# **FISHWAY STATUS REPORT**

**Date:** 6/9/2018

**Inspection Period:** 6/3/2018 thru 6/9/2018

## 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:	<b>59</b> F
	Out of Criteria	Limit		Secchi:	<b>3.3</b> Ft.
NORTH FISHWAY			In service with all 6 AWS pumps total availab	le.	
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	1.3' ± 0.1'	1.3' for shad passage since 5/24		
Entrance differential	0	1.0' - 2.0'	AVG 1.5		
SOUTH FISHWAY	0		In service with two AWS turbines and two FC	Gs.	
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	1.3' ± 0.1'	1.3' for shad passage since 5/24		
South entrance differential	0	1.0' - 2.0'	AVG 1.3		
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 11.1		
Entrance weir NE2	0	depth (≥ 8′)	AVG 11.0		
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 scheduled fo	r week of 6/18.	
Turbine trashrack drawdown	0	<1.5', wkly	Trashrack raking crane failed on 5/22. Its was	fixed and RTS 5/31.	
Vert barrier screen drawdown	0	<1.5', wkly			
Spill volume	0	per FPP	Special operations to lower TDG/ spill started	l 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 was in every day/ 24 hrs sampling 5/26 - 6/4 due to special TDG operations monitoring. Regular, every other day sampling restarted on 6/5.

### 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.

## 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?) 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 starting in early June.

JD Mechanical installed the JD North LPS water supply pumps by 6/1. LPS operations by FFU assisted by JD Fisheries to start soon.

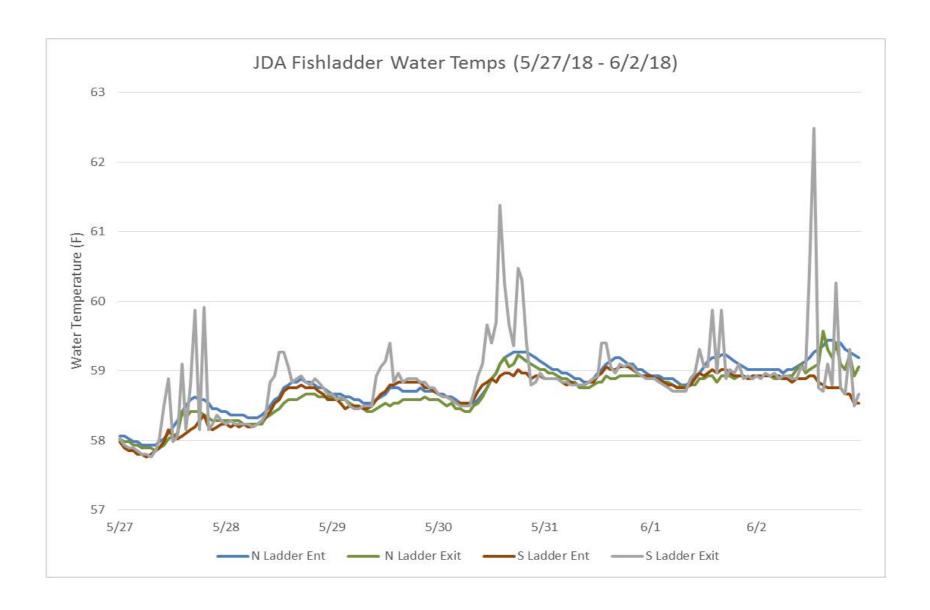
WDFW NPM angling from JD PH Tailrace deck started on 5/1. Catches increased the past week with 164 NPM caught thru 6/03.

Uof I crew continues monitoring the RT Adult Lamprey passage at both JD Adult Fishways.

MOYNAHAN, KEVIN PATRICK, 1393959157

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# **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)



# John Day Weekly Averages

	Temp:
Sun	59
Mon	59
Tue	59
Wed	59
Thur	60
Fri	60
Sat	60

Secchi:
3.0
3.5
3.5
3.5
3.0
3.5
3.0

Fallbacks
60
80
176
57
56

AVG:	59

AVG:	3.3	AVG/Sample	68
·-		MAX	176
		MIN	56

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.7	9.6	1.2	8.3	1.6	4.5	1.9
Sun	10.3	10.3	1.3	8.1	1.5	4.6	1.9
Mon	10.7	10.7	1.3	8.3	1.5	4.5	2.0
Mon	11.2	11.2	1.2	8.2	1.5	4.5	1.9
Tues	9.5	9.5	1.4	8.3	1.6	4.6	1.5
Tues	11.3	11.3	1.4	8.1	1.6	4.5	1.7
Wed	12.8	12.8	1.3	8.1	1.5	4.6	1.3
Wed	12.2	12.2	1.3	8.2	1.5	4.6	1.6
Thur	12.0	12.0	1.3	8.2	1.4	4.6	1.6
Thur	11.6	11.6	1.4	8.0	1.6	4.5	1.4
Fri	10.6	10.6	1.4	8.3	1.5	4.5	1.4
Fri	11.2	11.2	1.3	9.0	1.4	4.6	1.7
Sat	10.6	10.6	1.4	8.3	1.4	4.5	1.6
Sat	11.0	11.0	1.3	8.0	1.5	4.6	1.6
			· I				
AVG:	11.1	11.0	1.3	8.2	1.5	4.6	1.7

JDA Bird Counts: <u>6/3/18</u> to <u>6/9/18</u>

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

Date	Zone		G	Gulls			Cor	morant	:		Caspia	n tern			White	e Pelica	ın		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)	
3-Jun	PHFB	2	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	32	35	0	0	72
3-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Jun	PH1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3-Jun	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Jun	SW3	3	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	10
Avg/St			7		1	(	0	:	1		0	(	)	(	0		1	3	4		)	85
	PHFB	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	15	34	36	96
	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Jun	PH1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
4-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Jun	SW3	0	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5
Avg/Su		(	6	(	)		0	(	)		0	(	)		1	(	)	1	.3	3	5	108
	PHFB	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	10	14	36	30	93
	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Jun		4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5-Jun		0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<u> </u>	SW3	0	5	2	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	13
Avg/Su			5	į	5		0	(	)		0	(	)		3	(	)	1	.2	3	3	114
	PHFB	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	54	0	106
6-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Jun	PH3	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
6-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Jun		2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Avg/Su	urvey	1	.1	(	0	(	0	(	0		0	(	)	(	0	(	)	2	4	2	7	123

JDA Bird Counts: <u>6/3/18</u> <u>to</u> <u>6/9/18</u>

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

Date	Zone	Gulls					Cori	morant			Caspia	n tern			White	e Pelica	ın		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)	
7-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	28	0	0	76
7-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jun	PH3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jun		5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Avg/Su	urvey		6	(	)	(	)	(	)		0	(	0	(	0	(	)	3	88	(	0	88
8-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	11	0	41	94
8-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jun	PH1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jun		0	4	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	7
Avg/Su	urvey		4	(	)	(	)	(	)		0	(	0		2	(	)	2	27	2	21	105
	PHFB	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	13	0	42	99
9-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Jun	PH1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
9-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
9-Jun	SW1	3	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	8
9-Jun	SW2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
9-Jun	SW3	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Avg/Su	urvey	1	.2		)	(	)	(	)		0		0		6		ס	2	28	2	21	133

Totals	G	Gulls	Cori	morant	Caspia	ın tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	100	11	0	1	0	0	21	1	349	273	756
Avg/Survey	7	1	0	0	0	0	2	0	25	20	54