


FISHWAY STATUS REPORT

Date: 5/12/2018
Inspection Period: 5/6/2018 thru 5/12/2018



**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: 54 F
	Out of Criteria	Limit		Secchi: 4.1 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 1.2	
Entrance weir SE1	0	depth (≥ 8')	AVG 8.9	
Collection channel velocity	0	1.5 - 4 fps	AVG 4.86	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.6	
Entrance weir NE1	0	depth (≥ 8')	AVG 11.7	
Entrance weir NE2	0	depth (≥ 8')	AVG 11.7	
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 camera inspection to occur the week of 5/15.	
Turbine trashrack drawdown	0	<1.5', wkly	Monthly MU intake trashrack raking completed by 4/25. Very little debris found.	
Vert barrier screen drawdown	0	<1.5', wkly		
Spill volume	0	per FPP	Fish Spill at Gas Cap continues since 4/10/18.	
Spill pattern	0	per FPP	Two TSWs, bays 18 & 19 open since 4/10/18 AM.	
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

SMOLT MONITORING FACILITY

Operation:

SMF in service since 2/28 with every other day, 24 hrs condition sampling.

Maintenance:

SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway. Awaiting for \$ 170 K UFR to complete in FY18.

Research: None**Birds :**

Gulls and white pelican numbers are increasing in an immediate vicinity of JD. See Avian Numbers tab for details.

All 125 avian lines in place without any deficiencies. USDA boat hazing commenced on 4/16 and will continue 7 days a week thru 7/31.

A high number of gulls attempting to feed in the JD Tailrace BRZ but are successfully repelled by a combination of USDA boat hazing and avian lines.

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.

Coordinating with CRITFC and Tribes for the upcoming adult lamprey collection season starting in late May.

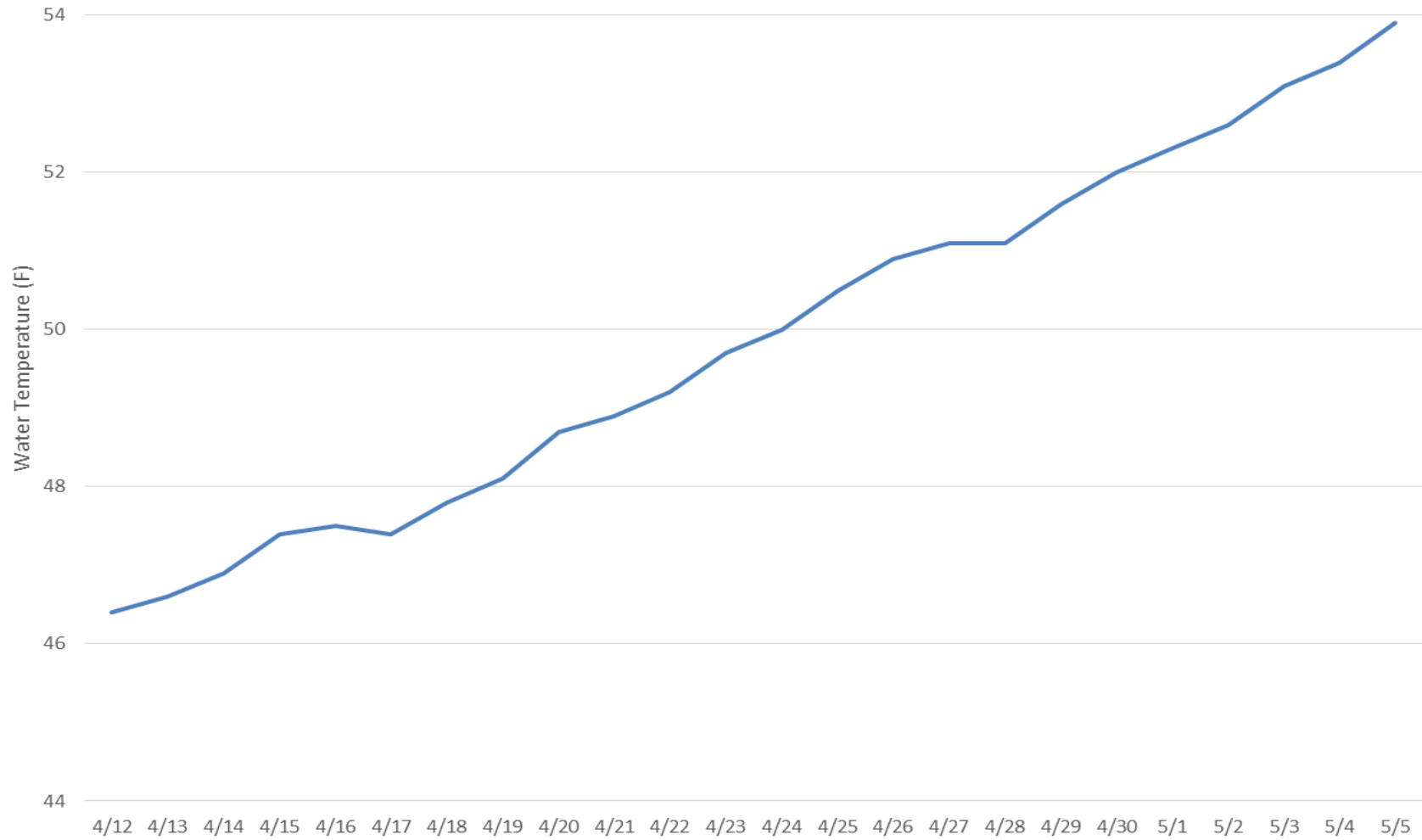
JD Mechanical continues planning for the JD North LPS water supply pumps installation. To be completed by 6/1.

