

FISHWAY STATUS REPORT

Date: 4/16/2016
 Inspection Period: 4/10/2016 thru 4/16/2016



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:	48 F
	Out of Criteria	Limit			Secchi:	5.3 Ft.
NORTH FISHWAY			In service; 5 AWS pumps available while # 4 will be re-installed by May.			
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			AWS turbine 2 returned to service/NE 2 gate opened on 3/31. 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	8.9		
Collection channel velocity	0	1.5 - 4 fps	AVG	3.61		
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			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	All STSs installed by 1 April; camera inspection scheduled for the next week, 4/18			
Turbine trashrack drawdown	0	<1.5', wkly	MU trashracks' raking as necessary per the differentials			
Vert barrier screen drawdown	0	<1.5', wkly				
Spill volume	0	N/A	2016 Spill season started on 4/10/16 at 0001, TSWs in bays 18 & 19 opened by 0750.			
Spill pattern	0	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

SMOLT MONITORING FACILITY

Operation:

In service since 1 April. Every other day sampling by PSMFC biologists in 2016; JD Fisheries crew moves the Switch Gate between sample-bypass modes daily AM.

Maintenance:

All winter maintenance completed by 1 April.

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: 58 MAX: 105 MIN: 19

OTHER JOHN DAY ISSUES:

Birds :

see the Avian Numbers tab. We report all species and locations, but in reality only gulls in the tailrace BRZ are relevant at JD.

13 Navlock and Spillway lines are missing out of 125 grid's total; no funding is available to reinstall for 2016 season. UFR for \$ 250K is pending.

New in April 2016, the JD Avian Lines Improvements' PDT will assess their reliability and design a better/ cheaper methods for their maintenance.

USDA boat avian hazing downstream of JD Tailrace BRZ will commence on 4/27; gulls haven't been present in high numbers so far (due to windy conditions ?)

Operations:

JBS and SMF in regular operation since 1 April as required by FPP.

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

JD South Fishway AWS turbine 3 cooling water line failed on 4/16, but it continued in service until Monday, 4/18. Turbine 3 was OOS on 4/18 from 0900 to 1400 while JD Mechanical performed the necessary repairs. FOGs # 18 & 19 remain closed due to two turbines operation.

MU Gatewell Drawdowns: Weekly or more frequently per river debris loads.

Maintenance:

JD North Fishway AWS - pump # 4 will be reinstalled by a contractor, by mid-May

JD South Fishway AWS turbine 1 OOS long term due to failed pump's lower bearing. Awaiting special funding for its overhaul/replacement.

MU 8 was dewatered to salvage potential sturgeon before its governor installation process: Scroll case on 4/11/16 = 3 live smolts, no morts and Draft tube on 4/12/16 = 3 small, live sturgeon and 4 cats, no morts.

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

Research:

Adult Fish Counting by Normandeau Associates commenced on 1 April 2016.

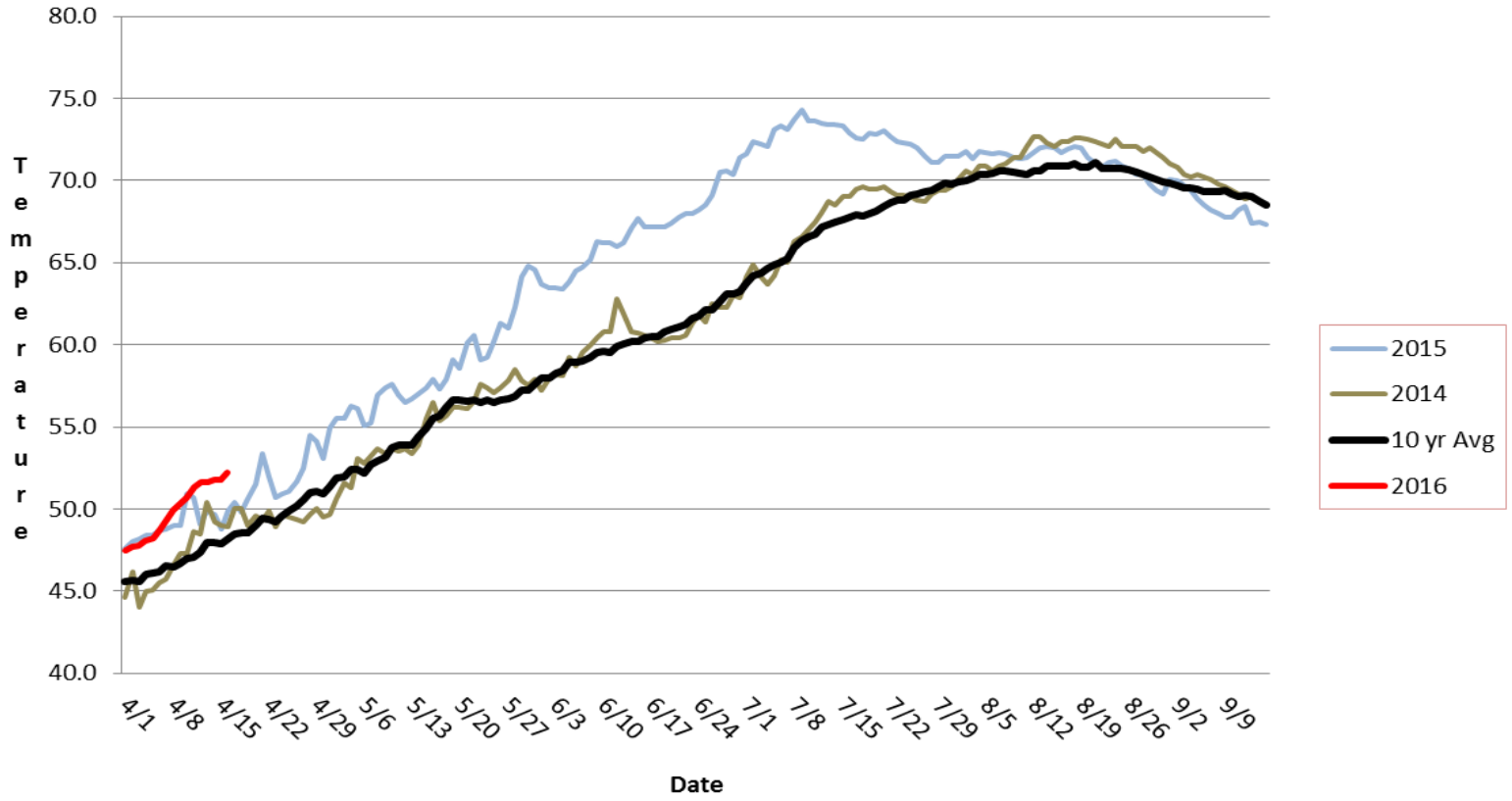
Proposal by PSMFC to install Adult PIT antennas at both JD Fishways is at the design/PDT level.

