### **FISHWAY STATUS REPORT**

**Date:** 6/23/2018

**Inspection Period:** 6/17/2018 thru 6/23/2018

### 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: 59 F
	Out of Criteria	Limit	Secchi: 3.3 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	1.3' ± 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 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	1.3' ± 0.1'	1.3' for shad passage since 5/24
South entrance differential	0	1.0' - 2.0'	AVG 1.3
Entrance weir SE1	1	depth (≥ 8')	AVG 8.2 SE1 depth OOC at 7.7' Adjusted manually within minutes of occurrence
Collection channel velocity	0	1.5 - 4 fps	AVG 2.61 on 6/19 AM.
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	June STS inspection completed 6/18. One bad STS at MU1 replaced with working spare.
Turbine trashrack drawdown	0	<1.5', wkly	Monthly trashracks raking is scheduled for the next week, 6/25.
Vert barrier screen drawdown	0	<1.5', wkly	-
Spill volume	0	per FPP	Summer spill operations started on 6/16 per FOP.
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 and inside of the BRZ. 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.

SE1 depth OOC at 7.7' on 6/19 AM inspection. Due to JD South AWS turbines tripped by SS switching. JD OPS restarted turbines within minutes. JD Fisheries adjusted the SE1 weir over 8.0' immediately by hand, as well.

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.

An orientation meeting with CRITFC and Tribes for the upcoming adult lamprey collection occurred on 6/12. JD South Trap was deployed the same day.

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

JD North LPS was started up on 6/20 AM. It is monitored by JD Fisheries with CRITFC retaining all unmarked adult lamprey for the tribal replanting programs.

Catches were great over the weekend with first day, 6/21 at 30, and then the high of 86 fish caught on Saturday 6/23.

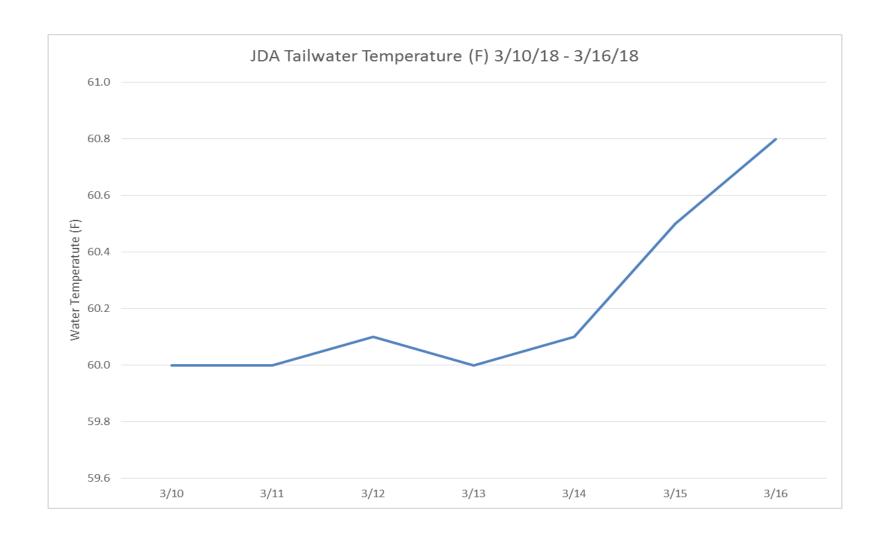
WDFW NPM angling from JD PH Tailrace deck continues since 5/1. Catches increased significantly in the past two weeks with 542 NPM caught thru 6/17.

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	15-Jun-18
Ву:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)			
0-2	1:09	69	2.61			
2 - 4	2:19	139	2.57			
4 - 6	3:25	205	2.73			
6 - 8	4:37	277	2.50			
8 - 10	5:49	349	2.50			
10 - 12	6:58	418	2.61			
12 - 14	8:17	497	2.28			
14 - 16	9:25	565	2.65			
16 - 18	10:24	624	3.05			
			2.61			

Bay 19 TW: 161.5

turbine 2-3=68rpm

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



## John Day Weekly Averages

	Temp:
Sun	61
Mon	62
Tue	62
Wed	63
Thur	63
Fri	64
Sat	64
	•

Secchi:									
5.0									
5.0									
4.5									
5.0									
5.0									
5.0									
5.0									

AVG:

