

FISHWAY STATUS REPORT

Date: 5/27/2017
 Inspection Period: 5/21/2017 thru 5/27/2017



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:	55 F
	Out of Criteria	Limit			Secchi:	3.5 Ft.
NORTH FISHWAY			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		
SOUTH FISHWAY			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	1.1		
Entrance weir SE1	0	depth (≥ 8')	AVG	8.1		
Collection channel velocity	0	1.5 - 4 fps	AVG			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.9		
Entrance weir NE1	0	depth (≥ 8')	AVG	10.9		
Entrance weir NE2	0	depth (≥ 8')	AVG	10.9		
JUVENILE PASSAGE			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 detected two bad screens; replaced with working spares by 5/25.			
Turbine trashrack drawdown	0	<1.5', wkly	Trashrack Crane OOS on 5/24 due to the clutch issues.			
Vert barrier screen drawdown	0	<1.5', wkly				
Spill volume	0	FOP	Fish spill continues since per FOP. Bay 20 reduced to 3 stops since 5/23 (see JDA08MFR)			
Spill pattern	0	TSW per FPP	All Spillway bays in service since 5/22.			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

SMOLT MONITORING FACILITY

Operation:

SMF in service since 3/28 with every other day, 24 hrs condition sampling.

Maintenance:

STS annual maintenance all complete in mid-May.

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

Research: Approval of access' letters are being sent out for this year's research/access requests

Birds :

USDA gull hazing from a boat downstream of JD Tailrace BRZ continues since 5/15. The numbers of gulls fishing at JD have been low so far in 2017. see the Avian Numbers tab.

6 Tower-to-Tower, 3 spillway (2 failed in May,) 2 Navlock and 2 PH lines are missing out of 125 grid's total. They will be reinstalled for the 2018 passage season.

Operations:

Spillbay #20 was reduced to 3 stops on 5/23 after two adult chinook salmon were found stranded on the adjacent tailrace deck (see JDA08MFR.)

Spillbay # 17 brakes were fixed and it returned to service on 5/16. Spillbays 3 & 5 repaired/ returned to service on 5/22. All JD Spillway bays are in service!

Trashrack Crane OOS due to its clutch issues on 5/24. ETR is the next week.

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:

Trashrack Crane OOS again, on 5/24. JD Maintenance plans to replace its clutch, with a new spare (on hand:) ETR is the next week.

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' .

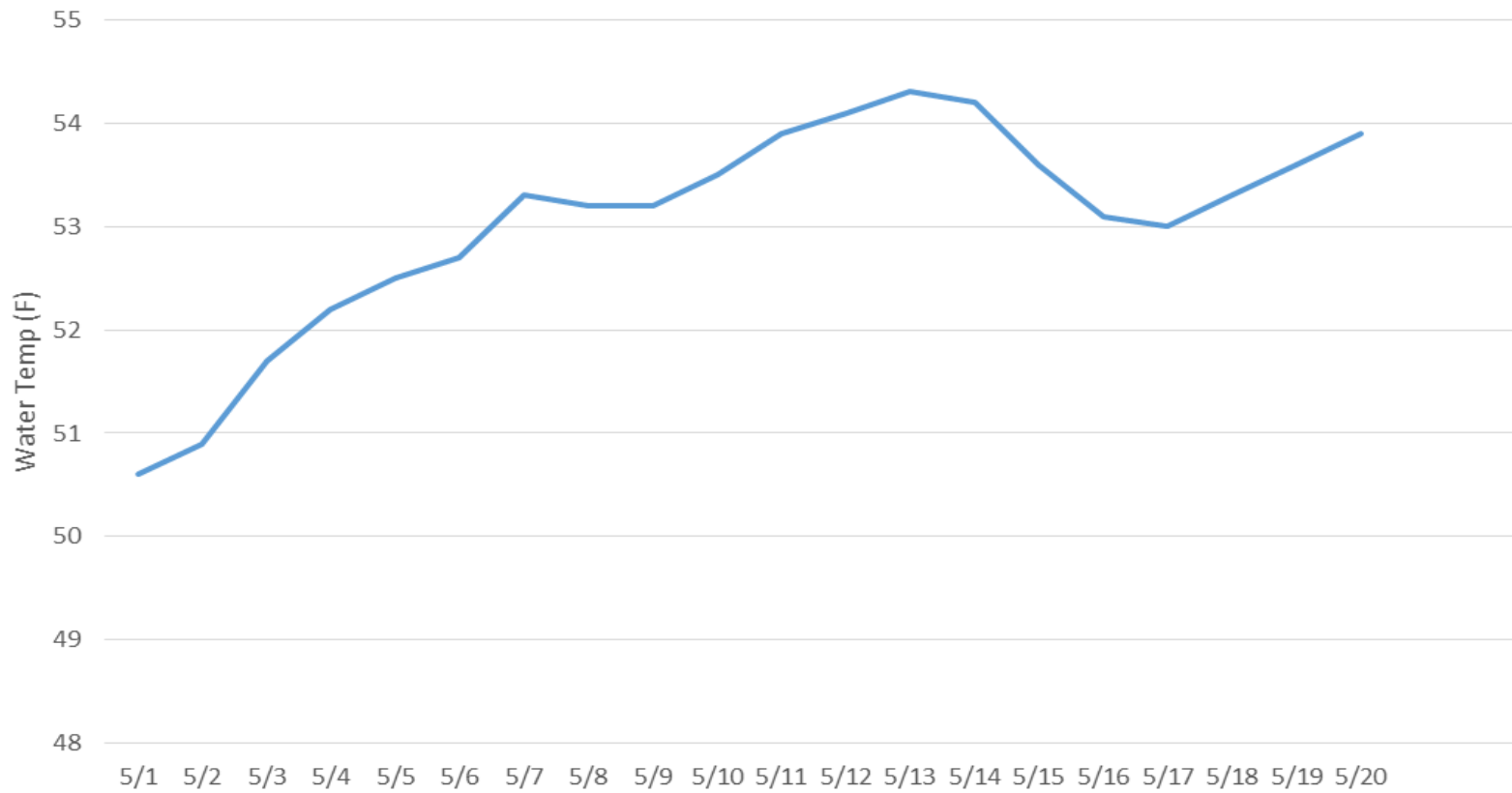
Research:

