

# FISHWAY STATUS REPORT

Date: 10/28/2017  
 Inspection Period: 10/22/2017 thru 10/28/2017



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:	57 F
	Out of Criteria	Limit			Secchi:	6.0 Ft.
<b>NORTH FISHWAY</b>			In service with all 6 AWS pumps available since 1/19/17.			
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>			In service since 3/3/17 with 2 out of 3 AWS turbines available.			
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	1	depth (≥ 8')	AVG	8.6	OOO at 7.7' on 10/23 PM. Adjusted immediately.	
Collection channel velocity	0	1.5 - 4 fps	AVG	2.35		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.6		
Entrance weir NE1	0	depth (≥ 8')	AVG	9.3		
Entrance weir NE2	0	depth (≥ 8')	AVG	9.0		
<b>JUVENILE PASSAGE</b>			JBS in service since 3/30/17.			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.6		
Submersible traveling screens	0	visual inspect	STS camera inspection completed 10/19. All STSs found undamaged in good working condition.			
Turbine trashrack drawdown	0	<1.5', wkly	Trashrack Crane in service since 6/01.			
Vert barrier screen drawdown	0	<1.5', wkly				
Spill volume	0	per FPP	Bay 2 at 1.6 cfs for adult attraction to the North Fishway entrance 1 Sept. thru 30 Nov.			
Spill pattern	0	per FPP	Bay 2 only.			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

## SMOLT MONITORING FACILITY

**Operation:**

SMF sampling concluded for the 2017 season on 15 September. SMF continues in bypass at Switch Gate for PIT detections through 30 November.

**Maintenance:**

SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway.

**Research:** None

**Birds :**

see the Avian Numbers tab.

6 Tower-to-Tower, 6 Spillway, 4 Navlock and 7 PH lines (3 failed on 10/18) are missing out of 125 grid's total. They will be reinstalled for the 2018 passage season.

**Operations:**

SE1 entrance weir was OOC at 7.7' for a few hrs, on 10/23 PM due to manual rather than PLC operation. Caused by faulty TW sensor's stillwell. Sensor is proposed to be relocated into PVC pipe by JD Electricians this coming winter.

Bay 2 at 1.6 cfs for adult attraction to the North Fishway entrance 1 Sept. thru 30 Nov.

JD South Fishway in service with two AWS Turbines and meeting all FPP criteria since 3/3/17.

JD North Fishway in service with all 6 AWS pumps available and meeting all FPP criteria since 1/19/17.

MU Gatewell Drawdowns: weekly or more frequently as necessary.

**Maintenance:**

JD STS crane's emergency repairs were all completed in February with the minor glitches/ adjustments continuing. The crane remains in a risky operational condition until it's replaced with a brand new machine. However, the \$ 5 million for its replacement is not yet available.

Calibration: All gauges/ sensors are within the criteria of 0.3' .

