

FISHWAY STATUS REPORT

Date: 10/15/2016
 Inspection Period: 10/9/2016 thru 10/15/2016



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:	62 F
	Out of Criteria	Limit			Secchi:	6.0 Ft.
NORTH FISHWAY			In service; 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	1.5		
Entrance weir SE1	0	depth (≥ 8')	AVG	8.3		
Collection channel velocity	0	1.5 - 4 fps	AVG	3.38		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.4		
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	4.6		
Submersible traveling screens	0	visual inspect	STS camera insp. completed by 9/22. Two bad STSs (MU1& 4) replaced with working spares			
Turbine trashrack drawdown	0	<1.5', wkly	Monthly raking scheduled for the week of 9/26; very light river debris loads			
Vert barrier screen drawdown	0	<1.5', wkly				
Spill volume	0	N/A	2016 Spill season ended 9/1. 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 will continue in bypass for the full flow PIT tags detections until 24 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.

12 Navlock, 7 Spillway (#77 broke on 8/31), 6 Tower-to-Tower (three new broke on 8/28,) 1 PH (broke on 8/1) 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 on 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.

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

Research:

Washington F&W dam angling/NPM (pikeminnow) removal from JD PH tailrace completed in late August due to lack of funding. 3,002 NPM removed by 8/28/16

JD Fisheries supporting/ coordinating with NW Tribes for adult lamprey trapping and other lamprey research.

Adult Fish Counting by Normandeau Associates continues since 1 April 2016.

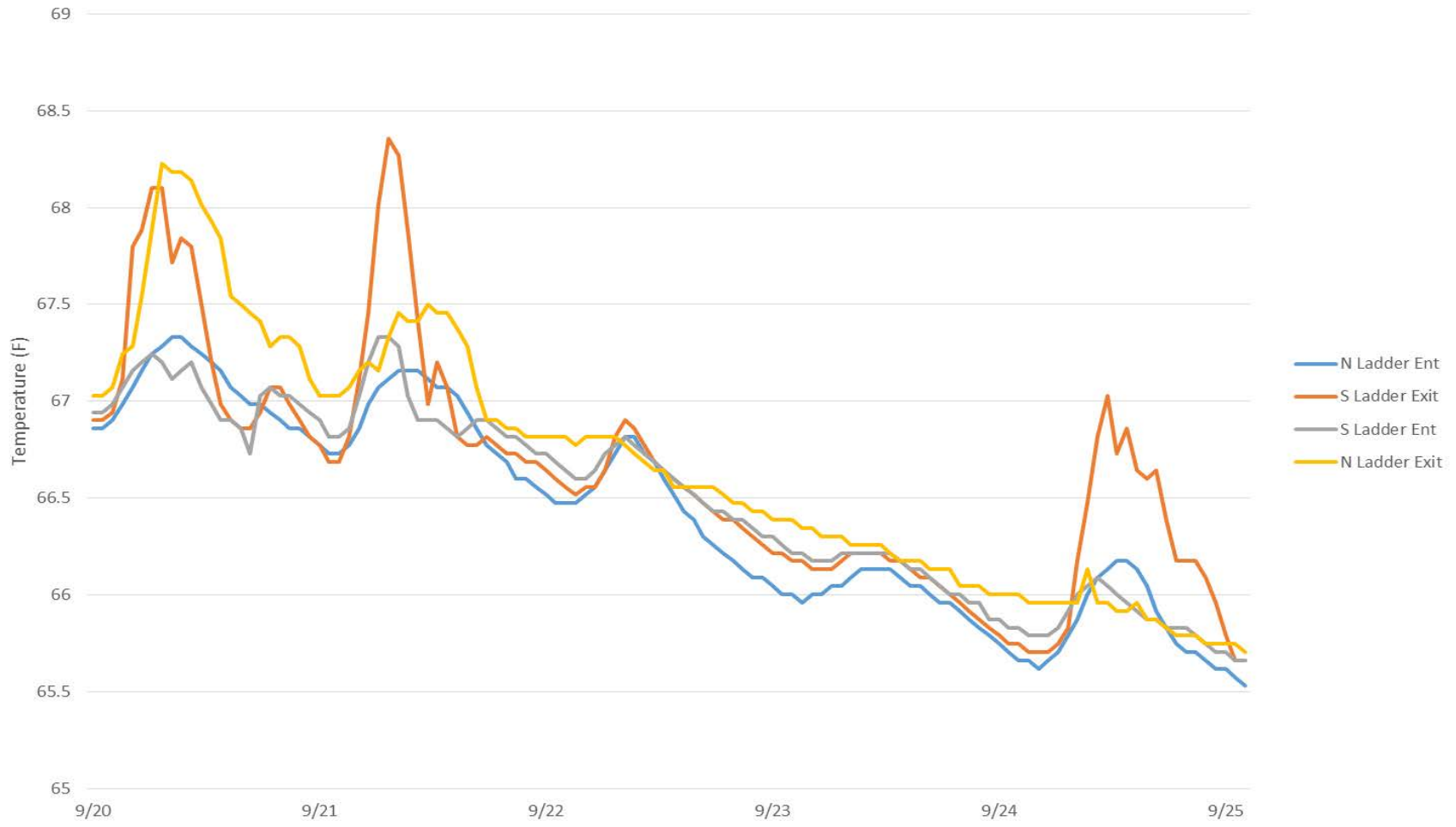
Adult PIT antennas PDT continues developing designs for the next winter outage's installation at both JD Fishways.