WDFW angling crew continues the pikeminnow removal from JD PH tailrace (fishing from PH deck) since 5/15. Low fishing success so far due to the high flows.

Adult PIT antennas' installation at JD South Fishway finished on 23 Feb. Both ladders' antennas in service with temporary power sources.

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

John Day Dam Water Temperature May 2017



JDA Collection Channel Velocity

Date 22-May-17

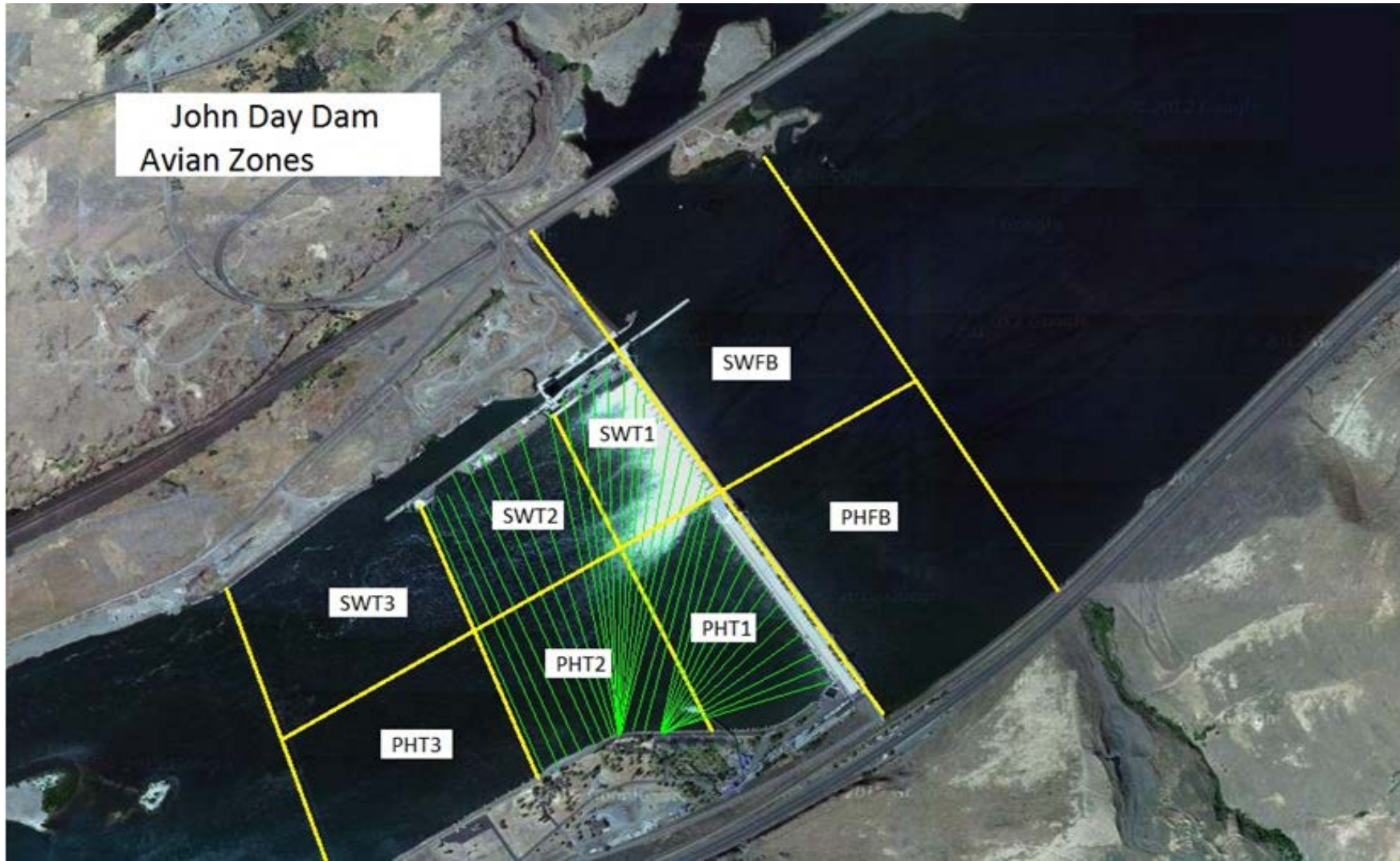
By: pete

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:11	71	2.54
2 - 4	2:21	141	2.57
4 - 6	3:38	218	2.34
6 - 8	4:45	285	2.69
8 - 10	5:56	356	2.54
10 - 12	7:09	429	2.47
12 - 14	8:18	498	2.61
14 - 16	9:25	565	2.69
16 - 18	10:27	627	2.90
			2.59

SE-1 TW = 165.0'

turbine 1 & 2 = 68 rpm

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	54	3.5	63
Mon	55	3.5	35
Tue	55	3.5	61
Wed	55	3.5	33
Thur	56	3.5	59
Fri	56	3.5	27
Sat	57	3.5	63
AVG:	55	AVG: 3.5	AVG 49
			MAX 63
			MIN 27

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	10.1	9.9	1.1	8.2	1.6	4.5	2.0
Sun	10.2	10.1	1.1	8.1	1.6	4.6	2.0
Mon	9.8	9.6	1.3	8.0	1.5	4.6	2.0
Mon	10.1	9.9	1.3	8.1	1.5	4.3	2.0
Tues	10.9	10.8	1.2	8.2	1.6	4.6	1.8
Tues	11.4	11.3	1.3	8.1	1.3	4.6	2.0
Wed	11.7	11.6	1.2	8.2	1.5	4.6	1.9
Wed	10.7	10.5	1.1	8.2	1.6	4.5	1.9
Thur	11.4	11.3	1.2	8.1	1.5	4.5	1.9
Thur	12.5	12.4	1.0	8.2	1.5	4.6	1.8
Fri	10.8	10.9	1.0	8.2	1.5	4.6	1.9
Fri	11.3	11.4	1.0	8.1	1.4	4.5	1.9
Sat	10.4	10.5	1.1	8.2	1.5	4.5	2.0
Sat	11.6	11.7	1.1	8.0	1.5	4.5	2.0
AVG:	10.9	10.9	1.1	8.1	1.5	4.5	1.9

JDA Bird Counts: 5/21/17 to 5/27/17

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)	
21-May	PHFB	0	0	0	8	0	0	0	1	0	0	0	0	0	0	0	0	24	12	25	13	83
21-May	SWFB	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
21-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May	SW2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
21-May	SW3	17	87	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	107
Avg/Survey		54		5		0		2		0		0		2		0		18		19		196
22-May	PHFB	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	26	10	27	10	77
22-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May	SW3	34	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
Avg/Survey		40		2		0		1		0		0		0		0		18		19		156
23-May	PHFB	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	22	17	23	17	85
