


FISHWAY STATUS REPORT

Date: 10/22/2016
Inspection Period: 10/16/2016 thru 10/22/2016



**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 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: 61 F
	Out of Criteria	Limit		Secchi: 6.0 Ft.
NORTH FISHWAY			In service; all 6 AWS pumps 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			In service with two AWS turbines; FOGs # 18 & 19 continue closed	
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	0	depth (≥ 8')	AVG 8.2	
Collection channel velocity	0	1.5 - 4 fps	AVG 3.60	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.5	
Entrance weir NE1	0	depth (≥ 8')	AVG 8.1	
Entrance weir NE2	0	depth (≥ 8')	AVG 8.1	
JUVENILE PASSAGE			In service with STSs installed since 4/1	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.5	
Submersible traveling screens	0	visual inspect	STS camera insp. completed by 10/20. One bad STS at MU4 replaced with working spare.	
Turbine trashrack drawdown	0	<1.5', wkly	Monthly raking scheduled for the week of 10/24; very light river debris loads	
Vert barrier screen drawdown	0	<1.5', wkly		
Spill volume	0	N/A	Bay 2 continues open 1.6 Kcfs for N ladder attraction water	
Spill pattern	0	per FPP		
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

SMOLT MONITORING FACILITY

Operation:

Sampling season ended on 9/15; SMF continues in bypass for the full flow PIT tags detections until 28 November.

Maintenance:

No maintenance issues to report. PDS screen cleaners have been working well.

SMF SCADA's investigation by JD Electrical underway. There is a current UFR of \$ 150 K, for the SCADA update's P&S.

Research:

None

Fallbacks: AVG: MAX: 0 MIN: 0

Birds :

see the Avian Numbers tab. No major avian presence/predation at JD since late August.

15 Navlock (# 43 & 58 broke this week,) 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.

All missing lines will be reinstalled in Phase 2, in the fall of 2017.

Operations:

SMF in bypass for PIT tag detections since 15 September.

JD North fishway has been meeting all FPP criteria since 1/5/16.

JD South Fishway in service with two out of three AWS turbines; FOGs 18 & 19 continue closed due to insufficient AWS.

MU Gatewell Drawdowns: weekly or more frequently as necessary.

Maintenance:

JD South Fishway AWS turbine 1 OOS long term due to failed pump's lower bearing. Possible temporary "Band-Aid" repair by JD Mechanical this winter but need additional \$ 70K in special funding/ UFR.

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

Research:

Adult Fish Counting by Normandeau Associates continues through 31 October 2016.