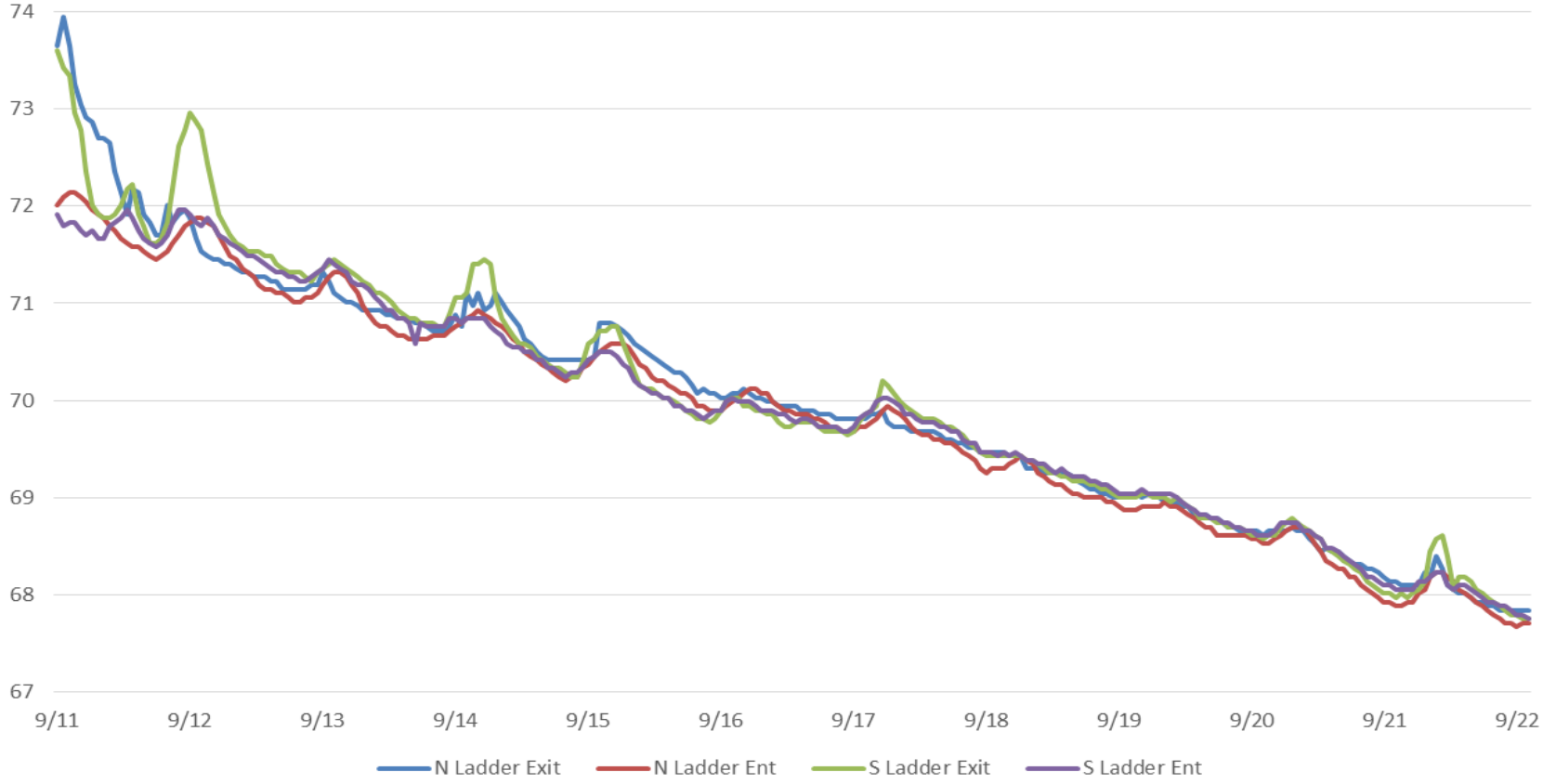
**Research:**

WDFW angling crew ended the pikeminnow removal from JD PH tailrace on 10/08. **Great annual catch of 3,472 NPM in 2017.**

Adult PIT antennas' installation at JD South Fishway finished on 23 Feb. Both ladders' antennas in service with temporary power sources. Phase 2 support contract to install building/ office spaces plus electrical and Gorgenet hookups completed by 10/14/17. PSMFC crew continues with Wi-Fi installation.

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

Fishladder Water Temps JDA (9/11/17 - 9/22/17)