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>18-Oct-16</i>
By:	<i>EG/JD</i>

Bay(s)	Time	Sec.	Velocity (f/s)
<i>0-2</i>	<i>1:05</i>	<i>65</i>	<i>2.77</i>
<i>2 - 4</i>	<i>1:59</i>	<i>119</i>	<i>3.33</i>
<i>4 - 6</i>	<i>2:48</i>	<i>168</i>	<i>3.67</i>
<i>6 - 8</i>	<i>3:42</i>	<i>222</i>	<i>3.33</i>
<i>8 - 10</i>	<i>4:35</i>	<i>275</i>	<i>3.40</i>
<i>10 - 12</i>	<i>5:28</i>	<i>328</i>	<i>3.40</i>
<i>12 - 14</i>	<i>6:22</i>	<i>382</i>	<i>3.33</i>
<i>14 - 16</i>	<i>7:12</i>	<i>432</i>	<i>3.60</i>
<i>16 - 18</i>	<i>8:02</i>	<i>482</i>	<i>3.60</i>
			3.38

TW	160.3
#2 RPM	60
#3 RPM	60

JDA Bird Counts: 10/9/16 to 10/15/16

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

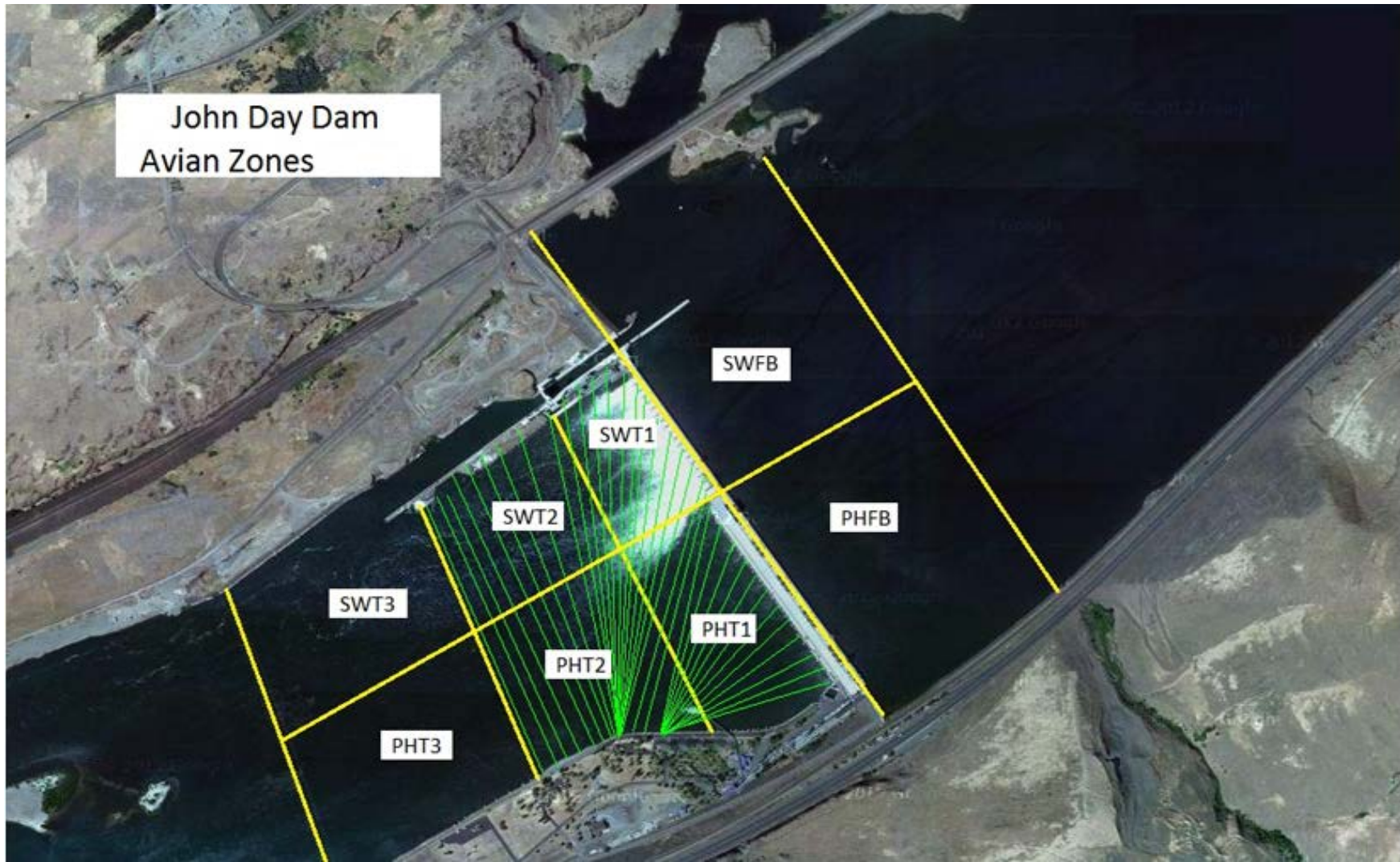
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
9-Oct	PHFB	0	0	288	163	0	0	24	31	0	0	0	0	0	0	0	0	0	0	98	74	678
9-Oct	SWFB	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
9-Oct	PH1	20	38	0	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
9-Oct	PH2	5	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
9-Oct	PH3	0	0	0	0	0	0	43	0	0	0	0	0	0	0	0	0	0	0	0	0	43
9-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-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		40		229		5		49		0		0		0		0		0		86		816
10-Oct	PHFB	0	0	140	197	0	0	15	13	0	0	0	0	0	0	0	0	0	0	90	85	540
10-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Oct	PH1	11	7	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
10-Oct	PH2	11	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
10-Oct	PH3	11	16	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	32
10-Oct	SW1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Oct	SW3	0	14	45	35	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	99
Avg/Survey		38		209		3		19		0		0		0		0		0		88		711
11-Oct	PHFB	0	0	0	128	0	0	0	4	0	0	0	0	0	0	0	0	10	0	69	24	235
11-Oct	SWFB	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11-Oct	PH1	2	3	0	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
11-Oct	PH2	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
11-Oct	PH3	0	66	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	97
11-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-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		44		66		4		18		0		0		0		0		5		47		365
12-Oct	PHFB	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106	0	127
12-Oct	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	9
12-Oct	PH1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12-Oct	PH2	68	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95
12-Oct	PH3	117	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	145
12-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Oct	SW2	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
12-Oct	SW3	17	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	52
Avg/Survey		129		11		1		20		0		0		0		0		0		58		433

