


FISHWAY STATUS REPORT

Date: 9/3/2016
Inspection Period: 8/28/2016 thru 9/3/2016



**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:	72 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	8.3		
Collection channel velocity	0	1.5 - 4 fps	AVG	3.59		
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	4.6		
Submersible traveling screens	0	visual inspect	STS camera insp. completed on 8/25. Three bad screens replaced with working spares.			
Turbine trashrack drawdown	0	<1.5', wkly	Monthly raking scheduled for the week of 8/29; 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 open 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:

In service since 1 April. The limited, two days a week, 6 hrs sampling started on 7/27 due to river temp. over 70 F.

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. Until this year, our internal focus had been on gulls in the tailrace BRZ, but the white pelicans are catching up quickly.

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.

No increased gull predation in spite the missing lines/large gaps in the tailrace Avian Array in 2016 !!!

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

Operations:

JBS and SMF in regular operation since 1 April, as required by FPP. Limited, two days a week sampling since 7/27 due to river temp over 70 F.

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: Twice a week or more frequently as necessary.

Maintenance:

JD South Fishway AWS turbine 1 OOS long term due to failed pump's lower bearing. Received \$100K UFR for AWS pumps' repair on 5/18.

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

Research:

Washington F&W dam angling / NPM (pikeminnow) removal from JD PH tailrace continues since 5/10/16. 3,002 fish 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.