## JDA Collection Channel Velocity

**Date** 18-Oct-17

**By:** MDL

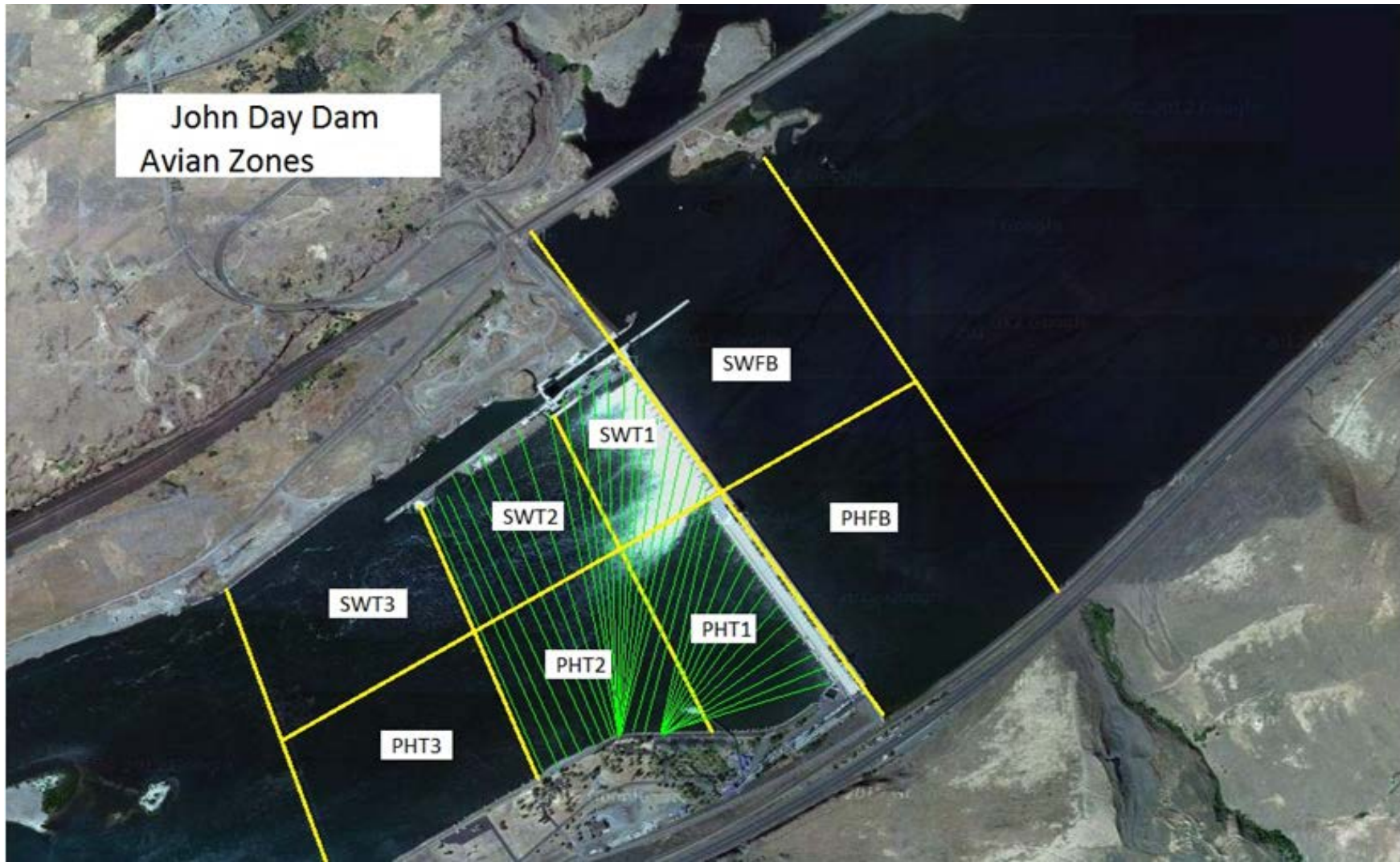
Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:20	80	2.25
2 - 4	2:39	159	2.28
4 - 6	4:00	240	2.22
6 - 8	5:27	327	2.07
8 - 10	6:40	400	2.47
10 - 12	7:54	474	2.43
12 - 14	9:10	550	2.37
14 - 16	10:22	622	2.50
16 - 18	11:32	692	2.57
			<b>2.35</b>

TW Bay19 = 159.5

RPMs: 68/68 (2&3) (1 @ 0)

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	58	6.0	NA
Mon	58	6.0	NA
Tue	58	6.0	NA
Wed	57	6.0	NA
Thur	57	6.0	NA
Fri	57	6.0	NA
Sat	57	6.0	NA
<b>AVG:</b>	<b>57</b>	<b>AVG: 6.0</b>	<b>AVG: NA</b>
			<b>MAX: NA</b>
			<b>MIN: NA</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.1	8.8	1.3	8.9	1.6	4.6	1.4
Sun	8.6	8.3	1.5	8.3	1.6	4.6	1.4
Mon	9.4	9.1	1.4	8.3	1.4	4.6	1.7
Mon	8.9	8.6	1.3	7.7	1.6	4.6	1.7
Tues	9.5	9.2	1.2	9.1	1.3	4.5	1.5
Tues	10.0	9.7	1.3	9.5	1.4	4.6	1.4
Wed	10.1	9.8	1.6	8.4	1.6	4.5	1.8
Wed	9.7	9.4	1.3	8.9	1.5	4.5	1.4
Thur	9.1	8.8	1.4	8.4	1.6	4.6	1.6
Thur	9.3	9.0	1.3	8.7	1.6	4.5	1.6
Fri	9.1	8.8	1.5	8.4	1.5	4.6	1.6
Fri	9.2	8.9	1.4	8.6	1.6	4.6	1.6
Sat	9.1	8.8	1.4	8.4	1.6	4.6	1.5
Sat	9.2	8.9	1.5	8.5	1.5	4.6	1.6
<b>AVG:</b>	<b>9.3</b>	<b>9.0</b>	<b>1.4</b>	<b>8.6</b>	<b>1.5</b>	<b>4.6</b>	<b>1.6</b>

