## **FISHWAY STATUS REPORT**

**Date:** 8/12/2017

**Inspection Period:** 8/6/2017 thru 8/12/2017

### 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: 72 F
	Out of Criteria	Limit	Secchi: 6.0 Ft.
NORTH FISHWAY			In service with all 6 AWS pumps available since 1/19/17.
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			In service since 3/3/17 with 2 out of 3 AWS turbines available.
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	3	depth (≥ 8′)	AVG 8.8 OOC at 7.7, 7.8, 7.9' due to TW sensor issues
Collection channel velocity	0	1.5 - 4 fps	AVG 2.42
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.6
Entrance weir NE1	0	depth (≥ 8′)	AVG 8.4
Entrance weir NE2	0	depth (≥ 8′)	AVG 8.3
JUVENILE PASSAGE			JBS in service since 3/30/17.
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6
Submersible traveling screens	0	visual inspect	August STS camera inspection scheduled for the week of 8/14.
Turbine trashrack drawdown	0	<1.5', wkly	Trashrack Crane in service since 6/01.
Vert barrier screen drawdown	0	<1.5', wkly	
Spill volume	0	FOP	Fish spill continues since per FOP. Bay 20 reduced to 3 stops since 5/23 (see JDA08MFR)
Spill pattern	0	TSW per FPP	All Spillway bays in service since 5/22.
Turbine Unit Priority	0	per FPP	
Turbine 1% Efficiency	0	per FPP	

#### SMOLT MONITORING FACILITY

#### Operation:

SMF in a limited, twice a week, 6 hrs sampling due to river temperatures above 70F since 7/23/17.

#### Maintenance:

STS annual maintenance all complete in mid-May.

SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway.

Research: None

#### Birds:

USDA gull hazing from a boat downstream of JD Tailrace BRZ ended on 7/30/17.

see the Avian Numbers tab.

6 Tower-to-Tower, 5 spillway, 4 Navlock and 4 PH lines are missing out of 125 grid's total. They will be reinstalled for the 2018 passage season.

#### Operations:

Spillbay #20 continues reduced to 3 stops after two adult chinook salmon were found stranded on the adjacent tailrace deck on 5/30 (see JDA08MFR.)

Trashrack Crane in service since 6/01/17.

JD South Fishway in service with two AWS Turbines and meeting all FPP criteria since 3/3/17.

JD North Fishway in service with all 6 AWS pumps available and meeting all FPP criteria since 1/19/17.

MU Gatewell Drawdowns: weekly or more frequently as necessary.

#### Maintenance:

SE1 entrance weir OOC at 7.7, 7.8, 7.9 due to TW sensor issues. Planning to install a new PVC pipe in the AWS pumps intake pool this coming winter.

Trashrack Crane was repaired/returned to service on 6/01.

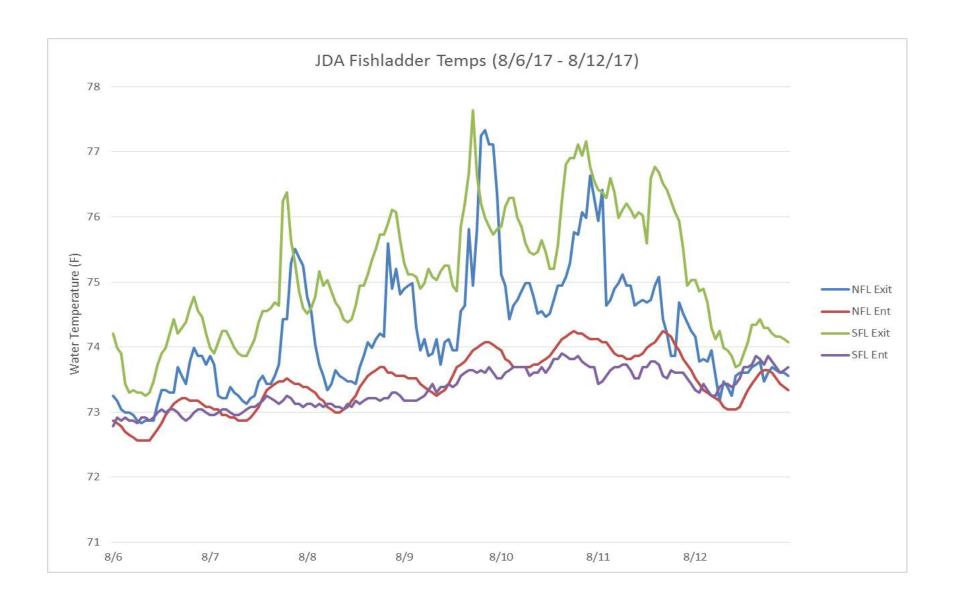
JD STS crane's emergency repairs were all completed in February with the minor glitches/adjustments continuing. The crane remains in a risky operational condition until it's replaced with a brand new machine. However, the \$5 million for its replacement is not yet available.

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

#### Research:

Tribal lamprey trapping at both JD fishways underway but expected to end soon.

WDFW angling crew continues the pikeminnow removal from JD PH tailrace (fishing from PH deck) since 5/15. Great catches with 2,609 NPM total by 7/30. Adult PIT antennas' installation at JD South Fishway finished on 23 Feb. Both ladders' antennas in service with temporary power sources. Phase 2 support contract to install building/ office spaces plus electrical and Gorgenet hookups underway since 7 August.