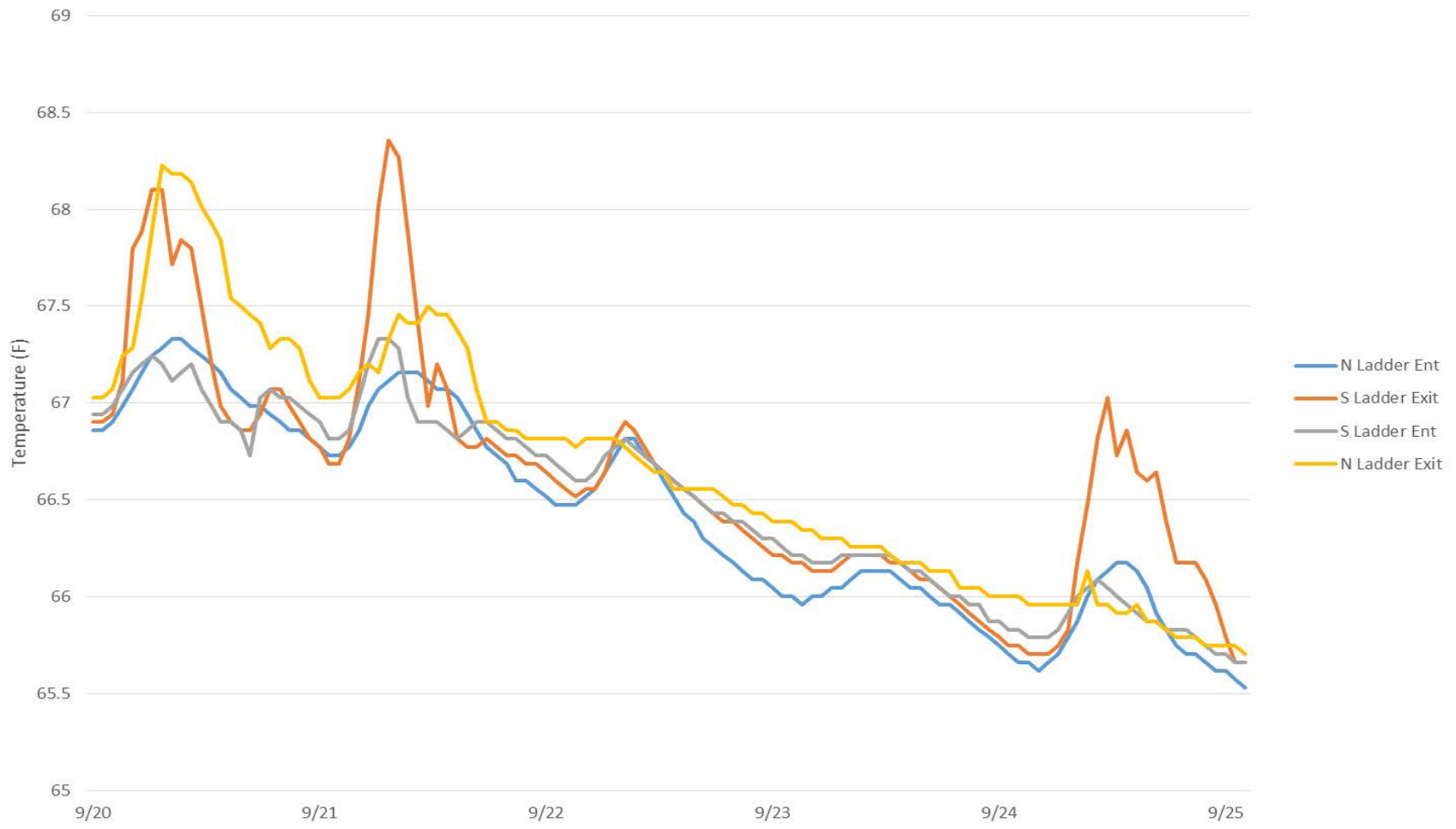
Adult PIT antennas PDT continues developing designs for this winter's installation at both JD Fishways.

Kevin Moynahan

OPM John Day/Willow Creek Project

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

John Day Dam Fishladder Temperatures (9/25/2016)



JDA Collection Channel Velocity

Date	<i>23/10</i>
By:	<i>pr</i>

Bay(s)	Time	Sec.	Velocity (f/s)
<i>0-2</i>	<i>1:09</i>	<i>69</i>	<i>2.61</i>
<i>2 - 4</i>	<i>2:02</i>	<i>122</i>	<i>3.40</i>
<i>4 - 6</i>	<i>2:42</i>	<i>162</i>	<i>4.50</i>
<i>6 - 8</i>	<i>3:32</i>	<i>212</i>	<i>3.60</i>
<i>8 - 10</i>	<i>4:20</i>	<i>260</i>	<i>3.75</i>
<i>10 - 12</i>	<i>5:15</i>	<i>315</i>	<i>3.27</i>
<i>12 - 14</i>	<i>5:59</i>	<i>359</i>	<i>4.09</i>
<i>14 - 16</i>	<i>6:51</i>	<i>411</i>	<i>3.46</i>
<i>16 - 18</i>	<i>7:39</i>	<i>459</i>	<i>3.75</i>
			3.60

TW	159.7
#2 RPM	60
#3 RPM	60

JDA Bird Counts: 10/15/16 to 10/21/16

F(1): Forage AM survey F(2): Forage PM Survey NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

