

FISHWAY STATUS REPORT

Date: 4/30/2016
 Inspection Period: 4/24/2016 thru 4/30/2016



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:	4.3 Ft.
NORTH FISHWAY			In service; 4 AWS pumps available, # 4 & 5 OOS			
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	8.8		
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	10.7		
Entrance weir NE2	0	depth (≥ 8')	AVG	10.6		
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/ orifices OK, per camera inspection the week of 4/18/16.			
Turbine trashrack drawdown	0	<1.5', wkly	Large volume of debris/ tumble weed raked from MUs intakes the past week			
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: 100 MAX: 117 MIN: 89

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 commenced on 4/29; light gull presence so far.

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 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. JD Structural removed a large volume of debris/ tumble weed from MUs intakes.

Maintenance:

JD North Fishway AWS - pump # 4 will be reinstalled by a contractor, by early June. Pump # 5 OOS due to gearbox's oil leak; it will be repaired soon.

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

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

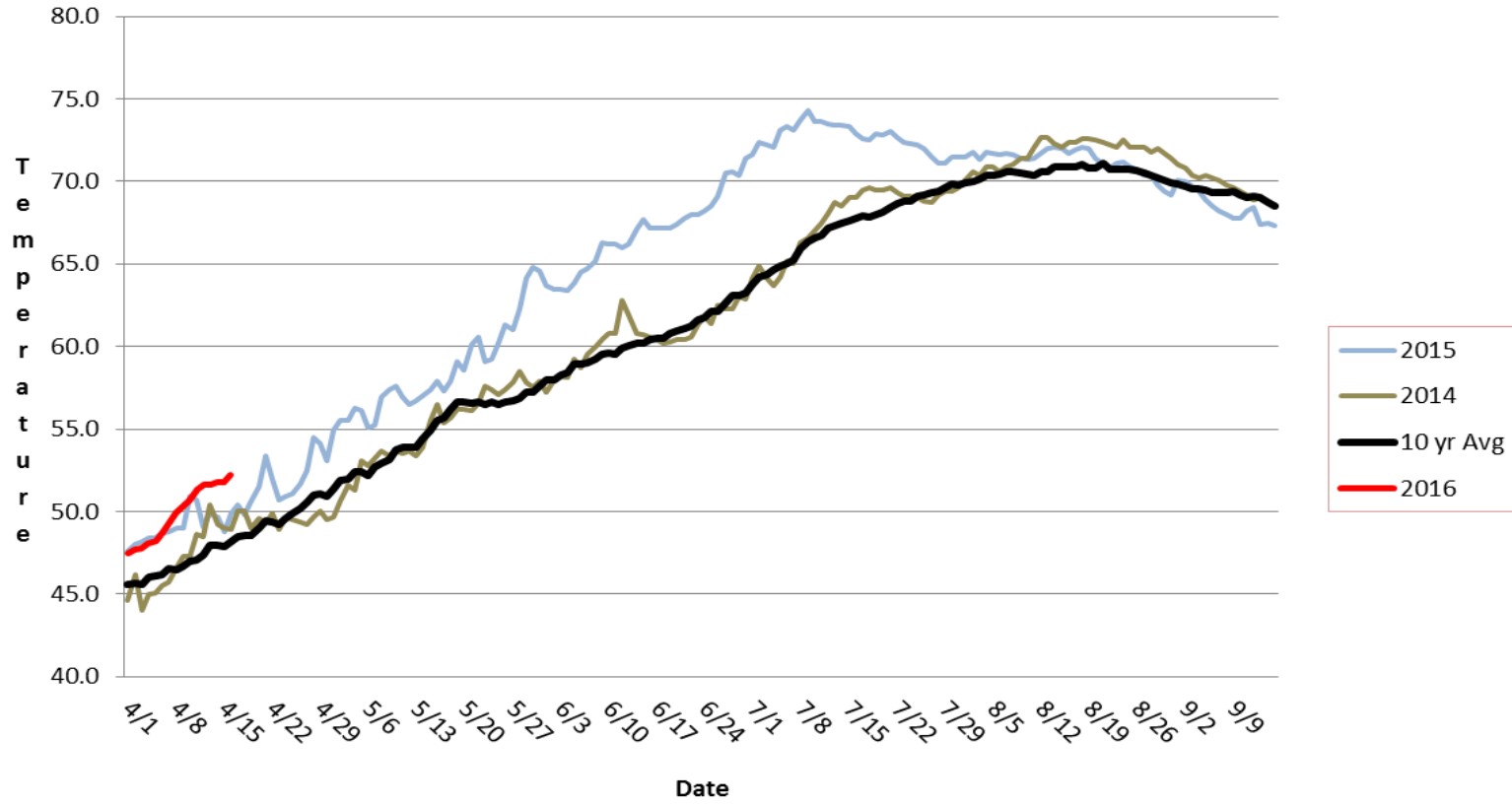
Proposal by PSMFC to install Adult PIT antennas at both JD Fishways is at the design/PDT level.