### JDA Bird Counts

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)	
22-Oct	PHFB	0	0	151	0	0	0	0	0	0	0	0	0	0	0	0	0	91	0	100	0	<b>342</b>	
22-Oct	SWFB	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>100</b>
22-Oct	PH1	21	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>24</b>
22-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
22-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
22-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
22-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
22-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>vvg/Survey</b>		<b>11</b>		<b>126</b>		<b>2</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>46</b>		<b>50</b>		<b>466</b>	
23-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
23-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
23-Oct	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
23-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
23-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
23-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
23-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
23-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>vvg/Survey</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>0</b>		<b>0</b>	
24-Oct	PHFB	0	0	8	0	0	0	26	0	0	0	0	0	0	0	5	125	0	0	117		<b>281</b>	
24-Oct	SWFB	0	0	181	210	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>396</b>
24-Oct	PH1	55	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>57</b>
24-Oct	PH2	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>19</b>
24-Oct	PH3	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>9</b>
24-Oct	SW1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>1</b>
24-Oct	SW2	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>9</b>
24-Oct	SW3	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>9</b>
<b>vvg/Survey</b>		<b>46</b>		<b>200</b>		<b>2</b>		<b>20</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>3</b>		<b>63</b>		<b>59</b>		<b>781</b>	
25-Oct	PHFB	0	0	37	0	0	0	18	0	0	0	0	0	0	0	106	0	0	0			<b>161</b>	
25-Oct	SWFB	0	0	299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>299</b>
25-Oct	PH1	56	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>58</b>
25-Oct	PH2	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>47</b>
25-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
25-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
25-Oct	SW2	0	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>33</b>
25-Oct	SW3	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>16</b>
<b>vvg/Survey</b>		<b>52</b>		<b>168</b>		<b>1</b>		<b>34</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>53</b>		<b>0</b>		<b>614</b>	

**JDA Bird Counts: ### to ###**

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)
26-Oct	PHFB	0	0	0	0	0	0	336	0	0	0	0	0	0	0	0	0	0	0	112	121	569
26-Oct	SWFB	0	0	176	133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	309
26-Oct	PH1	51	6	0	0	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	69	
26-Oct	PH2	25	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	
26-Oct	PH3	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
26-Oct	SW1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
26-Oct	SW2	7	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	42	
26-Oct	SW3	49	0	0	0	0	0	28	15	0	0	0	0	0	0	0	0	0	0	0	92	
avg/Survey		75		155		8		207		0		0		0		0		117			1121	
27-Oct	PHFB	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	22	0	100	110	258
27-Oct	SWFB	0	0	289	300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	589
27-Oct	PH1	106	94	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	207	
27-Oct	PH2	29	53	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	86	
27-Oct	PH3	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
27-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
27-Oct	SW2	10	0	0	0	0	0	21	38	0	0	0	0	0	0	0	0	0	0	0	69	
27-Oct	SW3	28	0	0	0	0	0	45	46	0	0	0	0	0	0	0	0	0	0	0	119	
avg/Survey		166		295		6		88		0		0		0		0		11		105	1340	
28-Oct	PHFB	0	0	22	49	0	0	45	0	0	0	0	0	0	0	0	16	0	109	115	356	
28-Oct	SWFB	0	0	488	347	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	840	
28-Oct	PH1	61	48	32	0	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	153	
28-Oct	PH2	16	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	
28-Oct	PH3	57	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	
28-Oct	SW1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
28-Oct	SW2	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	38	
28-Oct	SW3	51	0	0	0	0	0	52	53	0	0	0	0	0	0	0	0	0	0	0	156	
avg/Survey		128		469		8		97		0		0		0		0		8		112	1642	
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	F	NF			
Weekly Total		954	2822	49	890	0	0	0	5	360	884			5964								
avg/Survey		68	202	4	64	0	0	0	0	26	63			426								