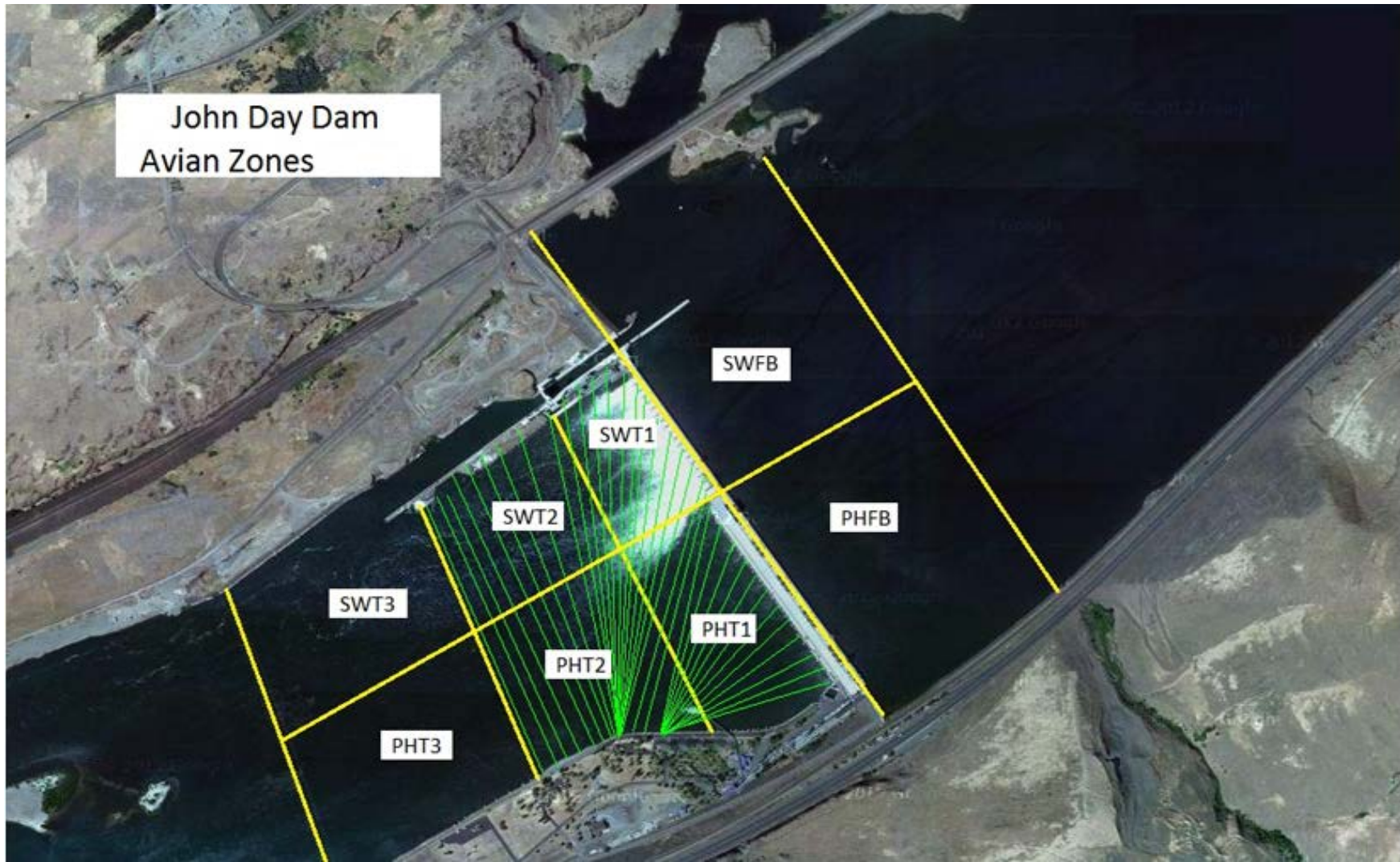
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
15-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	17
15-Oct	SWFB	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
15-Oct	PH1	31	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
15-Oct	PH2	27	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
15-Oct	PH3	11	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
15-Oct	SW1	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
15-Oct	SW2	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
15-Oct	SW3	7	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Avg/Survey		60		11		5		2		0		0		0		0		9		0		171
16-Oct	PHFB	5	0	0	78	0	0	0	8	0	0	0	0	0	0	0	0	0	0	17	0	108
16-Oct	SWFB	0	0	48	184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	232
16-Oct	PH1	11	14	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
16-Oct	PH2	53	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	101
16-Oct	PH3	89	15	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	106
16-Oct	SW1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Oct	SW3	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	40
Avg/Survey		118		155		9		24		0		0		1		0		0		0		629
17-Oct	PHFB	0	0	9	108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	0	204
17-Oct	SWFB	0	0	63	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	118
17-Oct	PH1	71	19	0	0	17	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113
17-Oct	PH2	22	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
17-Oct	PH3	2	8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	11
17-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Oct	SW2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17-Oct	SW3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Avg/Survey		79		118		12		1		0		0		1		0		0		0		505
18-Oct	PHFB	0	0	41	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	118
18-Oct	SWFB	0	0	37	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	0	172
18-Oct	PH1	87	0	0	30	17	3	0	0	0	0	0	0	0	0	0	0	39	0	0	0	176
18-Oct	PH2	15	0	0	22	10	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56
18-Oct	PH3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
18-Oct	SW1	0	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
18-Oct	SW2	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
18-Oct	SW3	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	28
Avg/Survey		53		115		20		18		0		0		0		0		20		60		568

