


FISHWAY STATUS REPORT

Date: 10/1/2016
Inspection Period: 9/25/2016 thru 10/1/2016



**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: 65 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 1.4	
Entrance weir SE1	0	depth (≥ 8')	AVG 8.6	
Collection channel velocity	0	1.5 - 4 fps	AVG 3.56	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.3	
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 9/22. Two bad STSs (MU1& 4) replaced with working spares	
Turbine trashrack drawdown	0	<1.5', wkly	Monthly raking of MUs 9-16 completed by 9/29; 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. Various bird species feeding on the abundant juvenile shad.

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 for PIT tags detection 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.

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.

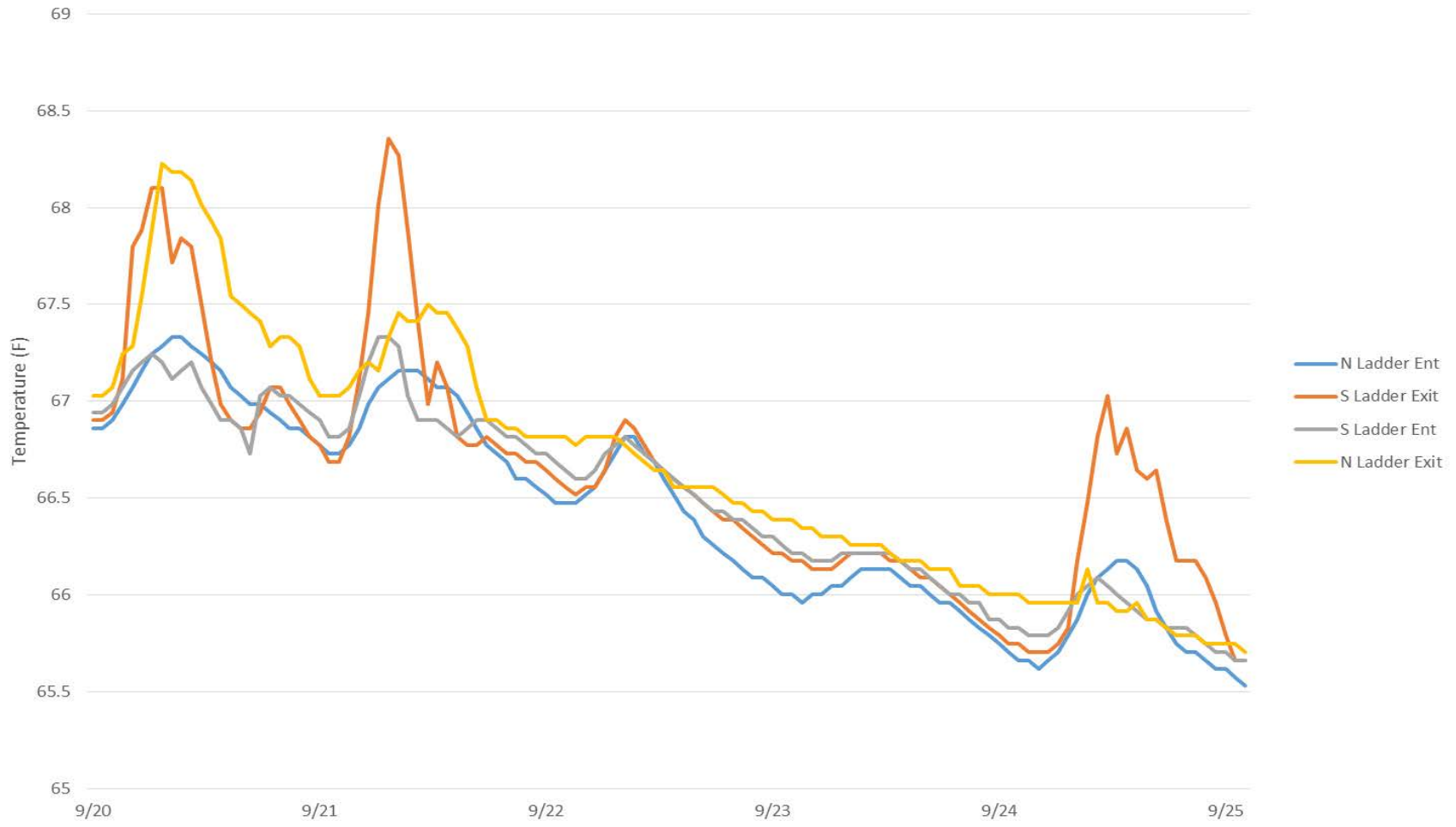
Kevin Moynahan

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 28-Sep-16

By: Jim

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:07	66	2.73
2 - 4	1:54	115	3.67
4 - 6	2:42	165	3.60
6 - 8	3:31	214	3.67
8 - 10	4:18	263	3.67
10 - 12	5:05	312	3.67
12 - 14	5:54	363	3.53
14 - 16	6:42	412	3.67
16 - 18	7:27	459	3.83
			3.56

TW 159.8
#2 RPM 60
#3 RPM 60

JDA Bird Counts: 9/25/16 to 10/1/16

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

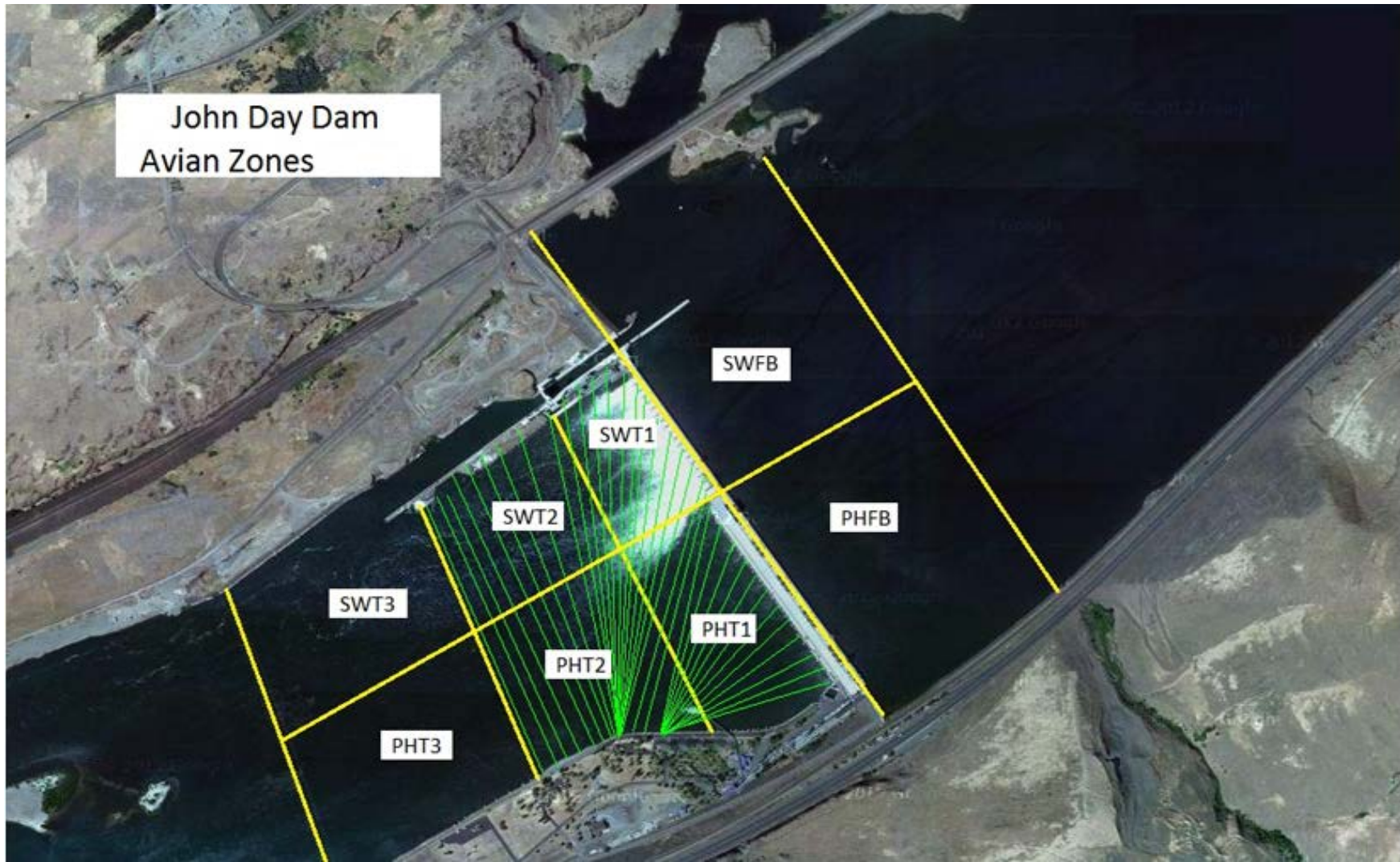
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
25-Sep	PHFB	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	4	0	39	0	66
25-Sep	SWFB	0	0	184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	184
25-Sep	PH1	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
25-Sep	PH2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
25-Sep	PH3	1	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25-Sep	SW1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
25-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Sep	SW3	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Avg/Survey		2		96		0		30		0		0		0		0		2		20		297
26-Sep	PHFB	0	0	23	184	0	4	4	0	0	0	0	0	0	0	0	0	0	6	60	6	287
26-Sep	SWFB	0	0	84	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183
26-Sep	PH1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
26-Sep	PH2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
26-Sep	PH3	52	0	0	0	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	99
26-Sep	SW1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
26-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Sep	SW3	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Avg/Survey		33		209		2		26		0		0		0		0		3		33		610
27-Sep	PHFB	0	0	235	87	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	36	359
27-Sep	SWFB	0	0	25	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106
27-Sep	PH1	10	6	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
27-Sep	PH2	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
27-Sep	PH3	2	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	9
27-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		10		214		2		4		0		0		0		0		0		18		496
28-Sep	PHFB	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
28-Sep	SWFB	0	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
28-Sep	PH1	2	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
28-Sep	PH2	0	4	12	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
28-Sep	PH3	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
28-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		6		47		1		0		0		0		0		0		0		0		107

