


FISHWAY STATUS REPORT

Date: 4/21/2018
Inspection Period: 4/15/2018 thru 4/21/2018



**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: 48 F
	Out of Criteria	Limit		Secchi: 4.1 Ft.
NORTH FISHWAY			6 out of 6 AWS pumps available. See maintenance section for details.	
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 since 2/28 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 1.4	
Entrance weir SE1	0	depth (≥ 8')	AVG 8.4	
Collection channel velocity	0	1.5 - 4 fps	AVG 2.77	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.7	
Entrance weir NE1	0	depth (≥ 8')	AVG 10.5	
Entrance weir NE2	0	depth (≥ 8')	AVG 10.5	
JUVENILE PASSAGE	0		In service since 2/28, with all STSs deployed by 3/30/18.	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.5	
Submersible traveling screens	0	visual inspect	Monthly STS camera inspection was completed by 4/17. MU 8C VBS found w/ minor damage.	
Turbine trashrack drawdown	0	<1.5', wkly	Monthly MU intake trashrack raking is scheduled for the next week, 4/23.	
Vert barrier screen drawdown	0	<1.5', wkly	MU8C VBS found with small, 6 " tear during camera inspection on 4/17. See Maintenance info.	
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:

Minor PDS screen cleaner components (electrical control conduit's trolley bearings) were replaced by JD Mechanical on 4/19.

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 :

Only a few birds, mostly cormorants are present at JD at this time. See the Avian Numbers tab for details.

Installation of all avian lines by a contractor completed by 3/30/18. USDA boat hazing commenced on 4/16 and will continue 7 days a week thru 7/31.

Operations:

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:

MU 8 C was dewatered by JD Maintenance for its VBS' s repair on 4/18. Gatewell dipping was performed resulting in approximately 1,000 live smolts salvaged and released into Forebay in good condition. No mortalities were observed. A small, 6 " tear was patched up and MU8 returned to service on 4/19.

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:

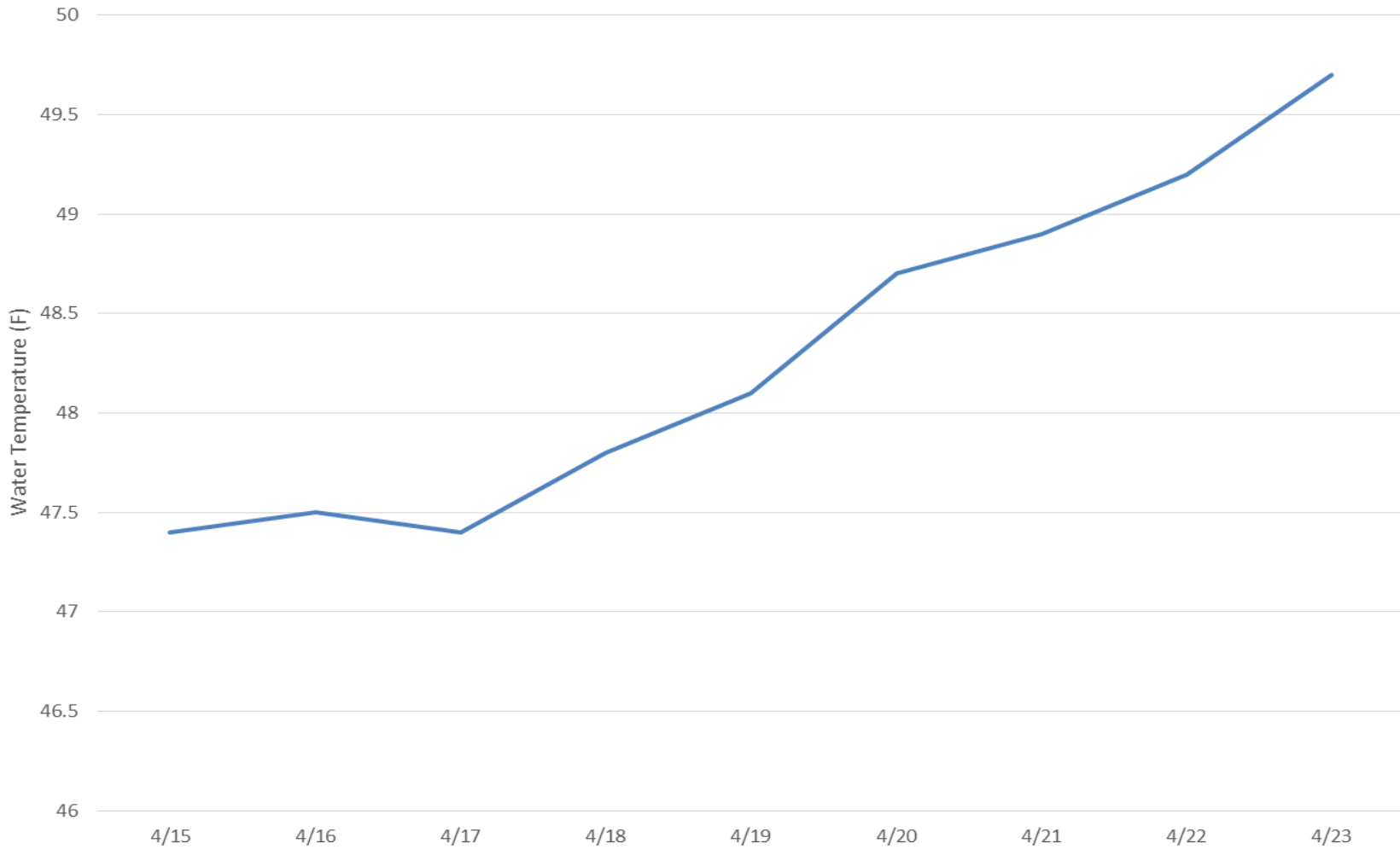
JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18.

