

# FISHWAY STATUS REPORT

Date: 7/21/2018  
 Inspection Period: 7/15/2018 thru 7/21/2018



## 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:	71 F
	Out of Criteria	Limit			Secchi:	6.0 Ft.
<b>NORTH FISHWAY</b>			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	1.3' ± 0.1'	1.3' for shad passage since 5/24			
Entrance differential	0	1.0' - 2.0'	AVG	1.5		
<b>SOUTH FISHWAY</b>	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	1.3' ± 0.1'	1.3' for shad passage since 5/24			
South entrance differential	0	1.0' - 2.0'	AVG	1.4		
Entrance weir SE1	1	depth (≥ 8')	AVG	9.0	OOC @ 7.9' (<8.0') on 7/15. Corrected manually/ immediately.	
Collection channel velocity	0	1.5 - 4 fps	AVG	2.53		
N. Entrance PH(Bay 19)differential	1	1.0' - 2.0'	AVG	1.6	OOC @ 2.2' (> 2.0') on 7/15. Corrected manually/ immediately.	
Entrance weir NE1	0	depth (≥ 8')	AVG	9.9		
Entrance weir NE2	0	depth (≥ 8')	AVG	9.9		
<b>JUVENILE PASSAGE</b>	0		In service since 2/28.			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.5		
Submersible traveling screens	0	visual inspect	July STS inspection completed 7/19. No bad STS found, all were in proper working order.			
Turbine trashrack drawdown	0	<1.5', wkly	Monthly trashracks raking is scheduled for the next week, 7/23.			
Vert barrier screen drawdown	0	<1.5', wkly				
Spill volume	0	per FPP	Summer spill operations started on 6/16 per FOP.			
Spill pattern	0	per FPP	Two TSWs, bays 18 & 19 open since 4/10/18 AM.			
Turbine Unit Priority	7	per FPP	MU 1-4 unavailable to flush JBS outfall due to Line 1 OOS 7/16 -7/19 PM. See 18JD 02 MFR.			
Turbine 1% Efficiency	0	per FPP				

## SMOLT MONITORING FACILITY

**Operation:**

SMF is in every other day/ 24 hrs sampling mode. The Switch Gate is moved between sampling and bypass every day, AM.

**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 :**

White pelicans continue increasing on the island downstream of BRZ and inside of the BRZ reaching estimated 500 birds (!) 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.

**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.

Line 1 OOS due to leaking bushing and arching on 7/16. JD Maintenance assisted by JD Engineering was able to repair in record short time. RTS 7/19/18.

There was a significant backflow from the JBS outfall towards the PH due to lack of flushing flow from MU 1 -4 (Line 1.) Which likely resulted in an increased mortality of smolts from the fish predators ambushing them in this slow, backwards flow.

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.

Lamprey trapping at JD S Trap and JD N LPS by CRITFC/ Tribes underway. Very successful season particularly at JD N LPS which is diverting a large # of lamprey.

WDFW NPM angling from JD PH Tailrace deck continues since 5/1. Great weekly catch of 455 fish with the season total of 2,199 thru 7/22.