JDA Bird Counts: 10/15/16 to 10/21/16

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)	
19-Oct	PHFB	0	0	25	505	0	6	0	0	0	0	0	0	0	0	0	0	55	0	0	0	591
19-Oct	SWFB	0	0	225	169	0	0	0	0	0	0	0	0	0	0	0	0	154	2	0	0	550
19-Oct	PH1	0	25	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
19-Oct	PH2	7	20	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
19-Oct	PH3	5	15	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
19-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Oct	SW3	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Avg/Survey		36		462		12		9		0		0		0		0		106		0		1248
20-Oct	PHFB	0	0	455	107	0	0	0	0	0	0	0	0	0	0	0	0	199	75	0	0	836
20-Oct	SWFB	0	0	0	191	0	0	0	0	0	0	0	0	0	0	0	0	0	89	0	0	280
20-Oct	PH1	1	45	0	0	1	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114
20-Oct	PH2	15	43	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96
20-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Oct	SW1	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
20-Oct	SW2	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
20-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		52		377		57		9		0		0		0		0		182		0		1351
21-Oct	PHFB	0	0	107	107	0	0	0	0	0	0	0	0	0	0	0	0	75	75	0	0	364
21-Oct	SWFB	0	0	191	191	0	0	0	0	0	0	0	0	0	0	0	0	89	89	0	0	560
21-Oct	PH1	45	45	0	0	67	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	224
21-Oct	PH2	43	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86
21-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		88		298		67		0		0		0		0		0		164		0		1234
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		969		3070		360		123		0		0		3		0		958		223		5706
Avg/Survey		69		219		26		9		0		0		0		0		68		16		408

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	60	6.0	
Mon	61	6.0	
Tue	61	6.0	
Wed	61	6.0	
Thur	61	6.0	
Fri	60	6.0	
Sat	60	6.0	
AVG:	61	6.0	AVG
			MAX 0
			MIN 0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.2	8.2	1.2	8.2	1.6	4.6	1.5
Sun	8.0	8.0	1.5	8.0	1.7	4.6	1.5
Mon	8.1	8.1	1.4	8.0	1.6	4.5	1.5
Mon	8.1	8.1	1.4	8.0	1.6	4.5	1.5
Tues	8.2	8.3	1.4	8.5	1.4	4.5	1.5
Tues	8.0	8.0	1.5	8.1	1.5	4.6	1.5
Wed	8.1	8.1	1.5	8.0	1.5	4.2	1.6
Wed	8.0	8.0	1.4	8.0	1.6	4.5	1.5
Thur	8.0	8.1	1.4	8.2	1.3	4.5	1.5
Thur	8.1	8.1	1.4	8.2	1.6	4.6	1.5
Fri	8.1	8.3	1.5	8.3	1.5	4.6	1.4
Fri	8.5	8.2	1.5	8.4	1.5	4.7	1.3
Sat	8.2	8.2	1.5	8.7	1.5	4.6	1.5
Sat	8.1	8.0	1.5	8.3	1.6	4.6	1.5
AVG:	8.1	8.1	1.4	8.2	1.5	4.5	1.5