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

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: 4/24/16 to 4/30/16

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)	
24-Apr	PHFB	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	48	60
24-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Apr	SW2	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
24-Apr	SW3	5	3	16	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Avg/Survey		4	18	0	0	0	0	0	0	0	0	0	5	24						102		
25-Apr	PHFB	0	0	11	4	0	0	0	0	0	0	0	0	0	0	0	0	10	9	38	38	110
25-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Apr	SW1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
25-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Apr	SW3	2	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Avg/Survey		1	17	0	0	0	0	0	0	0	0	0	10	38						130		
26-Apr	PHFB	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	7	0	46	27	95
26-Apr	SWFB	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
26-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Apr	PH2	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
26-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Apr	SW2	0	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
26-Apr	SW3	1	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Avg/Survey		7	18	0	0	0	0	0	0	0	0	0	4	37						130		
27-Apr	PHFB	0	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	35	38	0	0	82
27-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Apr	PH2	9	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
27-Apr	PH3	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
27-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Apr	SW2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
27-Apr	SW3	12	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Avg/Survey		28	5	0	0	0	0	0	0	0	0	0	37	0						138		

JDA Bird Counts: 4/24/16 to 4/30/16

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-Apr	PHFB	0	0	7	22	0	0	0	0	0	0	0	0	0	0	0	0	34	31	0	0	94 2 0 5 4 0 4 16 125
28-Apr	SWFB	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28-Apr	PH2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28-Apr	PH3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28-Apr	SW2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28-Apr	SW3	6	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avg/Survey		15		16		0		0		0		0		0		0		33		0		125
29-Apr	PHFB	0	0	3	7	0	0	0	0	0	0	0	0	0	0	0	0	31	30	0	0	71 7 0 0 6 0 1 22 107
29-Apr	SWFB	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29-Apr	PH3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29-Apr	SW2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29-Apr	SW3	16	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avg/Survey		15		9		0		0		0		0		0		0		31		0		107
30-Apr	PHFB	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	30 46 1 3 4 0 0 24 108
30-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	0	0	0	
30-Apr	PH1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30-Apr	PH2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30-Apr	PH3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30-Apr	SW3	5	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avg/Survey		16		2		0		0		0		0		0		0		37		0		108
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		170		165		0		0		0		0		0		0		308		197		
Avg/Survey		12		12		0		0		0		0		0		0		22		14		60

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	53	5.0	
Mon	53	5.0	117
Tue	53	5.0	
Wed	53	4.0	95
Thur	53	3.0	
Fri	53	3.5	89
Sat	53	4.5	
AVG:	53	AVG: 4.3	AVG 100
			MAX 117
			MIN 89

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.3	9.3	1.2	9.4	1.5	4.6	1.8
Sun	9.3	9.3	1.4	9.2	1.5	4.6	1.8
Mon	9.1	9.0	1.5	8.4	1.5	4.6	2.0
Mon	12.6	12.5	1.5	8.1	1.5	4.3	1.3
Tues	12.1	12.1	1.0	8.1	1.6	4.7	1.3
Tues	11.2	11.2	1.5	8.0	1.5	4.2	1.6
Wed	11.8	11.8	1.3	9.3	1.4	4.5	1.5
Wed	11.5	11.5	1.4	8.6	1.5	4.6	1.5
Thur	11.0	10.9	1.2	8.7	1.5	4.5	1.5
Thur	10.7	10.7	1.4	8.3	1.5	4.5	1.6
Fri	10.8	10.7	1.3	9.8	1.4	4.6	1.6
Fri	10.4	10.4	1.4	9.2	1.4	4.5	1.5
Sat	10.0	10.0	1.4	8.6	1.5	4.6	1.5
Sat	9.6	9.6	1.5	9.0	1.5	4.5	1.6
AVG:	10.7	10.6	1.4	8.8	1.5	4.5	1.6