WDFW NPM angling from JD PH Tailrace deck started on 5/1. Low catches so far with 47 total NPM removed by 5/6. On hold due to high river flows.

Coordinating with Uof I crew for their JD Adult Lamprey RT installation/ monitoring at both adult fishways in 2018.

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

Water Temperature JDA Tailrace (4/12 - 5/5/2018)



JDA Collection Channel Velocity

Date 7-May-18

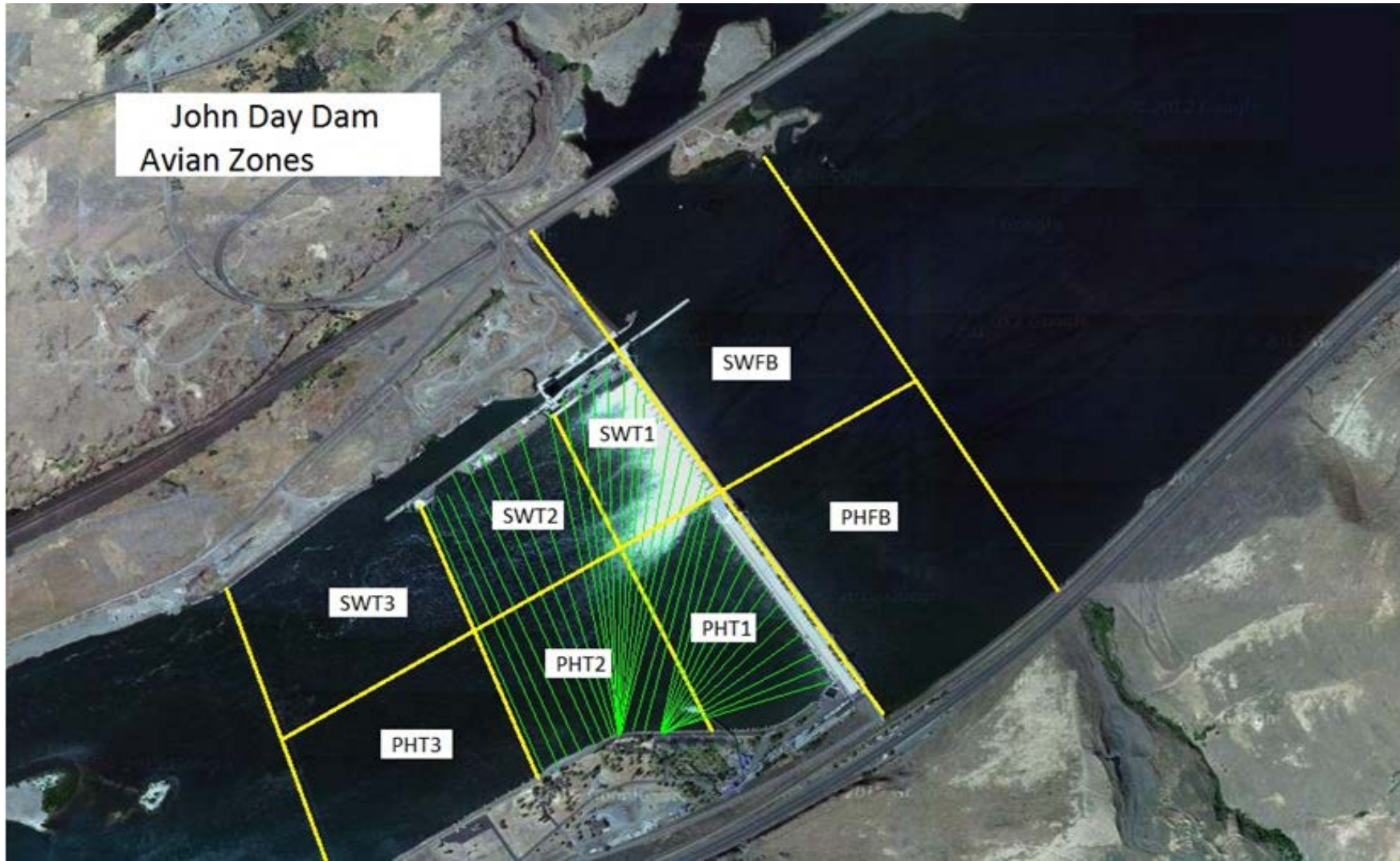
By: Pete Rankin

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:17	77	2.34
2 - 4	2:05	125	3.75
4 - 6	2:55	175	3.60
6 - 8	3:32	212	4.86
8 - 10	4:31	271	3.05
10 - 12	5:35	335	2.81
12 - 14	6:35	395	3.00
14 - 16	7:27	447	3.46
16 - 18	8:18	498	3.53
			3.38

tw=165.5

turbine 2-3=68rpm

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	54	4.0	53
Mon	54	4.0	bypass
Tue	54	4.0	43
Wed	54	4.5	bypass
Thur	54	4.0	63
Fri	54	4.0	bypass
Sat	54	4.0	39
AVG:	54	AVG: 4.1	AVG/Sample 50
			MAX 63
			MIN 39

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	12.8	12.8	1.2	9.3	1.5	4.6	1.7
Sun	13.5	13.5	1.2	10.1	1.4	4.5	1.7
Mon	12.5	12.5	1.2	9.0	1.7	4.6	1.7
Mon	12.5	12.5	1.2	8.3	1.7	4.6	1.8
Tues	13.5	13.5	1.3	9.1	1.3	4.6	1.7
Tues	13.4	13.4	1.4	10.4	1.5	4.6	1.7
Wed	13.5	13.5	1.1	8.1	1.6	4.5	1.5
Wed	10.4	10.4	1.2	8.0	1.6	4.6	1.4
Thur	10.5	10.5	1.2	8.0	1.6	4.6	1.3
Thur	10.4	10.4	1.1	8.1	1.5	4.5	1.4
Fri	10.0	10.0	1.1	8.3	1.5	4.6	1.4
Fri	10.7	10.7	1.0	9.2	1.5	4.5	1.3
Sat	10.0	10.0	1.3	9.5	1.5	4.6	1.7
Sat	10.0	10.0	1.2	9.0	1.5	4.6	1.5
AVG:	11.7	11.7	1.2	8.9	1.5	4.6	1.6

JDA Bird Counts: 5/6/18 to 5/12/18

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)	
6-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	23	24	24	94
6-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-May	SW3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Avg/Survey		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	24	0	0	100	
7-May	PHFB	0	0	14	10	0	0	0	0	0	0	0	0	0	0	0	9	19	5	19	6	82
7-May	SWFB	0	0	14	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	16
7-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-May	SW2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7-May	SW3	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Avg/Survey		6	20	0	1	0	1	0	0	0	0	0	0	5	12	13	0	0	0	0	110	
8-May	PHFB	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	28	21	29	21	126
8-May	SWFB	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
8-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-May	SW3	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Avg/Survey		5	18	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	0	0	143	
9-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	31	0	0	59
9-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-May	PH3	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
9-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-May	SW3	47	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84
Avg/Survey		47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	152	

JDA Bird Counts: 5/6/18 to 5/12/18

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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)	
10-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	31	33	0	0	65
10-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-May	PH3	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	4
10-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-May	SW3	48	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	103
Avg/Survey		52		0		0		0		0		0		2		0		32		0		172
11-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	39	0	0	84
11-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
11-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-May	PH3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-May	SW3	38	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140
Avg/Survey		72		0		0		0		0		0		1		0		42		0		228
12-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	48	0	0	92
12-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
12-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-May	PH3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-May	SW3	72	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160
Avg/Survey		81		0		0		0		0		0		1		0		46		0		255
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		529		74		0		1		0		0		6		9		418		123		1160
Avg/Survey		38		5		0		0		0		0		0		1		30		9		83