

FISHWAY STATUS REPORT

Date: 4/1/2017
 Inspection Period: 3/26/2017 thru 4/1/2017



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:	13	Temperature:	44 F
	Out of Criteria	Limit			Secchi:	1.7 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	1.8		
Entrance weir NE1	0	depth (≥ 8')	AVG	8.6		
Entrance weir NE2	0	depth (≥ 8')	AVG	8.6		
JUVENILE PASSAGE			All STSs installed by 3/30. JBS in regular service that day as well.			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.6		
Submersible traveling screens	0	visual inspect				
Turbine trashrack drawdown	0	<1.5', wkly	Trashrack Crane OOS due to burnt up hoist motor on 3/27.			
Vert barrier screen drawdown	0	<1.5', wkly				
Spill volume	Emergency	Emergency	Unplanned spill due to high river flows is ongoing. Bay 5 OOS due to bad brakes on 3/28.			
Spill pattern	Emergency	per FPP	Unplanned spill due to high river flows is ongoing. TSWs open since 3/15/17.			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

SMOLT MONITORING FACILITY

Operation:

SMF successfully returned to service on 3/28. First 24 hrs sampling scheduled for 2 April 2017.

Maintenance:

STS annual maintenance is ongoing at an accelerated rate. Experiencing a shortage of STS parts which are difficult to order due to the JD 2017 O&M Budget's shortages.

A leak of the PDS Dewatering Pipe's joint has been fixed by JD Mechanics in March. The 6 feet diameter pipes had to be uncoupled, realigned and reconnected with use of a mobile crane. It was a challenging job which JD Project had planned for a few years but now the joint is finally fixed !

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

Research: Approval of access' letters are being sent out for this years requests

Birds :

see the Avian Numbers tab.

15 Navlock, 6 Spillway, 6 Tower-to-Tower, 1 PH lines are missing out of 125 grid's total.

PDT will reinstall up to 15 critical, missing lines before May 2017; JD Fisheries believes that this will be sufficient for the Avian Grid to remain effective.

Avian line contractor has been reinstalling missing avian lines since the week of 3/13/17. Navlock section completed by 3/27 (no missing lines there :)

Operations:

Trashrack Crane OOS due to burnt up hoist motor on 3/27. JD unable to rake debris from the intake trashracks until the crane is fixed!

JD TSWs in bays 18 & 19 were activated on 3/15 (annual FOP spill normally starts on 4/10) due to high river flows this year. This early TSWs operation has been an effective in the JD Forebay debris removal due to its surface water's skimming capabilities.

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 ' hoist motor burnt up on 3/27 and it needs to be rewound ASAP. JD Project prepared a contract request for \$ 10 K which is currently pending. The estimated RTS is two to three weeks.

JD South AWS Turbine 1 bearing's repairs successfully completed by JD Mechanical in March. But its condition continues to be poor and it will be available only as backup if the other turbines fail. Inspection of AWS Turbine 2 was successfully completed 2 March and it returned to regular service the next day.

JD South AWS Turbines 1 and 2 are still in need of a major overhaul and there is no guarantee by the project on their reliability.

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 necessary \$ 5 million for its replacement is not yet available.

