FISHWAY STATUS REPORT

Date:	6/2/2018		
Inspection Period:	5/27/2018	thru	6/2/2018



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US Army Corps of Engineers Portland District 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:	59 F
	Out of Criteria	Limit			Secchi:	2.9 Ft.
NORTH FISHWAY			In service with all 6 AWS pumps total ava	ailable.		
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 1.6			
SOUTH FISHWAY	0		In service with two AWS turbines and tw	o 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 1.2			
Entrance weir SE1	0	depth (≥ 8')	AVG 8.2			
Collection channel velocity	0	1.5 - 4 fps	AVG 2.61			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.7			
Entrance weir NE1	0	depth (≥ 8')	AVG 11.3			
Entrance weir NE2	0	depth (≥ 8')	AVG 11.3			
JUVENILE PASSAGE	0		In service since 2/28.			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.5			
Submersible traveling screens	0	visual inspect	Monthly STS camera inspection complete	ed 5/14	All STS screens are	in good working order.
Turbine trashrack drawdown	0	<1.5', wkly	Trashrack raking crane failed on 5/22. Its	s was fixe	d and RTS 5/31.	
Vert barrier screen drawdown	0	<1.5', wkly				
Spill volume	0	per FPP	Special operations to lower TDG/ spill sta	arted on !	5/26 and continue	d thru 6/1.
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 with every other day sampling increased to every day on 5/26. It will continue thru 6/4 due to special JD operations to lower TDG.

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 :

White pelicans continue increasing on the island downstream of BRZ but the BRZ gulls have declined over the past week. 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.

JD BRZ avian/ gull presence has declined from minor to almost non-existent over the past week :)

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:

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 Structural and Mechanical crew started working on the failed Trashrack crane on 5/22 and it was successfully fixed/ RTS on 5/31.

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.

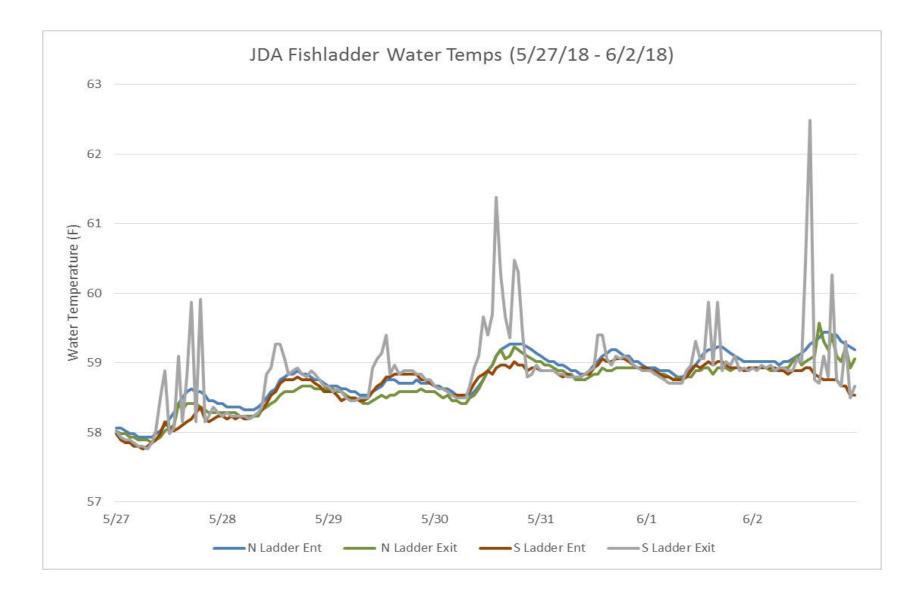
Coordinating with CRITFC and Tribes for the upcoming adult lamprey collection season starting in late May.

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. Catches started increasing the past week with 131 NPM caught thru 5/27.

