


FISHWAY STATUS REPORT

Date: 5/5/2018
Inspection Period: 4/29/2018 thru 5/5/2018



**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 passage 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: 4.0 Ft.
NORTH FISHWAY			In service with all 6 AWS pumps total 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	0		In service with two AWS turbines and two FOGs.	
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 4.86	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.6	
Entrance weir NE1	0	depth (≥ 8')	AVG 12.0	
Entrance weir NE2	0	depth (≥ 8')	AVG 12.1	
JUVENILE PASSAGE	0		In service since 2/28.	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect	Monthly STS camera inspection to occur the week of 5/21.	
Turbine trashrack drawdown	0	<1.5', wkly	Monthly MU intake trashrack raking completed by 4/25. Very little debris found.	
Vert barrier screen drawdown	0	<1.5', wkly		
Spill volume	0	per FPP	Fish Spill at Gas Cap continues since 4/10/18.	
Spill pattern	0	per FPP	Two TSWs, bays 18 & 19 open since 4/10/18 AM.	
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

SMOLT MONITORING FACILITY

Operation:

SMF in service since 2/28 with every other day, 24 hrs condition sampling.

Maintenance:

SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway. Awaiting for \$ 170 K UFR to complete in FY18.

Research: None**Birds :**

Gulls and white pelican numbers are slowly increasing in an immediate vicinity of JD. See Avian Numbers tab for details.

All 125 avian lines in place without any deficiencies. USDA boat hazing commenced on 4/16 and will continue 7 days a week thru 7/31.

Operations:

35 smolt mortalities were found in a gatewell 8B during routine, daily inspection on 4/23 AM. An immediate underwater camera inspection found 8B orifice plugged up by sticks/wooden debris which were removed by JD Structural crew using grapple hook. Unfortunately, additional 37 smolt mortalities were identified before the orifice was fully open, the same day PM. See 18 JDA 01 MFR for details.

JD South Fishway in service, with two AWS turbines and two FOGs since 2/28/18. Awaiting special funding to overhaul turbines 1 & 2 (\$ 3 million each.)

JD North Ladder in service since 12/21/17. 6 out of 6 AWS pumps available again since 4/18/18.

MU Gatewell Drawdowns: All MUs trashrack differentials are 1.5' or below according to twice a week inspections.

Maintenance:

JD South AWS turbine 1 is OOS, in poor condition and urgently awaiting its overhaul as soon as \$ 3 million becomes available (hopefully in a year or two ?)

JD North AWS pump 1 motor was repaired by JD Mechanical crew and the pump returned to service on 4/18/18.

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

Research:

JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18.

Coordinating with CRITFC and Tribes for the upcoming adult lamprey collection season starting in late May.