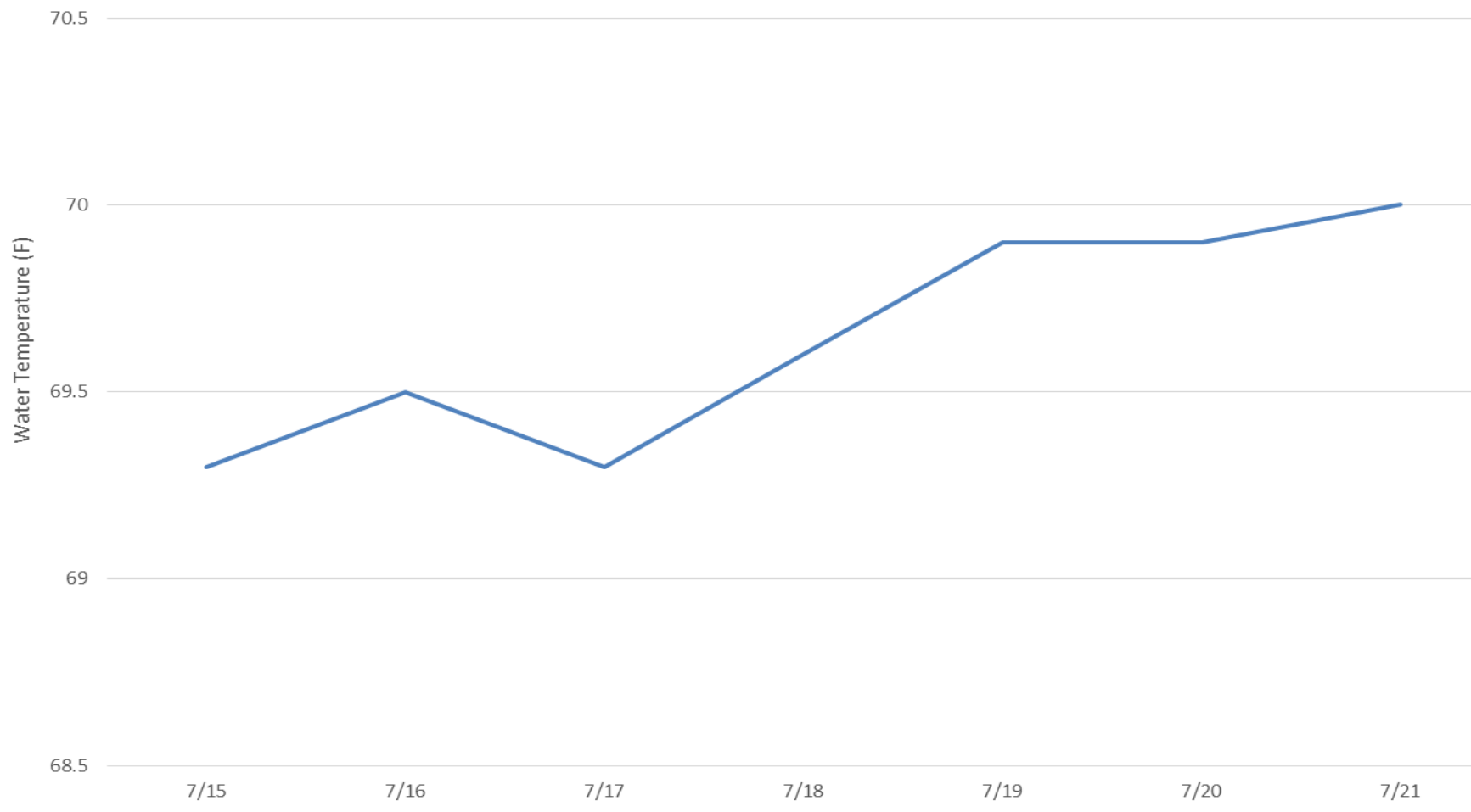
Uof I crew continues monitoring the RT Adult Lamprey passage at both JD Adult Fishways.

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





JDA Tailwater Temperature (7/15/18 - 7/21/18)