# **JDA Collection Channel Velocity**

Date	11-Aug-17
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:19	79	2.28
2 - 4	2:40	160	2.22
4 - 6	3:57	237	2.34
6 - 8	5:11	311	2.43
8 - 10	6:27	387	2.37
10 - 12	7:48	468	2.22
12 - 14	9:13	553	2.12
14 - 16	10:27	627	2.43
16 - 18	11:29	689	2.90
			2.37

TW Bay19= 158.9

RPMs 68/68



## **John Day Weekly Averages**

 Sun
 73

 Mon
 73

 Tue
 73

 Wed
 74

 Thur
 74

 Fri
 74

 Sat
 73

AVG: 73

6.0 6.0 6.0 6.0 6.0 6.0 6.0

AVG: 6.0

12 20

AVG 16 MAX 20 MIN 12

ľ	
	0.0
	0.0

6 hour sample mode

6 hour sample mode

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.1	9.0	1.4	8.3	1.5	4.6	1.9
Sun	8.6	8.6	1.4	8.1	1.5	4.5	1.9
Mon	8.6	8.5	1.6	8.3	1.6	4.5	1.8
Mon	8.8	9.0	1.4	8.1	1.5	4.5	1.8
Tues	8.5	8.6	1.3	8.0	1.4	4.6	1.8
Tues	9.0	9.1	1.1	8.2	1.5	4.6	1.6
Wed	8.3	8.3	1.5	7.7	1.6	4.6	1.7
Wed	8.8	8.8	1.4	7.9	1.7	4.6	1.5
Thur	8.6	8.4	1.4	8.0	1.5	4.5	1.5
Thur	9.9	9.8	1.4	8.1	1.4	4.6	1.5
Fri	8.1	8.0	1.4	7.8	1.6	4.6	1.5
Fri	8.7	8.8	1.4	8.2	1.5	4.5	1.5
Sat	8.7	8.5	1.3	8.3	1.6	4.5	1.5
Sat	9.2	9.0	1.5	8.2	1.5	4.5	1.4
	ı		1		1	1	
AVG:	8.8	8.7	1.4	8.1	1.5	4.6	1.6

JDA Bird Counts: <u>8/6/17</u> to <u>8/12/17</u>

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

Data	Zone	Gulls				Corr	norant			Casp	ian ter	n		White	e Pelica	ın		G	rebe		Total
Date	Zone	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)	Total
6-Aug	PHFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Aug S	SWFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Aug F	PH1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Aug F		0 0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
6-Aug F	PH3	0 0	0	0	0	0	0	0	0	0	0	0	11	8	0	0	0	0	0	0	19
6-Aug S		0 0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	11
6-Aug S		0 0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
6-Aug S		0 0	0	0	0	0	0	0	0	0	0	0	14	15	0	0	0	0	0	0	29
Avg/Sur		0		0	0	)	(	)		)	(	)	3	2	(	)	. (	0		)	63
7-Aug F		0 0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7-Aug S		0 0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7-Aug F		0 0	0	0	0	0	0	0	0	0	0	0	6	14	0	0	0	0	0	0	20
7-Aug F		0 0	0	0	0	0	0	0	0	0	0	0	6	5	0	0	0	0	0	0	11
7-Aug F		0 2	0	0	0	0	0	0	0	0	0	0	7	16	0	0	0	0	0	0	25
7-Aug S		0 0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
7-Aug S		0 0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
7-Aug S		0 0	0	0	0	0	0	0	0	0	0	0	4	22	0	0	0	0	0	0	26
Avg/Sur		1		2	0	)	(	)	(	)	(	)	4	4	(	)	. (	0	(	0	93
8-Aug F		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Aug S		0 0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
8-Aug F		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Aug F		0 0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
8-Aug F		0 0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7
8-Aug S		0 0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	25
8-Aug S		0 0	0	0	0	0	0	0	0	0	0	0	22	45	0	0	0	0	0	0	67
8-Aug S		0 0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10
Avg/Sur		0		<b>.</b> 8	0		(	)	C		(	)		7	(	)	. (	0	•	0	148
9-Aug F		0 0	2	2	0	0	11	0	0	0	0	0	0	0	3	0	0	0	0	0	18
9-Aug S		0 0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
9-Aug F		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Aug F		0 0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
9-Aug F		0 0	0	0	0	0	0	0	0	0	0	0	0	0	52	0	0	0	0	0	52
9-Aug S		0 0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	15
9-Aug S		0 0	0	0	0	0	0	0	0	0	0	0	0	0	5	25	0	0	0	0	30
9-Aug S		0 0	0	0	0	0	0	0	0	0	0	0	0	0	19	35	0	0	0	0	54
Avg/Sur	rvey	0		6	0	)	6	5	C	)	(	)	9	9	7	0		0		0	179

JDA Bird Counts: <u>8/6/17</u> <u>to</u> <u>8/12/17</u>

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

Date	Zone	Gulls				Corr	morant	1		Casp	ian ter	n	,	White	e Pelica	n	Grebe				Total	
Date	ZUITE	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)	Total
10-Aug	PHFB	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
10-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11
10-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10
10-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	19
10-Aug		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	22
Avg/Su			0	,	1	(	)	(	)	(	0		)	į	5	2	.6	. (	0	:	1	65
11-Aug		0	0	2	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	15
11-Aug		0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
11-Aug		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Aug		0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	0	0	0	0	0	53
11-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Aug		0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	15
Avg/Su			0		5	(	)	7	7	(	0		)	(	)	3	4	. (	0	(	)	90
12-Aug		0	0	0	56	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	61
12-Aug	SWFB	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
12-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Aug		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Aug		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
12-Aug		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11
12-Aug		0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	0	7
Avg/Su	ırvey		0	2	28	1	6	(	)	(	0		0		1	9	9	3	3		0	112

Totals	(	Gulls	Cori	morant	Casp	ian tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	TOtal
Weekly Total	2	117	31	24	0	0	293	277	5	1	750
Avg/Survey	0	8	2	2	0	0	21	20	0	0	54