


FISHWAY STATUS REPORT

Date: 4/23/2016
Inspection Period: 4/17/2016 thru 4/23/2016



**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:	53 F
	Out of Criteria	Limit	Secchi: 4.5 Ft.			
NORTH FISHWAY			In service; 5 AWS pumps available while # 4 will be re-installed by June.			
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	1.3		
Entrance weir SE1	0	depth (≥ 8')	AVG	8.7		
Collection channel velocity	0	1.5 - 4 fps	AVG	3.50		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.6		
Entrance weir NE1	0	depth (≥ 8')	AVG	10.4		
Entrance weir NE2	0	depth (≥ 8')	AVG	10.4		
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	All STSs/ orifices OK, per camera inspection the week of 4/18/16.			
Turbine trashrack drawdown	0	<1.5', wkly	MUs trashracks' raking is scheduled for the next week, 4/25/16			
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 was 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: 47 MAX: 64 MIN: 26

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 4/29; 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.

MU 16 emergency Scroll Case's dewatering occurred on 4/20 AM; JD Fisheries crew found no fish inside.

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

Research:

Adult Fish Counting by Normandeau Associ:

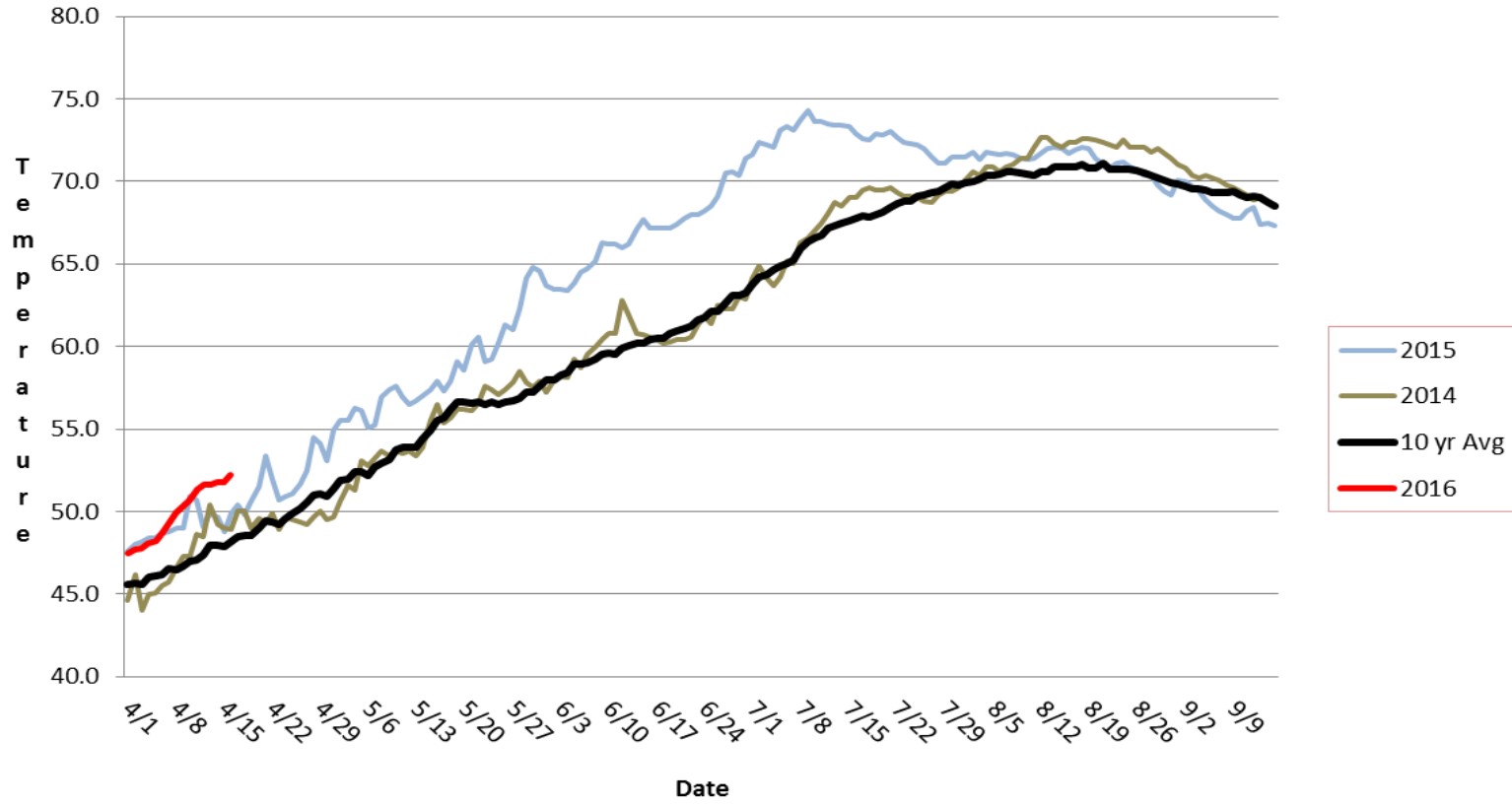
Proposal by PSMFC to install Adult PIT antennas at both JD Fishways is at the design/PDT level.

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

Kevin Moynahan

OPM John Day/Willow Creek Project

JDA SMF Water Temp



JDA Collection Channel Velocity

Date 23-Apr-16

By: pete

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:04	64	2.81
2 - 4	1:51	111	3.83
4 - 6	2:43	163	3.46
6 - 8	3:38	218	3.27
8 - 10	4:29	269	3.53
10 - 12	5:22	322	3.40
12 - 14	6:10	370	3.75
14 - 16	6:58	418	3.75
16 - 18	7:47	467	3.67
			3.50

NE TW 163.5
#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	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	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	32					93	
13-Apr	PHFB	3	0	0	0	0	0	6	0	0	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	2	26					72	

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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)	
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	0	0	0	0	0	0	0	46	372							633
Avg/Survey		10	1	1	4	0	0	0	0	0	0	3	27									45

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	53	4.5	64
Mon	53	4.5	45
Tue	53	4.5	63
Wed	53	4.5	38
Thur	53	4.5	44
Fri	53	4.5	26
Sat	53	4.5	51
AVG:	53	AVG: 4.5	AVG 47
			MAX 64
			MIN 26

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.3	9.3	1.2	10.6	1.5	4.5	1.8
Sun	10.3	10.3	1.4	8.4	1.6	4.5	1.6
Mon	10.4	10.4	1.2	9.4	1.5	4.6	1.8
Mon	10.5	10.5	1.2	8.3	1.6	4.4	1.6
Tues	10.9	10.9	1.3	8.2	1.5	4.6	1.6
Tues	10.0	10.1	1.5	8.1	1.6	4.5	1.9
Wed	11.3	11.3	1.0	9.6	1.6	4.6	1.6
Wed	10.6	10.6	1.6	8.3	1.4	4.7	1.7
Thur	11.2	11.2	1.3	8.6	1.5	4.5	1.3
Thur	11.5	11.5	1.5	8.0	1.5	4.5	1.3
Fri	12.3	12.3	1.2	8.7	1.5	4.6	1.4
Fri	10.0	10.0	1.3	8.7	1.4	4.6	1.8
Sat	8.9	8.9	1.5	8.4	1.6	4.6	1.7
Sat	8.8	8.8	1.6	8.7	1.5	4.7	1.8
AVG:	10.4	10.4	1.3	8.7	1.5	4.6	1.6