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

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

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

JDA Tailrace Water Temperature (April 15 - April 23)



JDA Collection Channel Velocity

JDA Collection Channel Velocity

Date 22-Apr-18

By: pete

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:02	62	2.90
2 - 4	2:06	126	2.81
4 - 6	3:10	190	2.81
6 - 8	4:15	255	2.77
8 - 10	5:18	318	2.86
10 - 12	6:20	380	2.90
12 - 14	7:30	450	2.57
14 - 16	8:32	512	2.90
16 - 18	9:28	568	3.21
			2.86

turbine 1 & 2 =68rpm
tw=161.9 foot msl

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	47	5.0	bypass
Mon	47	5.0	18
Tue	48	4.5	bypass
Wed	47	4.5	31
Thur	48	4.0	bypass
Fri	49	3.0	25
Sat	49	3.0	bypass
AVG:	48	AVG: 4.1	AVG/Sample #DIV/0!
			MAX 31
			MIN 0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	10.0	10.0	1.4	8.1	1.5	4.5	1.5
Sun	9.4	9.4	1.4	8.2	1.6	4.5	1.9
Mon	10.3	10.3	1.3	8.6	1.5	4.6	1.6
Mon	11.6	11.6	1.0	8.4	1.4	4.5	1.4
Tues	10.8	10.8	1.3	8.4	1.6	4.5	1.4
Tues	8.6	8.4	1.4	8.5	1.5	4.5	1.9
Wed	10.8	10.8	1.3	8.6	1.6	4.5	1.7
Wed	10.8	10.8	1.3	8.3	1.4	4.6	1.9
Thur	10.7	10.7	1.4	8.0	1.4	4.5	1.5
Thur	11.2	11.2	1.4	8.9	1.5	4.7	1.9
Fri	11.5	11.5	1.5	8.1	1.5	4.6	1.4
Fri	10.9	10.9	1.5	8.2	1.6	4.6	1.5
Sat	11.2	11.2	1.3	8.7	1.3	4.5	1.7
Sat	9.8	9.8	1.4	8.1	1.1	4.5	1.9
AVG:	10.5	10.5	1.4	8.4	1.5	4.5	1.7

JDA Bird Counts: 4/15/18 to 4/21/18

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)	
15-Apr	PHFB	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	33	34	18	0	106
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Apr	PH3	0	3	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	14
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	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
Avg/Survey		20	0	0	11	0	0	0	0	6	0	0	34	9						156		
16-Apr	PHFB	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	22	23	0	23	69
16-Apr	SWFB	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Apr	PH3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
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	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
16-Apr	SW3	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Avg/Survey		14	2	0	0	0	0	0	0	0	0	0	23	12						99		
17-Apr	PHFB	0	0	0	1	0	0	0	13	0	0	0	0	0	0	0	0	30	0	0	18	62
17-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Apr	PH1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Apr	PH3	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
17-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Apr	SW3	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Avg/Survey		12	1	0	7	0	0	0	0	1	0	15	9						88			
18-Apr	PHFB	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	22	22	22	22	91
18-Apr	SWFB	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18-Apr	PH1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-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		1	1	0	2	0	0	0	0	0	0	22	22						95			

JDA Bird Counts: 4/15/18 to 4/21/18

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)	
19-Apr	PHFB	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	22	22	22	22	95
19-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Apr	SW3	3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Avg/Survey		6		0		0		4		0		0		0		0		22		22		106
20-Apr	PHFB	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	27	31	26	30	118
20-Apr	SWFB	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	9
20-Apr	PH1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Apr	PH3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Apr	SW3	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
Avg/Survey		3		1		0		2		0		0		1		0		31		30		133
21-Apr	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	36	35	35	142
21-Apr	SWFB	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
21-Apr	PH1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
21-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Apr	SW3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Avg/Survey		4		1		0		1		0		0		0		0		36		35		153
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		117	11	0		48		0		0		13		0		364		277				830
Avg/Survey		8		1		3		0		0		1		0		26		20				59