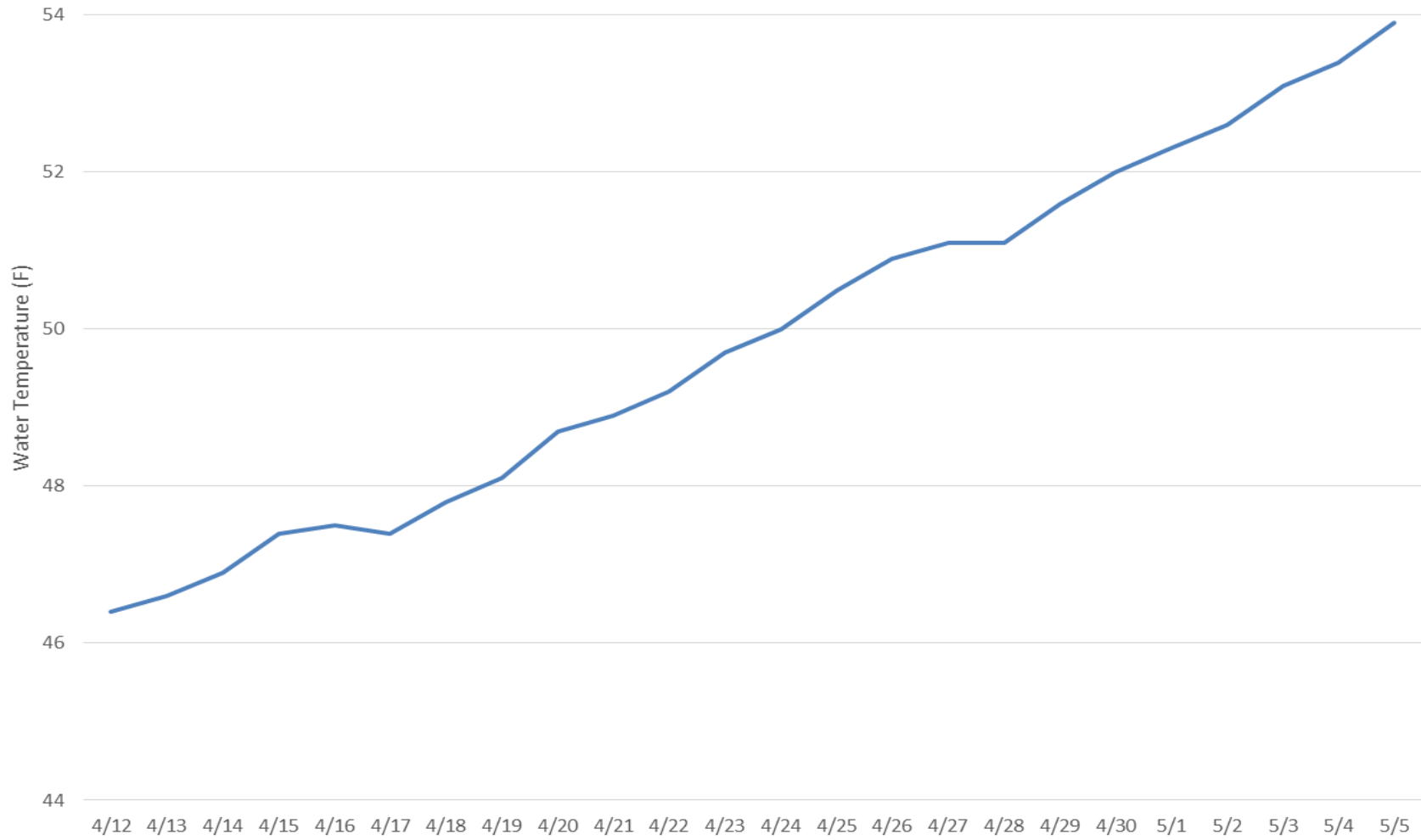
JD Mechanical continues planning for the JD North LPS water supply pumps installation. To be completed by 6/1.

WDFW NPM angling from JD PH Tailrace deck started on 5/1. Low catches so far with 47 total NPM removed by 5/6.

Coordinating with Uof I crew for their JD Adult Lamprey RT installation/ monitoring at both adult fishways in 2018.

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

Water Temperature JDA Tailrace (4/12 - 5/5/2018)



JDA Collection Channel Velocity

Date *7-May-18*

By: *Pete Rankin*

Bay(s)	Time	Sec.	Velocity (f/s)
<i>0-2</i>	<i>1:17</i>	<i>77</i>	<i>2.34</i>
<i>2 - 4</i>	<i>2:05</i>	<i>125</i>	<i>3.75</i>
<i>4 - 6</i>	<i>2:55</i>	<i>175</i>	<i>3.60</i>
<i>6 - 8</i>	<i>3:32</i>	<i>212</i>	<i>4.86</i>
<i>8 - 10</i>	<i>4:31</i>	<i>271</i>	<i>3.05</i>
<i>10 - 12</i>	<i>5:35</i>	<i>335</i>	<i>2.81</i>
<i>12 - 14</i>	<i>6:35</i>	<i>395</i>	<i>3.00</i>
<i>14 - 16</i>	<i>7:27</i>	<i>447</i>	<i>3.46</i>
<i>16 - 18</i>	<i>8:18</i>	<i>498</i>	<i>3.53</i>
			3.38

tw=165.5

turbine 2-3=68rpm

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	51	4.0	74
Mon	52	4.0	bypass
Tue	52	4.0	69
Wed	53	4.0	bypass
Thur	53	4.0	54
Fri	53	4.0	bypass
Sat	54	4.0	53
AVG:	53	AVG: 4.0	AVG/Sample 63
			MAX 74
			MIN 53

