

FISHWAY STATUS REPORT

Date: 10/13/2018
 Inspection Period: 10/7/2018 thru 10/13/2018



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:	63 F
	Out of Criteria	Limit			Secchi:	6.0 Ft.
NORTH FISHWAY			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		
SOUTH FISHWAY	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	1.4		
Entrance weir SE1	0	depth (≥ 8')	AVG	8.8		
Collection channel velocity	0	1.5 - 4 fps	AVG	2.22		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.7		
Entrance weir NE1	0	depth (≥ 8')	AVG	9.6		
Entrance weir NE2	0	depth (≥ 8')	AVG	9.7		
JUVENILE PASSAGE	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' investigation by JD Electrical/ Portland District Engineers is underway. Awaiting for \$ 170 K UFR to complete in FY18.

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' .

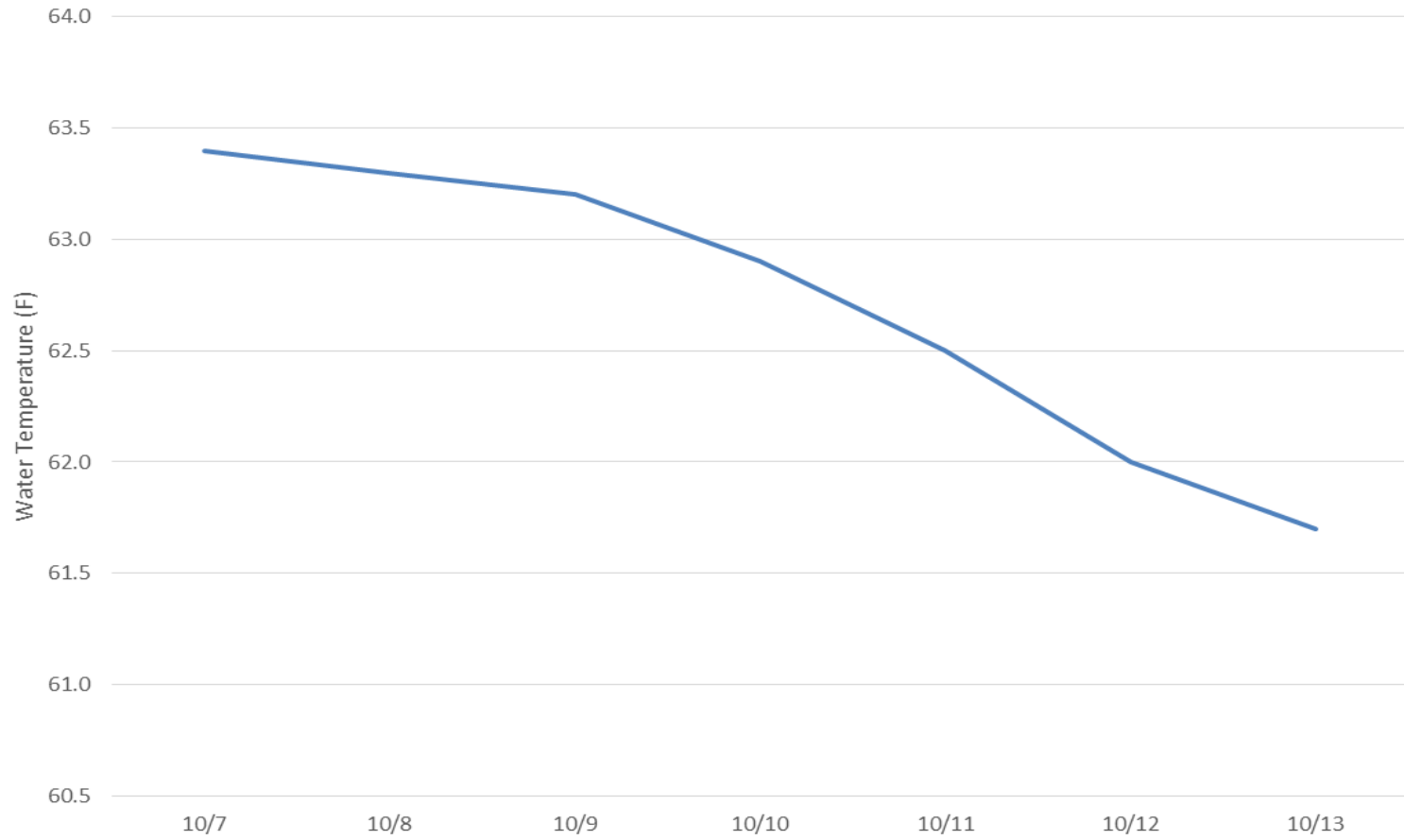
Research:

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 

MOYNAHAN, KEVIN, PATRICK, 1393959157

JDA Water Temperature (F) 10/7/18 - 10/13/18



JDA Collection Channel Velocity

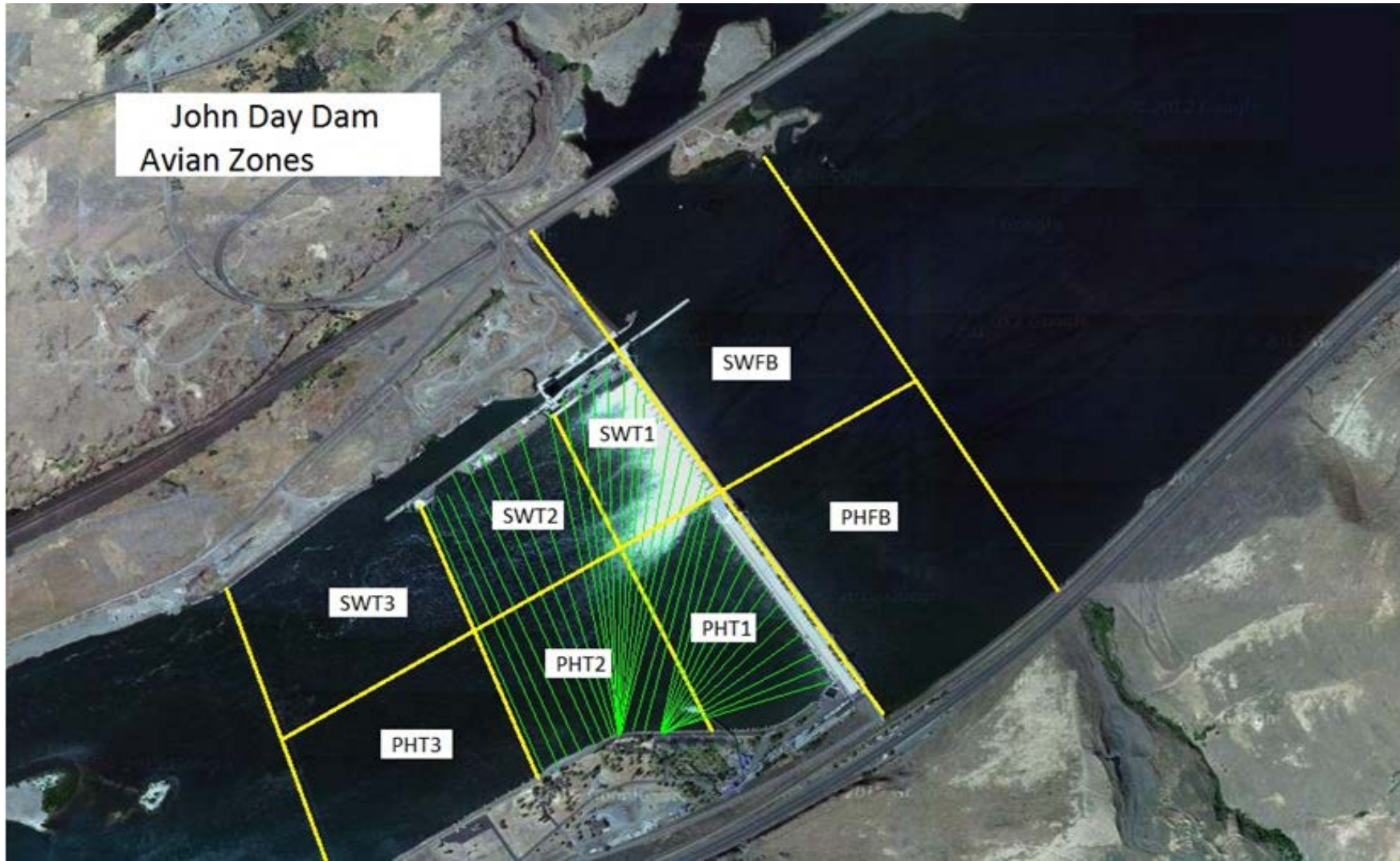
Date	<i>4-Oct-18</i>
By:	<i>MDL</i>

Bay(s)	Time	Sec.	Velocity (f/s)
<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>
			2.29