## JDA Collection Channel Velocity

<b>Date</b>	<i>29-Jun-18</i>
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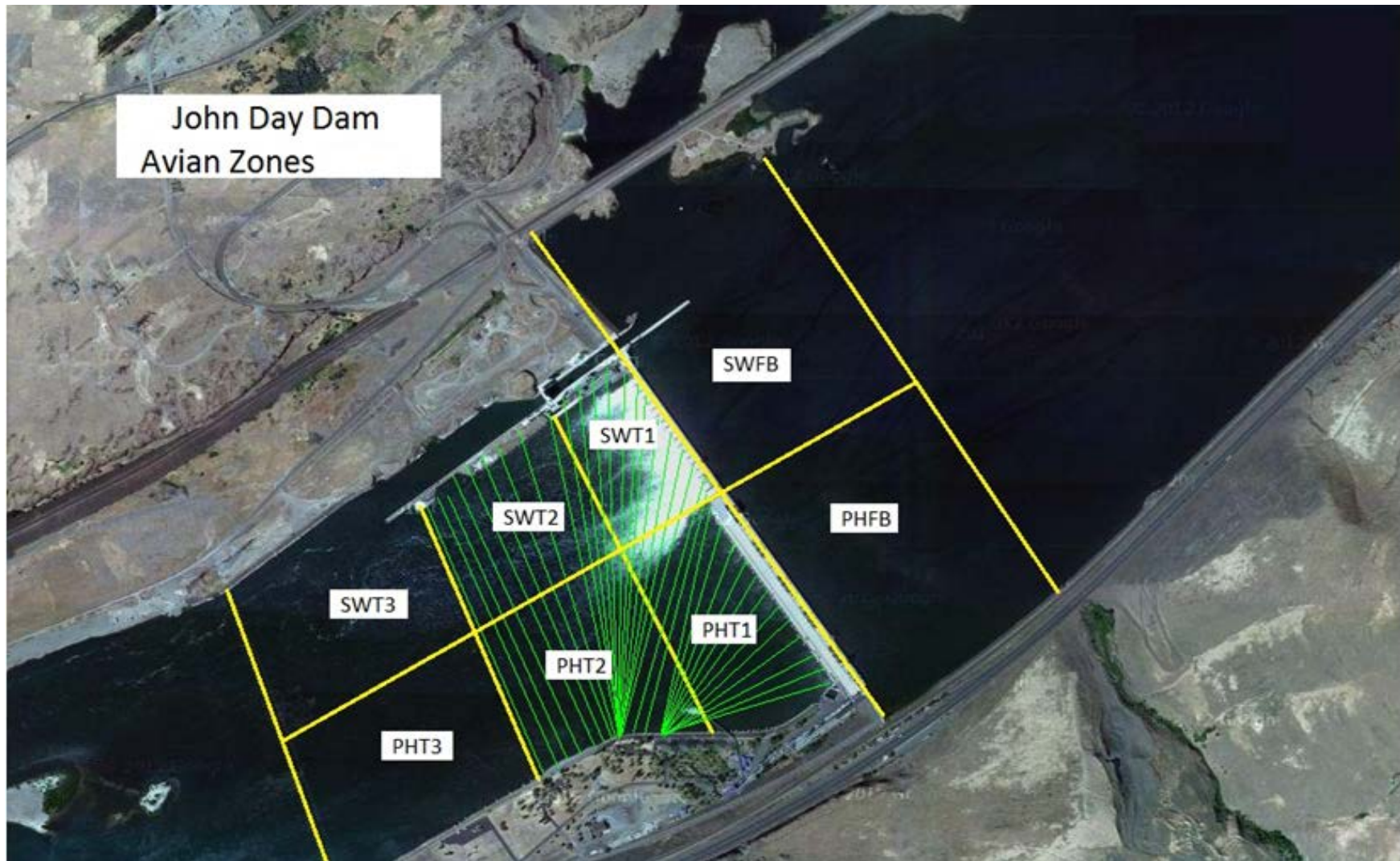
<b>By:</b>	<i>MDL</i>
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<b>Bay(s)</b>	<b>Time</b>	<b>Sec.</b>	<b>Velocity (f/s)</b>
<i>0-2</i>	<i>1:09</i>	<i>69</i>	<i>2.61</i>
<i>2 - 4</i>	<i>2:16</i>	<i>136</i>	<i>2.69</i>
<i>4 - 6</i>	<i>3:32</i>	<i>212</i>	<i>2.37</i>
<i>6 - 8</i>	<i>4:51</i>	<i>291</i>	<i>2.28</i>
<i>8 - 10</i>	<i>6:15</i>	<i>375</i>	<i>2.14</i>
<i>10 - 12</i>	<i>7:24</i>	<i>444</i>	<i>2.61</i>
<i>12 - 14</i>	<i>8:35</i>	<i>515</i>	<i>2.54</i>
<i>14 - 16</i>	<i>9:44</i>	<i>584</i>	<i>2.61</i>
<i>16 - 18</i>	<i>10:46</i>	<i>646</i>	<i>2.90</i>
			<b>2.53</b>