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	11.5	11.5	1.3	9.4	1.4	4.6	1.7
Sun	11.9	11.9	1.2	10.9	1.5	4.5	1.6
Mon	12.3	12.3	1.3	10.3	1.4	4.6	1.5
Mon	12.3	12.3	1.3	8.4	1.5	4.5	1.8
Tues	11.7	11.7	1.4	8.2	1.7	4.6	1.4
Tues	12.5	12.5	1.4	8.4	1.4	4.6	1.7
Wed	12.4	12.5	1.4	8.2	1.4	4.6	1.6
Wed	12.4	12.4	1.2	8.6	1.0	4.6	1.5
Thur	11.6	11.7	1.3	8.1	1.5	4.5	1.5
Thur	12.0	12.1	1.3	8.5	1.6	4.6	1.6
Fri	11.7	11.7	1.3	8.0	1.6	4.6	1.7
Fri	11.9	11.8	1.1	8.3	1.5	4.5	1.5
Sat	12.1	12.2	1.3	8.4	1.5	4.5	1.6
Sat	12.3	12.4	1.3	8.7	1.5	4.6	1.6
AVG:	12.0	12.1	1.3	8.7	1.5	4.6	1.6

JDA Bird Counts: 4/29/18 to 5/5/18

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)	
29-Apr	PHFB	4	7	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	10	81	61	174
29-Apr	SWFB	0	0	0	0	0	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	0
29-Apr	PH2	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
29-Apr	PH3	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
29-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Apr	SW3	6	8	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	17
Avg/Survey		23	0	0	0	6	0	0	0	2	0	0	0	5	0	0	0	71	0	0	0	212
30-Apr	PHFB	5	6	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	16	84	87	213
30-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Apr	PH1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
30-Apr	PH2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
30-Apr	PH3	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
30-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Apr	SW2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
30-Apr	SW3	4	13	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	22
Avg/Survey		25	0	0	0	8	0	0	0	3	0	0	0	8	0	0	0	86	0	0	0	257
1-May	PHFB	0	0	0	9	0	0	10	0	0	0	0	0	0	0	0	0	12	0	82	78	191
1-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-May	PH2	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
1-May	PH3	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
1-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-May	SW2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1-May	SW3	6	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Avg/Survey		15	5	0	0	5	0	0	0	0	0	0	0	6	0	0	0	80	0	0	0	221
2-May	PHFB	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	37	9	37	10	94
2-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-May	SW3	2	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5
Avg/Survey		2	1	0	0	0	0	0	0	1	0	0	0	23	0	0	0	24	0	0	0	99

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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)	
3-May	PHFB	0	0	0	7	0	0	8	0	0	0	0	0	0	0	0	0	22	38	23	39	137
3-May	SWFB	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
3-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-May	SW3	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Avg/Survey		4		11		0		4		0		0		0		0		30		31		159
4-May	PHFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	27	22	28	22	100
4-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-May	SW1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-May	SW3	10	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Avg/Survey		13		1		0		0		0		0		0		0		25		25		126
5-May	PHFB	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	28	9	29	9	78
5-May	SWFB	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-May	SW3	7	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	12
Avg/Survey		6		5		0		0		0		0		1		0		19		19		96
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		175		41		0		44		0		0		10		0		230		670		1170
Avg/Survey		13		3		0		3		0		0		1		0		16		48		84