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

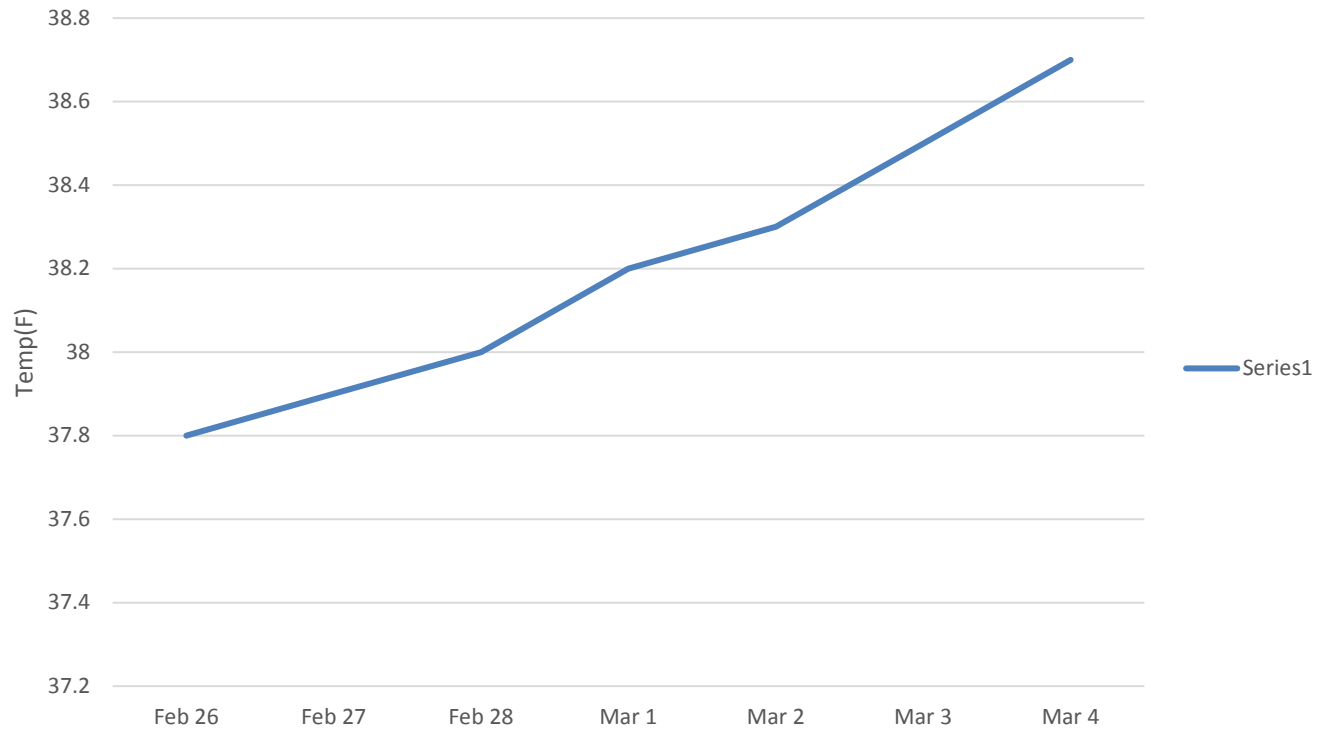
Research:

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

JDA Water Temperature



JDA Collection Channel Velocity

Date 7-Mar-17

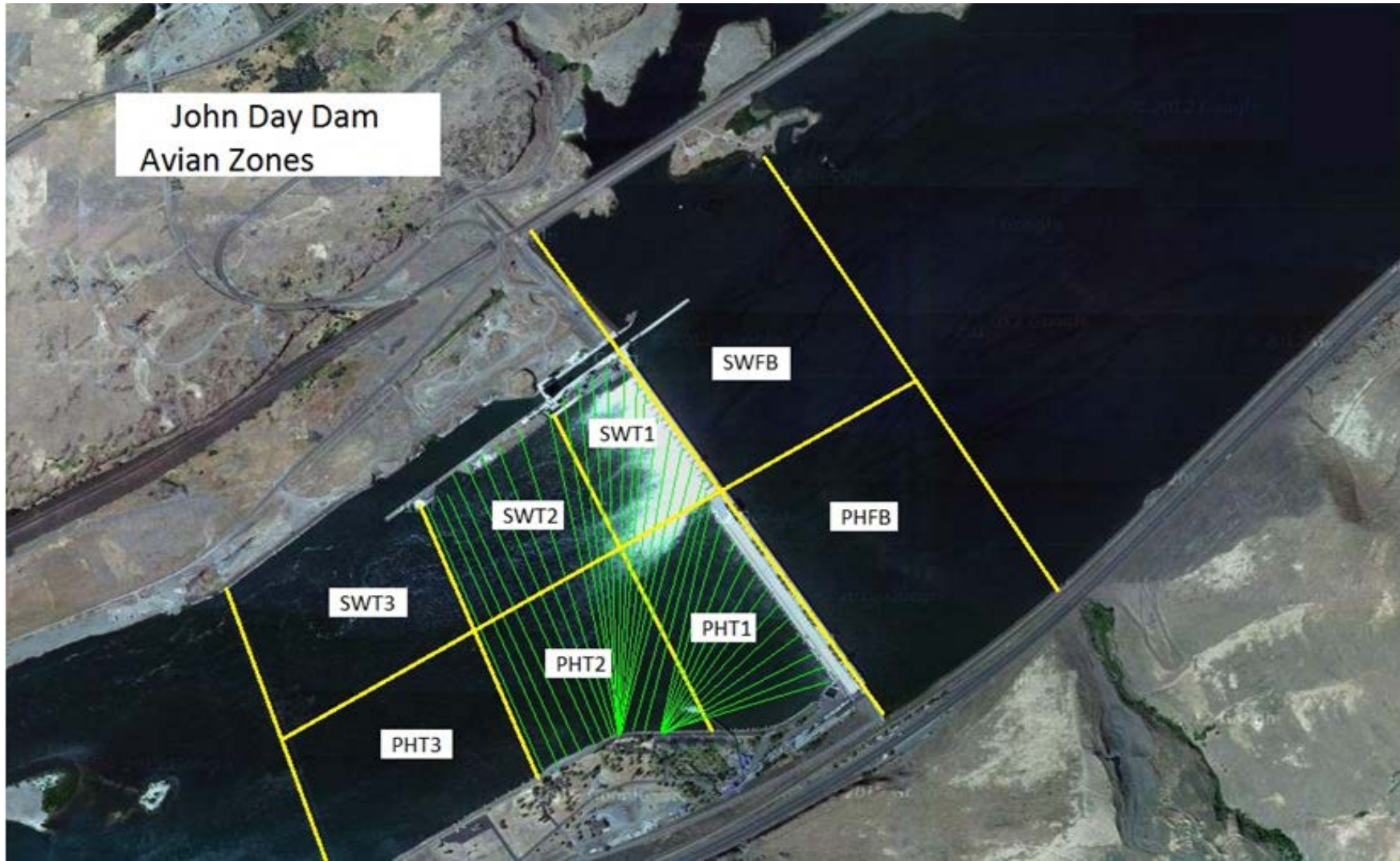
By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:04	64	2.81
2 - 4	2:10	130	2.73
4 - 6	3:10	190	3.00
6 - 8	4:08	248	3.10
8 - 10	5:10	310	2.90
10 - 12	6:10	370	3.00
12 - 14	7:10	430	3.00
14 - 16	8:14	494	2.81
16 - 18	9:14	554	3.00
			2.93