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





JDA Collection Channel Velocity

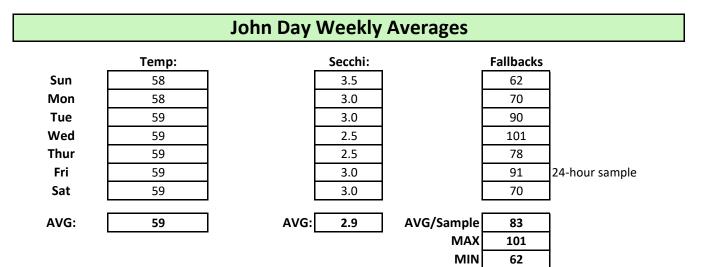
Date	1-Jun-18
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:57	57	3.16
2 - 4	1:59	119	2.90
4 - 6	3:05	185	2.73
6 - 8	4:14	254	2.61
8 - 10	5:21	321	2.69
10 - 12	6:30	390	2.61
12 - 14	7:48	468	2.31
14 - 16	8:56	536	2.65
16 - 18	9:53	593	3.16
			2.76

Bay 19 TW: 164.3 turbine 2-3=68rpm

FPP Criteria 1.5–4.0 feet per second (2 fps optimum)





	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	11.8	11.8	1.0	8.5	1.4	4.5	1.6
Sun	11.3	11.4	1.2	8.1	1.4	4.6	1.8
Mon	11.1	11.1	1.2	8.2	1.5	4.6	1.8
Mon	11.2	11.2	1.2	8.2	1.5	4.6	2.0
Tues	10.8	10.8	1.2	8.1	1.7	4.6	2.0
Tues	10.7	10.7	1.2	8.1	1.5	4.5	1.9
Wed	11.8	11.8	1.4	8.2	1.6	4.5	1.5
Wed	11.3	11.3	1.2	8.7	1.7	4.5	1.8
Thur	11.3	11.3	1.1	8.1	1.7	4.6	1.4
Thur	10.6	10.6	1.2	8.1	1.5	4.6	1.8
Fri	10.3	10.3	1.1	8.3	1.5	4.4	1.8
Fri	11.8	11.9	1.1	8.0	1.4	4.5	1.6
Sat	11.9	12.0	1.1	8.2	1.5	4.6	1.5
Sat	11.8	11.9	1.1	8.2	1.8	4.5	1.8
AVG:	11.3	11.3	1.2	8.2	1.6	4.5	1.7

JDA Bird Counts: <u>5/27/18</u> to <u>6/2/18</u>

NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Date	Zone		G	Gulls	-		Cori	morant			Caspia	n tern	-		White	e Pelica	n		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)	
27-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	18	36	16	79
27-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-May	PH3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
27-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-May		19	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Avg/Su	-	2	5	(0	(0	(0		0		0	(0	(0	1	.4		6	128
28-May		1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8	8	38	36	92
28-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-May	PH1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
28-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-May	PH3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
28-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-May		1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Avg/Su		!	5	1	1		0	(0		0		0	-	0		0		8	3	7	101
29-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	5	35	38	86
29-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-May		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
29-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-May		2	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	6
Avg/Su	-		3		0	-	0		0		0	1	0	-	2		0		7	-	7	94
30-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	27	0	0	72
30-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-May		9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Avg/Su	urvey		5	(D	(0	(D		0		0	(0	(0	3	6	(0	82

JDA Bird Counts: <u>5/27/18</u> <u>to</u> <u>6/2/18</u>

NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Date	Zone		Ģ	alls			Cori	morant			Caspia	n tern			White	e Pelica	in		G	rebe		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)	
31-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	32	0	0	72
31-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-May	SW3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Avg/Su	urvey		1	(0	()	()	_	0	(0	(0	()	3	6	(0	74
1-Jun	PHFB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	35	27	0	0	63
1-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
1-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jun		2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Avg/Su	urvey		3	(0	()	1	L		0	(0		2	()	3	81	(0	71
2-Jun	PHFB	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	37	32	0	0	73
2-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jun	SW3	5	8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	14
Avg/Su	urvey	;	8	(0	()	()		0	(0	(0	1	L	3	5	(0	87

Totals		Gulls	Cor	morant	Caspia	in tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	97	1	0	1	0	0	6	2	331	199	637
Avg/Survey	7	0	0	0	0	0	0	0	24	14	46