Kevin Moynahan

OPM John Day/Willow Creek Project

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

JDA SMF Water Temp



JDA Collection Channel Velocity

Date 8-Apr-16

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:56	56	3.21
2 - 4	1:43	103	3.83
4 - 6	2:31	151	3.75
6 - 8	3:17	197	3.91
8 - 10	4:05	245	3.75
10 - 12	4:52	292	3.83
12 - 14	5:43	343	3.53
14 - 16	6:38	398	3.27
16 - 18	7:31	451	3.40
			3.61

NE TW 162.3
#2 RPM 64
#3 RPM 64

JDA Bird Counts: 4/10/16 to 4/16/16

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

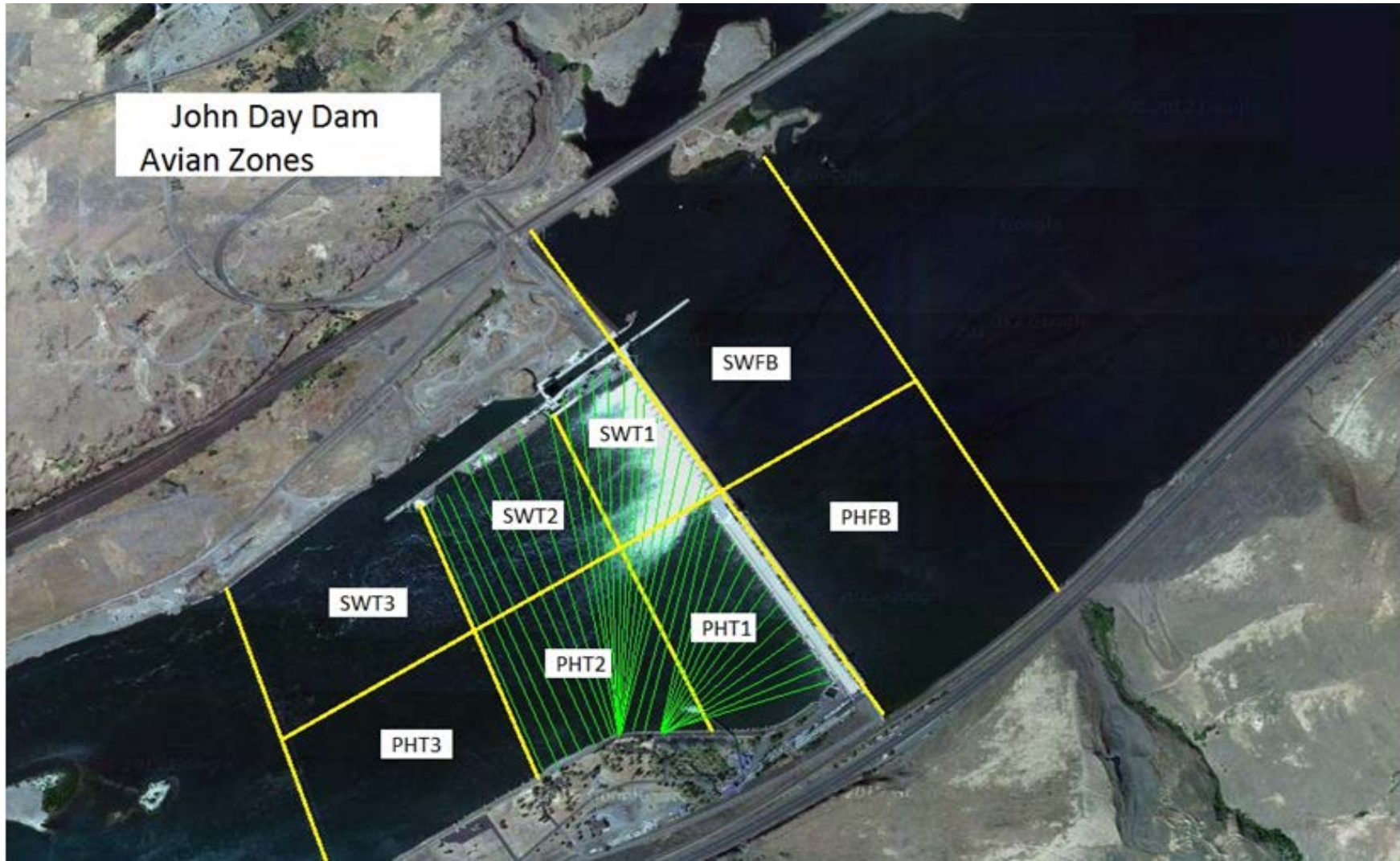
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
10-Apr	PHFB	0	0	0	1	0	0	12	2	0	0	0	0	0	0	0	0	17	0	0	21	53
10-Apr	SWFB	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10-Apr	PH1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Apr	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	7	0	7	0	0	0	0	0	0	0	0	9	11					56
11-Apr	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	24	48
11-Apr	SWFB	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Apr	PH2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11-Apr	PH3	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
11-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Apr	SW3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Avg/Survey		7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24		65
12-Apr	PHFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	34	65
12-Apr	SWFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12-Apr	PH1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12-Apr	PH2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12-Apr	PH3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Apr	SW3	19	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Avg/Survey		10	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32		93
13-Apr	PHFB	3	0	0	0	0	0	6	0	0	0	0	0	0	0	0	3	23	28			63
13-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Apr	PH2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
13-Apr	PH3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
13-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Apr	SW3	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Avg/Survey		4	2	0	3	0	0	0	0	0	0	0	0	0	0	2	26					72