Bay 19 TW:                    161.7  
 turbine 2-3=68rpm

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	70	6.0	
Mon	70	6.0	141
Tue	71	6.0	
Wed	71	6.0	
Thur	71	6.0	28
Fri	71	6.0	
Sat	71	6.0	
<b>AVG:</b>	<b>71</b>	<b>AVG: 6.0</b>	<b>AVG/Sample 85</b>
			<b>MAX 141</b>
			<b>MIN 28</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.6	8.6	1.6	7.9	1.5	4.6	2.2
Sun	9.9	9.9	1.5	8.7	1.5	4.5	1.7
Mon	9.6	9.6	1.6	8.5	1.5	4.5	1.8
Mon	11.3	11.3	1.4	10.4	1.4	4.6	1.9
Tues	9.3	9.3	1.4	9.0	1.5	4.6	1.8
Tues	11.1	11.1	1.2	10.7	1.5	4.5	1.7
Wed	9.3	9.3	1.6	8.1	1.5	4.5	1.5
Wed	10.0	10.0	1.2	9.1	1.5	4.5	1.2
Thur	10.0	10.0	1.4	9.0	1.4	4.6	1.6
Thur	10.4	10.4	1.2	9.8	1.5	4.5	1.4
Fri	8.7	8.7	1.4	8.2	1.8	4.5	1.7
Fri	11.1	11.1	1.1	9.5	1.5	4.5	1.1
Sat	8.8	8.8	1.4	8.3	1.6	4.5	1.8
Sat	9.8	9.8	1.5	9.0	1.5	4.6	1.6
<b>AVG:</b>	<b>9.9</b>	<b>9.9</b>	<b>1.4</b>	<b>9.0</b>	<b>1.5</b>	<b>4.5</b>	<b>1.6</b>

**JDA Bird Counts: 7/15/18 to 7/21/18**

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)	
15-Jul	PHFB	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	4	7	4	6	24
15-Jul	SWFB	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3
15-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	22	4	0	0	0	0	0	0	26
15-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	25
15-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	27
15-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	47	7	0	0	0	0	0	0	54
15-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	41	7	0	0	0	0	0	0	48
Avg/Survey		0		3		0		0		0		0		90		0		6		5		207
16-Jul	PHFB	0	0	30	5	0	0	0	0	0	0	0	0	0	0	1	0	6	12	5	11	70
16-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	35	31	0	0	0	0	0	0	66
16-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	35	5	0	0	0	0	0	0	40
16-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	31	15	0	0	0	0	0	0	46
16-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	26
16-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	75	20	0	0	0	0	0	0	95
16-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	65	60	0	0	0	0	0	0	125
Avg/Survey		0		18		0		0		0		0		199		1		9		8		468
17-Jul	PHFB	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	35
17-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
17-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11
17-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	62	0	0	0	0	0	0	62
Avg/Survey		0		13		0		0		0		0		39		0		5		0		112
18-Jul	PHFB	0	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	82
18-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0	23
18-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
18-Jul	PH2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
18-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	0	29
Avg/Survey		1		28		0		0		0		0		17		0		0		25		141

**JDA Bird Counts: 7/15/18 to 7/21/18**

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)		
19-Jul	PHFB	0	0	16	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	70
19-Jul	SWFB	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59
19-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
19-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
19-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	11	3	0	0	0	0	0	0	0	14
19-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6
<b>Avg/Survey</b>		<b>0</b>	<b>0</b>	<b>52</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>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>158</b>		
20-Jul	PHFB	0	0	8	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	21	58	
20-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10	
20-Jul	PH1	5	0	0	0	0	0	0	0	0	0	0	0	15	3	0	0	0	0	0	0	23	
20-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	23	
20-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	21	
20-Jul	SW1	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	7	
20-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	32	2	0	0	0	0	0	0	34	
20-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	43	0	0	0	0	0	0	0	43	
<b>Avg/Survey</b>		<b>4</b>	<b>0</b>	<b>15</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>72</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>219</b>		
21-Jul	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	12	16	45	
21-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	16	
21-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	41	0	0	13	0	0	0	0	54	
21-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	36	0	0	8	0	0	0	0	44	
21-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	
21-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	95	0	0	0	0	0	0	0	95	
21-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	39	
<b>Avg/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>	<b>115</b>	<b>11</b>	<b>9</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>295</b>		
<b>Totals</b>		<b>Gulls</b>				<b>Cormorant</b>				<b>Caspian tern</b>				<b>White Pelican</b>				<b>Grebe</b>				<b>Total</b>	
		<b>F</b>	<b>F</b>	<b>NF</b>	<b>NF</b>	<b>F</b>	<b>F</b>	<b>NF</b>	<b>NF</b>	<b>F</b>	<b>F</b>	<b>NF</b>	<b>NF</b>	<b>F</b>	<b>F</b>	<b>NF</b>	<b>NF</b>	<b>F</b>	<b>F</b>	<b>NF</b>	<b>NF</b>		
<b>Weekly Total</b>		<b>9</b>	<b>0</b>	<b>255</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>1091</b>	<b>22</b>	<b>56</b>	<b>167</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1600</b>	
<b>Avg/Survey</b>		<b>1</b>	<b>0</b>	<b>18</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>78</b>	<b>2</b>	<b>4</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>114</b>	