FISHWAY STATUS REPORT

Date: 9/9/2017

Inspection Period: 9/3/2017 thru 9/9/2017

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: 13 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 1.5
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	0	depth (≥ 8′)	AVG 8.5
Collection channel velocity	0	1.5 - 4 fps	AVG 2.42
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.5
Entrance weir NE1	0	depth (≥ 8′)	AVG 8.4
Entrance weir NE2	0	depth (≥ 8′)	AVG 8.4
JUVENILE PASSAGE			JBS in service since 3/30/17.
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG #DIV/0! Manual mode due to CH sensor failure since 8/28/17.
Submersible traveling screens	0	visual inspect	
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 ended and two TSW were shut down on 8/31.
Spill pattern	0	TSW per FPP	
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, 6 spillway (1 failed 23 August,) 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:

JBS Tainter Gate in manual mode due to the Channel's sensor failure since 8/27. Shortage of JD O&M funding may result in a longer OOS.

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.

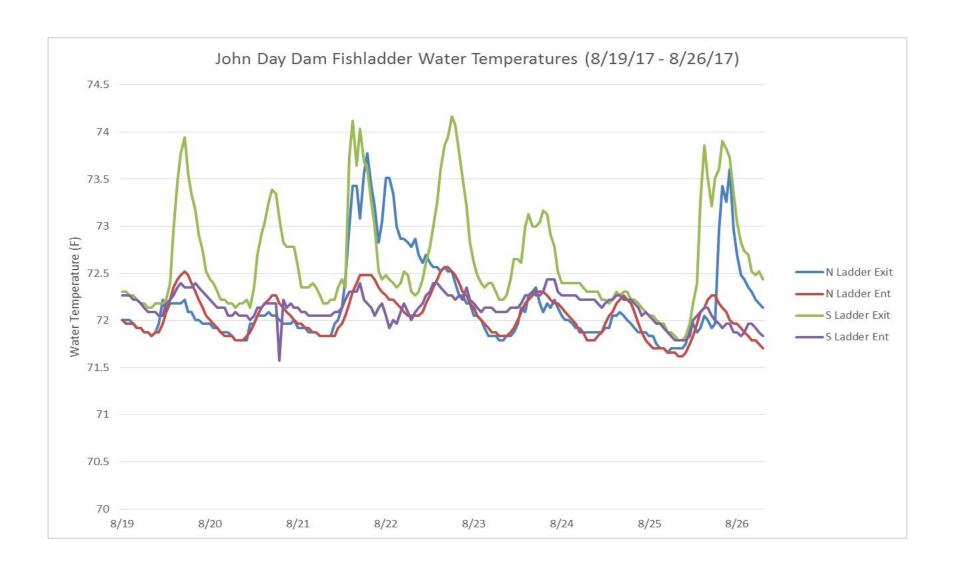
Calibration: All gauges/ sensors are within the criteria of 0.3'.

Research:

All tribal lamprey trapping successfully ended on 8/18/17.

WDFW angling crew continues the pikeminnow removal from JD PH tailrace (fishing from PH deck) since 5/15. Great catches with 3,332 NPM total by 9/3/17.

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	26-Aug-17
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:19	79	2.28
2 - 4	2:33	153	2.43
4 - 6	3:51	231	2.31
6 - 8	5:08	308	2.34
8 - 10	6:20	380	2.50
10 - 12	7:38	458	2.31
12 - 14	8:56	536	2.31
14 - 16	10:10	610	2.43
16 - 18	11:13	673	2.86
			2.42

TW Bay19= 159.7

RPMs 68/68



John Day Weekly Averages

 Temp:

 Sun
 72

 Mon
 72

 Tue
 72

 Wed
 72

 Thur
 72

 Fri
 72

 Sat
 72

AVG:

12		0.0
72		6.0
72		6.0
72		6.0
72		6.0
72		6.0
72		6.0
	•	
72	AVG:	6.0

Secchi:	_	Fallbacks
6.0		
6.0		13
6.0		
6.0		
6.0		18
6.0		
6.0		
	<u>-</u> '	

AVG

MAX

MIN

16

18

13

6 hour, limited sample n
6 hour sample mode

0.0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.0	8.9	1.4	8.8	1.4	4.0-5.0	1.6
Sun	8.6	8.4	1.4	8.8	1.5	4.0-5.0	1.6
Mon	8.1	8.3	1.5	8.0	1.6	4.0-5.0	1.8
Mon	8.7	8.7	1.4	8.1	1.5	4.0-5.0	1.7
Tues	8.3	8.3	1.4	8.0	1.5	4.0-5.0	1.5
Tues	-	-	-	-	-	-	-
Wed	8.6	8.4	1.6	8.4	1.6	4.0-5.0	1.5
Wed	8.5	8.7	1.2	9.4	1.5	4.0-5.0	1.5
Thur	8.1	8.0	1.5	8.0	1.7	4.0-5.0	1.7
Thur	8.7	8.6	1.4	8.7	1.5	4.0-5.0	1.4
Fri	8.2	8.1	1.4	8.5	1.6	4.0-5.0	1.5
Fri	8.1	8.2	1.4	8.8	1.6	4.0-5.0	1.5
Sat	8.3	8.3	1.6	8.5	1.5	4.0-5.0	1.4
Sat	8.2	8.2	1.4	8.5	1.6	4.0-5.0	1.4
AVG:	8.4	8.4	1.4	8.5	1.5	#DIV/0!	1.5

Tainter gate in manual mode but in criteria- due to CH sensor failure



JDA Bird Counts: <u>9/3/17</u> <u>to</u> <u>9/9/17</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				Cormorant					Casp	ian teri	n	,	White	Pelica	n		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
3-Sep	PHFB	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
3-Sep	SWFB	0	0	0	112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112
3-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Sep	PH3	7	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	10
3-Sep		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Sep	SW2	10	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	16
	SW3	54	41	0	0	0	0	0	0	0	0	0	0	11	7	0	0	0	0	0	0	113
Avg/S		9	1	5	6)	()	()	()	1	4	()	()	()	321
-	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SWFB	0	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
4-Sep		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Sep		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Sep		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4-Sep		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Sep		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4-Sep		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/S		ı —	0		29	1		()	(1	()	(60
-	PHFB	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
-	SWFB	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
5-Sep		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/S			0		.7		-		5))	•))	•))	44
-	PHFB	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
-	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep		0	5	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
6-Sep		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Avg/S	urvey		5		U	1	L	9	1	(J	(J	(J	(J	(J	(J	25

JDA Bird Counts: <u>9/3/17</u> <u>to</u> <u>9/9/17</u>

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

Date	Date Zone Gulls				Cormorant					Casp	ian ter	n	,	White	e Pelica	n	Grebe				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)	iotai
7-Sep	PHFB	0	0	1	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	17
7-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	PH1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	ırvey		0		1	()	9	9	(0	()	()	(0	(0	(0	19
8-Sep	PHFB	0	0	18	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	34
8-Sep	SWFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8-Sep	PH1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Sep	PH3	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Sep	SW2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8-Sep		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	ırvey	(0	1	.0	1	L	1	2	(0	()	()	(0	(0	(0	46
9-Sep	PHFB	0	0	53	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
9-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Sep	PH1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Sep	SW2	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
9-Sep		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	ırvey		0	2	7	1	L	6	5		0	()	()		0	(0		0	68

Totals	(Gulls	Cori	morant	Casp	ian tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	iotai
Weekly Total	187	277	8	83	0	0	28	0	0	0	583
Avg/Survey	13	20	1	6	0	0	2	0	0	0	42