TW 160.5

#1 RPM	53
#2 RPM	52
#3 RPM	52

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	44	1.5	
Mon	44	1.5	
Tue	44	1.5	
Wed	44	1.5	
Thur	44	2.0	
Fri	44	2.0	
Sat	44	2.0	52
AVG:	44	AVG: 1.7	AVG 52
			MAX 52
			MIN 52

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.4	8.4	1.0	8.1	1.6	4.6	2.0
Sun	8.1	8.1	1.2	8.2	1.5	4.5	2.0
Mon	8.3	8.3	1.1	8.1	1.5	4.6	1.9
Mon	8.4	8.4	1.2	8.1	1.6	4.6	1.9
Tues	9.2	9.1	1.0	8.2	1.5	4.5	1.9
Tues							
Wed	8.7	8.6	1.1	8.1	1.5	4.5	1.7
Wed	8.5	8.5	1.2	8.0	1.3	4.6	1.9
Thur	8.1	8.0	1.3	8.0	1.6	4.6	1.8
Thur	8.6	8.5	1.2	8.2	1.7	4.6	1.7
Fri	9.0	8.9	1.2	8.2	1.5	4.5	1.8
Fri	8.9	8.8	1.1	8.0	1.5	4.5	1.8
Sat	8.8	8.8	1.2	8.0	1.5	4.6	1.8
Sat	9.0	9.0	1.1	8.0	1.6	4.5	1.8
AVG:	8.6	8.6	1.1	8.1	1.5	4.6	1.8

JDA Bird Counts: 3/26/17 to 4/1/17

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)	
26-Mar	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4
26-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Mar	PH1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
26-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Mar	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2			7
27-Mar	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3
27-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Mar	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Mar	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2			3
28-Mar	PHFB	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3
28-Mar	SWFB	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
28-Mar	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Mar	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			4
29-Mar	PHFB	0	0	0	0	0	0	10	3	0	0	0	0	0	0	0	0	0	0	0	0	13
29-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	PH1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
29-Mar	PH2	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
29-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		1	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0			18

JDA Bird Counts: 3/26/17 to 4/1/17
 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)	
30-Mar	PHFB	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5	8	0	18		
30-Mar	SWFB	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2		
30-Mar	PH1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
30-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
30-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
30-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
30-Mar	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
30-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Avg/Survey		0	0	1	0	0	0	4	0	0	0	0	0	0	0	3	4	0	0	21		

31-Mar	PHFB	0	0	0	0	0	0	6	7	0	0	0	0	0	0	4	4	0	0	21
31-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Mar	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Mar	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Mar	SW3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Avg/Survey		1	0	0	0	0	0	7	0	0	0	0	0	0	4	0	0	0	0	22

1-Apr	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Apr	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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					
Weekly Total	3	8	0	34	0	0	0	0	0	0	0	0	13	17	0	0	75				
Avg/Survey	0	1	0	2	0	0	0	0	0	0	1	1	5								