JDA Bird Counts: 10/9/16 to 10/15/16

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)	
13-Oct	PHFB	22	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
13-Oct	SWFB	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	68
13-Oct	PH1	114	38	0	0	0	19	0	0	0	0	0	0	0	0	0	88	0	0	0	0	259
13-Oct	PH2	49	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
13-Oct	PH3	9	15	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	27
13-Oct	SW1	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
13-Oct	SW2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
13-Oct	SW3	0	0	0	0	0	0	31	62	0	0	0	0	0	0	0	0	0	0	0	0	93
Avg/Survey		137		42		10		50		0		0		2		0		44		6		576
14-Oct	PHFB	0	0	118	28	0	0	41	0	0	0	0	0	0	0	0	0	0	0	0	0	187
14-Oct	SWFB	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
14-Oct	PH1	53	37	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92
14-Oct	PH2	41	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
14-Oct	PH3	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
14-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Oct	SW2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
14-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		80		77		1		21		0		0		0		0		0		0		358
15-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	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
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		1053		1286		53		354		0		0		3		0		115		566		3430
Avg/Survey		75		92		4		25		0		0		0		0		8		40		245

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	63	6.0	
Mon	63	6.0	
Tue	63	6.0	
Wed	62	6.0	
Thur	62	6.0	
Fri	61	6.0	
Sat	61	6.0	
AVG:	62	6.0	AVG
			0
			MAX
			0
			MIN

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.2	8.2	1.5	9.1	1.5	4.6	1.4
Sun	8.1	8.0	1.6	8.4	1.5	4.6	1.3
Mon	8.3	8.3	1.4	8.2	1.6	4.6	1.1
Mon	8.0	8.1	1.2	8.7	1.5	4.6	1.3
Tues	8.2	8.2	1.6	8.0	1.7	4.7	1.1
Tues	8.2	8.2	1.5	8.2	1.5	4.5	1.4
Wed	8.0	8.0	1.5	8.0	1.4	4.5	1.6
Wed	8.0	8.0	1.5	8.0	1.6	4.6	1.5
Thur	8.1	8.1	1.4	8.2	1.6	4.6	1.5
Thur	8.2	8.2	1.5	8.2	1.6	4.6	1.4
Fri	8.0	8.0	1.3	8.0	1.5	4.5	1.5
Fri	8.0	8.0	1.5	8.1	1.6	4.5	1.4
Sat	8.2	8.0	1.3	8.2	1.5	4.5	1.4
Sat	8.0	8.0	1.5	8.3	1.5	4.6	1.4
AVG:	8.1	8.1	1.5	8.3	1.5	4.6	1.4