JDA Bird Counts: 9/25/16 to 10/1/16

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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)	
29-Sep	PHFB	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	32
29-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Sep	PH1	4	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
29-Sep	PH2	10	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
29-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Sep	SW3	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Avg/Survey		12	0	2	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	
30-Sep	PHFB	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
30-Sep	SWFB	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
30-Sep	PH1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
30-Sep	PH2	2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
30-Sep	PH3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
30-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Sep	SW3	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Avg/Survey		9	21	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	
1-Oct	PHFB	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25
1-Oct	SWFB	0	0	225	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	303
1-Oct	PH1	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
1-Oct	PH2	2	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
1-Oct	PH3	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
1-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Oct	SW3	0	0	0	0	0	0	18	0	0	0	0	0	0	0	8	0	0	0	0	0	26
Avg/Survey		12	152	2	22	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	382	
Totals		Gulls		Cormorant		Caspian tern		White Pelican		Grebe		Total										
		F	NF	F	NF	F	NF	F	NF	F	NF	F	NF									
Weekly Total		167	1475	17	246	0	0	0	8	10	141	2064										
Avg/Survey		12	105	1	18	0	0	0	1	1	10	147										

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	66	6.0	
Mon	66	6.0	
Tue	65	6.0	
Wed	65	6.0	
Thur	65	6.0	
Fri	64	6.0	
Sat	64	6.0	
AVG:	65	6.0	
			AVG
			MAX 0
			MIN 0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.1	8.1	1.4	8.7	1.6	4.5	1.2
Sun	8.1	8.2	1.3	9.1	1.5	4.5	1.3
Mon	8.1	8.0	1.3	8.7	1.6	4.2	1.4
Mon	8.1	8.0	1.4	8.1	1.5	4.5	1.1
Tues	8.2	8.4	1.4	8.5	1.4	4.6	1.3
Tues	8.2	8.2	1.4	8.6	1.5	4.6	1.5
Wed	8.2	8.2	1.4	9.0	1.6	4.6	1.4
Wed	8.2	8.2	1.4	9.0	1.5	4.5	1.4
Thur	8.0	8.0	1.4	8.0	1.4	4.3	1.4
Thur	8.0	8.0	1.4	8.7	1.6	4.4	1.3
Fri	8.0	8.0	1.5	8.6	1.5	4.6	1.3
Fri	8.0	8.0	1.4	8.5	1.7	4.6	1.2
Sat	8.0	8.0	1.5	8.6	1.6	4.6	1.4
Sat	8.2	8.2	1.5	8.6	1.5	4.6	1.3
AVG:	8.1	8.1	1.4	8.6	1.5	4.5	1.3