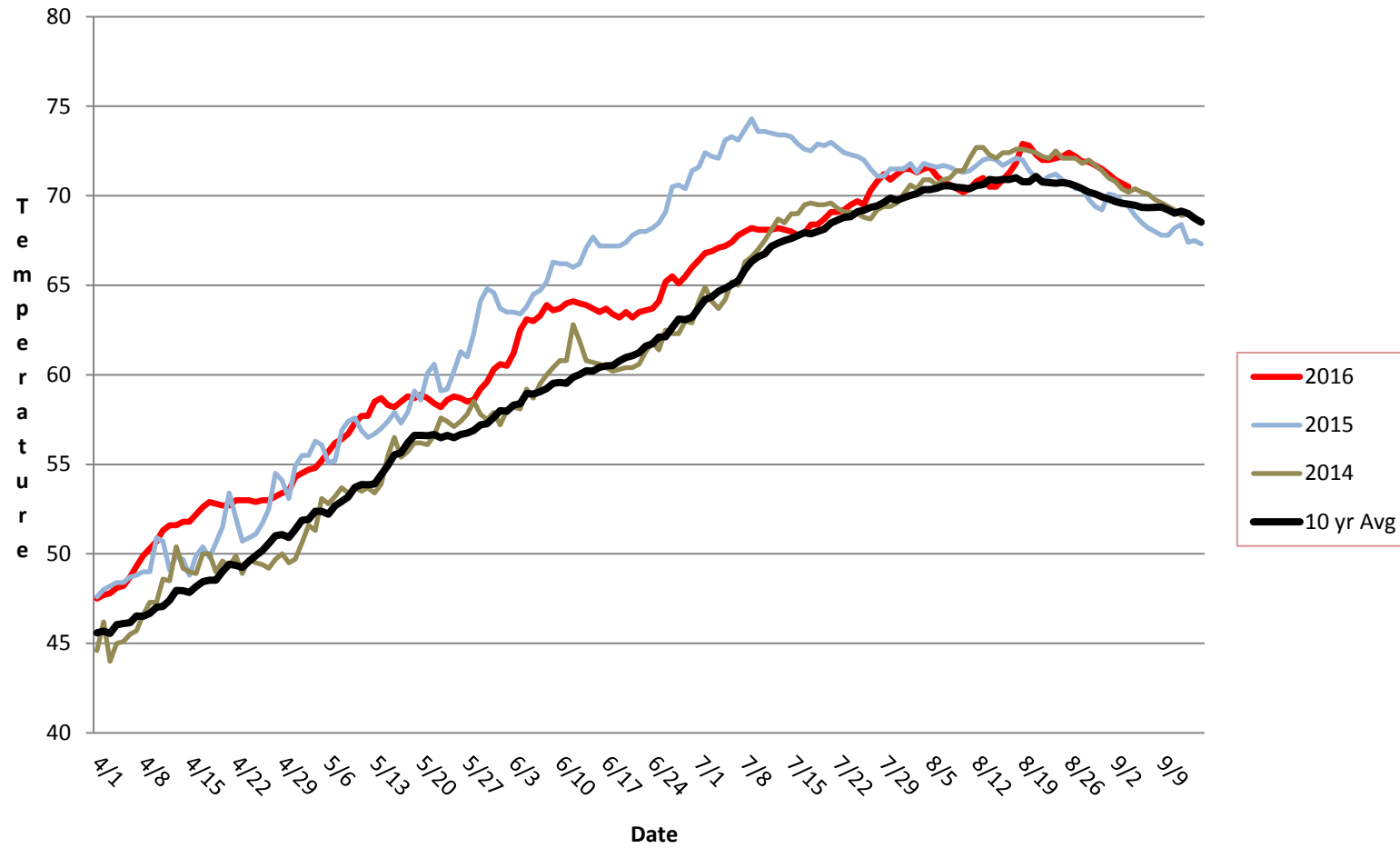
Kevin Moynahan

OPM John Day/Willow Creek Project

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

JDA SMF Water Temp



JDA Collection Channel Velocity

Date 27-Aug-16

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:57	57	3.16
2 - 4	1:47	107	3.60
4 - 6	2:37	157	3.60
6 - 8	3:27	207	3.60
8 - 10	4:16	256	3.67
10 - 12	5:04	304	3.75
12 - 14	5:56	356	3.46
14 - 16	6:45	405	3.67
16 - 18	7:33	453	3.75
			3.59

TW 159.9
 #2 RPM 60
 #3 RPM 60

JDA Bird Counts: 8/21/16 to 8/27/16

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)		
28-Aug	PHFB	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	8
28-Aug	SWFB	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
28-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
28-Aug	PH3	3	4	0	0	0	0	0	0	0	0	0	0	3	2	11	9	0	0	0	0	0	32
28-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Aug	SW3	13	6	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	24
Avg/Survey		13	12	0	2	0	0	6	10	0	2	90											
29-Aug	PHFB	0	0	26	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
29-Aug	SWFB	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
29-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
29-Aug	PH3	29	0	0	0	0	0	0	0	0	0	0	0	3	4	19	5	0	0	0	0	0	60
29-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
29-Aug	SW3	30	4	0	0	0	0	0	0	0	0	0	0	12	6	0	0	0	0	0	0	0	52
Avg/Survey		32	15	0	6	0	0	14	12	0	0	155											
30-Aug	PHFB	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
30-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	PH2	3	2	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	11
30-Aug	PH3	0	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5
30-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	SW2	2	3	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	9
30-Aug	SW3	0	3	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	8
Avg/Survey		9	11	0	0	0	0	8	0	0	0	55											
31-Aug	PHFB	0	0	37	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
31-Aug	SWFB	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
31-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
31-Aug	PH3	33	0	0	0	0	0	0	0	0	0	0	0	2	0	4	0	0	0	0	0	0	39
31-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug	SW2	0	6	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	9
31-Aug	SW3	35	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	42
Avg/Survey		37	21	0	4	0	0	7	2	0	0	141											

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	72	6.0	
Mon	72	6.0	
Tue	72	6.0	
Wed	72	6.0	
Thur	72	6.0	
Fri	72	6.0	
Sat	71	6.0	
AVG:	72	6.0	AVG
			0
			MAX
			0
			MIN

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.1	8.1	1.4	8.2	1.5	4.5	1.3
Sun	8.1	8.0	1.5	8.0	1.6	4.5	1.3
Mon	8.1	8.3	1.4	8.2	1.5	4.6	1.1
Mon	8.3	8.5	1.3	8.5	1.6	4.6	1.1
Tues	8.1	8.1	1.3	8.2	1.5	4.5	1.1
Tues	8.0	8.0	1.3	8.3	1.6	4.6	1.1
Wed	8.1	8.1	1.3	8.5	1.7	4.6	1.3
Wed	8.0	8.0	1.4	8.7	1.5	4.6	1.5
Thur	8.0	8.0	1.5	8.8	1.6	4.5	1.4
Thur	8.0	8.1	1.6	8.2	1.5	4.5	1.4
Fri	8.1	8.1	1.3	8.3	1.5	4.6	1.5
Fri	8.0	8.0	1.2	8.1	1.4	4.6	1.5
Sat	8.0	8.0	1.3	8.1	1.5	4.6	1.5
Sat	8.0	8.0	1.4	8.2	1.6	4.6	1.4
AVG:	8.1	8.1	1.4	8.3	1.5	4.6	1.3