	40	0	0	0	0	0	0	0	0	0	0	0	0	80
Avg/Survey		31		265		6		40		0		0		0		0		43		42		852
<b>Totals</b>		<b>Gulls</b>				<b>Cormorant</b>				<b>Caspian tern</b>				<b>White Pelican</b>				<b>Grebe</b>				<b>Total</b>
		F		NF		F		NF		F		NF		F		NF		F		NF		
<b>Weekly Total</b>		391		2949		30		321		0		0		0		0		261		231		4183
<b>Avg/Survey</b>		28		211		2		23		0		0		0		0		19		17		299