Fallbacks
205
181
161
225

)	AVG/Sample	225
	MAX	225
	MIN	75

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.0	9.0	1.5	8.0	1.1	4.5	1.8
Sun	8.4	8.4	1.5	8.0	1.5	4.6	1.8
Mon	10.4	10.4	1.3	8.0	1.5	4.6	1.6
Mon	10.7	10.7	1.4	8.0	1.5	4.6	1.7
Tues	10.5	10.5	1.4	7.7	1.4	4.5	1.5
Tues	10.2	10.2	1.4	8.4	1.4	4.6	1.4
Wed	10.0	10.0	1.4	8.1	1.5	4.5	1.7
Wed	11.2	11.2	1.4	8.3	1.5	4.6	1.6
Thur	9.2	9.2	1.4	8.0	1.7	4.6	1.8
Thur	11.0	11.0	1.4	8.0	1.5	4.5	1.5
Fri	9.5	9.5	1.5	8.0	1.6	4.5	1.0
Fri	10.5	10.5	1.3	8.0	1.5	4.5	1.6
Sat	10.5	10.5	1.3	9.0	1.5	4.5	1.5
Sat	10.5	10.5	1.4	8.3	1.6	4.6	1.5
		-	· · ·	-	•	· ·	
AVG:	10.1	10.1	1.4	8.1	1.5	4.6	1.6

JDA Bird Counts: <u>6/17/18</u> to <u>6/23/18</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	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)	
17-Jun	PHFB	0	2	0	0	0	0	0	1	0	0	0	0	0	0	7	0	21	8	0	0	39
17-Jun	SWFB	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jun	PH2	6	2	0	0	0	0	0	0	0	0	0	0	28	17	0	0	0	0	0	0	53
17-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	10	12	0	0	0	0	0	0	22
17-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	16
17-Jun	SW3	0	4	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	21
Avg/St			7		1	. (	0	:	1		0	(	)	5	0	4	1	1	.5	(	)	153
18-Jun	PHFB	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	20	20	0	0	45
	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jun		0	0	0	0	0	0	0	0	0	0	0	0	20	14	0	0	0	0	0	0	34
18-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
18-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
18-Jun	SW3	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7
Avg/Su			2	(	)		0	(	)		0	(	)	2	2		1		0	(	)	88
19-Jun		0	0	2	10	0	0	0	0	0	0	0	0	0	0	0	0	25	4	0	0	41
19-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	14
19-Jun		1	0	0	0	0	0	0	0	0	0	0	0	9	10	0	0	0	0	0	0	20
19-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	6
19-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jun		0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	16
19-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
Avg/Su			1	(	5		0	(	)		0	(	)	3	2	(	)	1	.5	(	)	105
20-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	27	0	0	48
20-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0	0	0	0	0	0	7
20-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	45	28	0	0	0	0	0	0	73
20-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
20-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
Avg/Su	urvey		0	(	0		0		0		0	(	)	4	3	(	)	2	4		)	134

## JDA Bird Counts: <u>6/17/18</u> <u>to</u> <u>6/23/18</u>

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

Date	Zone		G	iulls		Cormorant					Caspian tern				White Pelican				Grebe			
		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)	
21-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	20	0	0	0	21
21-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
21-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10
21-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	48	0	0	0	0	0	0	0	48
21-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
21-Jun		0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
Avg/Su		(	0	(	0	(	)	(	)		0	(	0	3	9	(	)	1	.0		0	97
22-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	22	20	0	0	43
22-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
22-Jun		0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
22-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jun		7	1	0	0	0	0	0	0	0	0	0	0	54	3	0	0	0	0	0	0	65
22-Jun		0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	22
22-Jun		0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9
Avg/Su		-	4	(	)	(	)	(	)		0		)	4	9	(	)		21		0	148
23-Jun		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	0	0	42
23-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Jun		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
23-Jun		0	0	0	0	0	0	0	0	0	0	0	0	2	12	0	0	0	0	0	0	14
23-Jun		4	0	0	0	0	0	0	0	0	0	0	0	27	4	0	0	0	0	0	0	35
23-Jun		0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	12
23-Jun		3	2	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	13
Avg/Su	ırvey		6	(	0	(	)	(	)		0	(	0	3	3	(	)	2	20		0	117

Totals	(	Gulls	Cori	morant	Caspia	ın tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	37	14	0	1	0	0	533	9	248	0	842
Avg/Survey	3	1	0	0	0	0	38	1	18	0	60