Bay 19 TW:	159.5
Turbine 2-3:	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	64	6.0	
Mon	63	6.0	
Tue	63	6.0	
Wed	63	6.0	
Thur	63	6.0	
Fri	62	6.0	
Sat	62	6.0	
AVG:	63	AVG: 6.0	AVG/Sample #DIV/0!
			MAX 0
			MIN 0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.3	9.2	1.4	10.1	1.4	4.5	1.5
Sun	9.2	9.1	1.4	8.8	1.4	4.6	1.7
Mon	9.1	9.1	1.5	8.6	1.7	4.6	1.4
Mon	9.1	9.1	1.4	8.6	1.6	4.5	1.6
Tues	9.5	9.5	1.2	9.0	1.6	4.6	1.9
Tues							
Wed	9.7	9.8	1.3	9.5	1.6	4.6	1.6
Wed	9.9	10.0	1.4	8.6	1.5	4.6	1.7
Thur	9.7	9.8	1.6	8.2	1.4	4.6	1.8
Thur	9.9	10.0	1.4	8.5	1.6	4.5	1.8
Fri	10.1	10.2	1.4	8.8	1.5	4.6	1.8
Fri	10.0	10.0	1.5	8.9	1.5	4.6	1.7
Sat	10.0	10.1	1.5	8.4	1.5	4.5	1.6
Sat	9.7	9.8	1.5	8.2	1.5	4.6	1.7
AVG:	9.6	9.7	1.4	8.8	1.5	4.6	1.7

JDA Bird Counts: 10/7/18 to 10/13/18

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)	
7-Oct	PHFB	0	0	55	244	0	1	0	0	0	0	0	0	0	0	0	0	10	51	10	51	422
7-Oct	SWFB	0	0	241	285	0	0	0	0	0	0	0	0	0	0	0	0	48	2	48	2	626
7-Oct	PH1	5	25	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
7-Oct	PH2	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
7-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-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		20		413		2		40		0		0		0		0		56		56		1169
8-Oct	PHFB	0	0	1	188	1	0	0	0	0	0	0	0	0	0	0	0	64	0	64	63	381
8-Oct	SWFB	0	0	129	395	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	589
8-Oct	PH1	35	34	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
8-Oct	PH2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Oct	SW1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Oct	SW3	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Avg/Survey		38		357		3		20		0		0		0		0		32		96		1090
9-Oct	PHFB	0	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	53
9-Oct	SWFB	0	0	0	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
9-Oct	PH1	37	63	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113
9-Oct	PH2	2	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
9-Oct	PH3	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
9-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-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		73		44		7		0		0		0		0		0		0		3		253
10-Oct	PHFB	0	0	5	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	53
10-Oct	SWFB	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
10-Oct	PH1	16	71	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90
10-Oct	PH2	2	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
10-Oct	PH3	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
10-Oct	SW1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10-Oct	SW2	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
10-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		64		43		2		4		0		0		0		0		0		2		227

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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)		
11-Oct	PHFB	21	0	0	0	22	0	0	31	0	0	0	0	0	0	0	0	17	47	0	0	138	
11-Oct	SWFB	0	0	219	252	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	471	
11-Oct	PH1	28	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	
11-Oct	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
11-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11-Oct	SW1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
11-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11-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		31		236		14		16		0		0		0		0		32		0		656	
12-Oct	PHFB	0	0	16	0	0	0	3	31	0	0	0	0	0	0	0	0	0	17	47	0	114	
12-Oct	SWFB	0	0	287	298	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	585	
12-Oct	PH1	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	
12-Oct	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
12-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12-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		16		301		0		17		0		0		0		0		9		24		731	
13-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	15	
13-Oct	SWFB	0	0	39	202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	241	
13-Oct	PH1	25	42	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	
13-Oct	PH2	11	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	
13-Oct	PH3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
13-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13-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		49		121		4		0		0		0		0		0		0		8		361	
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total	
		F		NF		F		NF		F		NF		F		NF		F		NF			
Weekly Total		579		3025		60		193		0		0		0		0		256		374			4487
Avg/Survey		41		216		4		14		0		0		0		0		18		27		321	