JDA Bird Counts: 4/10/16 to 4/16/16

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)	
14-Apr	PHFB	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9	36	21	75
14-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Apr	PH2	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
14-Apr	PH3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
14-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Apr	SW3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Avg/Survey		8		0		0		5		0		0		0		0		5		29		90
15-Apr	PHFB	2	1	0	0	0	6	8	0	0	0	0	0	0	0	0	0	0	7	35	24	83
15-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Apr	PH2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
15-Apr	PH3	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
15-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Apr	SW3	8	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Avg/Survey		20		0		3		4		0		0		0		0		4		30		120
16-Apr	PHFB	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	4	6	40	32	94
16-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Apr	PH2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
16-Apr	PH3	6	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
16-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Apr	SW3	13	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Avg/Survey		22		0		0		6		0		0		0		0		5		36		137
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	F	NF	F	NF	
Weekly Total		140	18	8	49	0	49	0	0	0	0	0	0	46	372	46	372	633		633		
Avg/Survey		10	1	1	4	0	4	0	0	0	0	0	0	3	27	3	27	45		45		

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks	
Sun	50	5.5	19	April 10th @ 0001 - 10:55
Mon	50	5.5	55	April 11th @ 0645 - April 12th @ 0945
Tue	51	5.0	Bypass	
Wed	52	5.0	51	April 13th @ 0700 - April 14th @ 0900
Thur	52	4.5	Bypass	
Fri	52	4.0	105	April 15th @ 0700 - April 16th @ 1000
Sat	52	4.5	Bypass	
AVG:	51	AVG: 4.9	AVG 58	
			MAX 105	
			MIN 19	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.8	8.8	1.3	9.0	1.6	4.5	1.9
Sun	8.8	8.8	1.5	8.9	1.6	4.6	1.9
Mon	8.6	8.6	0.7	8.7	1.4	4.6	1.0
Mon	9.0	9.0	1.4	9.0	1.6	4.5	1.7
Tues	9.0	9.0	1.4	9.0	1.3	4.6	1.8
Tues	9.9	9.9	1.5	8.8	1.5	4.5	1.5
Wed	10.3	10.3	1.4	9.1	1.6	4.5	1.3
Wed	9.8	9.8	1.5	8.9	1.6	4.6	1.8
Thur	10.4	10.4	1.3	9.6	1.4	4.6	1.6
Thur	10.5	10.5	1.4	9.3	1.6	4.5	1.5
Fri	10.0	10.0	1.1	9.9	1.4	4.6	1.5
Fri	9.4	9.4	1.3	8.6	1.5	4.6	1.7
Sat	10.1	10.2	1.3	10.2	1.5	4.5	1.5
Sat	9.4	9.4	1.3	9.4	1.6	4.6	1.5
AVG:	9.6	9.6	1.3	9.2	1.5	4.6	1.6