23-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-May	SW1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
23-May	SW2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
23-May	SW3	9	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
Avg/Survey		22		3		0		0		0		0		0		0		20		20		129
24-May	PHFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23	22	24	22	92
24-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	SW3	14	25	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	48
Avg/Survey		20		1		0		0		0		0		5		0		23		23		140

JDA Bird Counts: 5/21/17 to 5/27/17

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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)	
25-May	PHFB	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	22	15	23	15	76
25-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	PH2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
25-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	SW1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
25-May	SW2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
25-May	SW3	7	2	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	13
Avg/Survey		11		1		0		0		0		0		2		0		19		19		102
26-May	PHFB	0	1	0	0	2	1	0	0	0	0	0	0	1	0	0	0	28	21	20	20	94
26-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-May	PH1	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
26-May	PH2	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
26-May	PH3	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
26-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-May	SW2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
26-May	SW3	5	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Avg/Survey		20		0		2		0		0		0		1		0		25		20		133
27-May	PHFB	0	7	0	0	0	1	0	0	0	0	0	0	0	0	0	0	26	10	20	8	72
27-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-May	PH1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
27-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-May	SW1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
27-May	SW2	0	13	0	0	1	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	18
27-May	SW3	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Avg/Survey		20		0		1		0		0		0		2		0		18		14		110
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		371		20		5		4		0		0		21		0		278		267		966
Avg/Survey		27		1		0		0		0		0		2		0		20		19		69