

FISHWAY STATUS REPORT

Date: 11/25/2017
 Inspection Period: 11/19/2017 thru 11/25/2017



US Army Corps
 of Engineers
 Portland District

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:	50 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	1.3		
Entrance weir SE1	0	depth (≥ 8')	AVG	8.9		
Collection channel velocity	0	1.5 - 4 fps	AVG	2.35		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.6		
Entrance weir NE1	0	depth (≥ 8')	AVG	9.9		
Entrance weir NE2	0	depth (≥ 8')	AVG	9.8		
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	STS camera inspection for November completed by 11/22. All screens found in good condition.			
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	per FPP	Bay 2 at 1.6 cfs for adult attraction to the North Fishway entrance 1 Sept. thru 30 Nov.			
Spill pattern	0	per FPP	Bay 2 only.			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

SMOLT MONITORING FACILITY

Operation:

SMF sampling concluded for the 2017 season on 15 September. SMF continues in bypass at Switch Gate for PIT detections through 30 November.

End-of-season dewatering is scheduled for 30 November.

Maintenance:

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

Research: None

Birds :

A large number of the overwintering, migratory gulls and other aquatic birds feeding extensively on the abundant juvenile shad in the PH Tailrace BRZ. see the Avian Numbers tab.

6 Tower-to-Tower, 6 Spillway, 6 Navlock (2 failed on 11/02) and 7 PH lines are missing out of 125 grid's total. They will be reinstalled for the 2018 passage season.

Operations:

Bay 2 at 1.6 cfs for adult attraction to the North Fishway entrance 1 Sept. thru 30 Nov.

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:

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' .

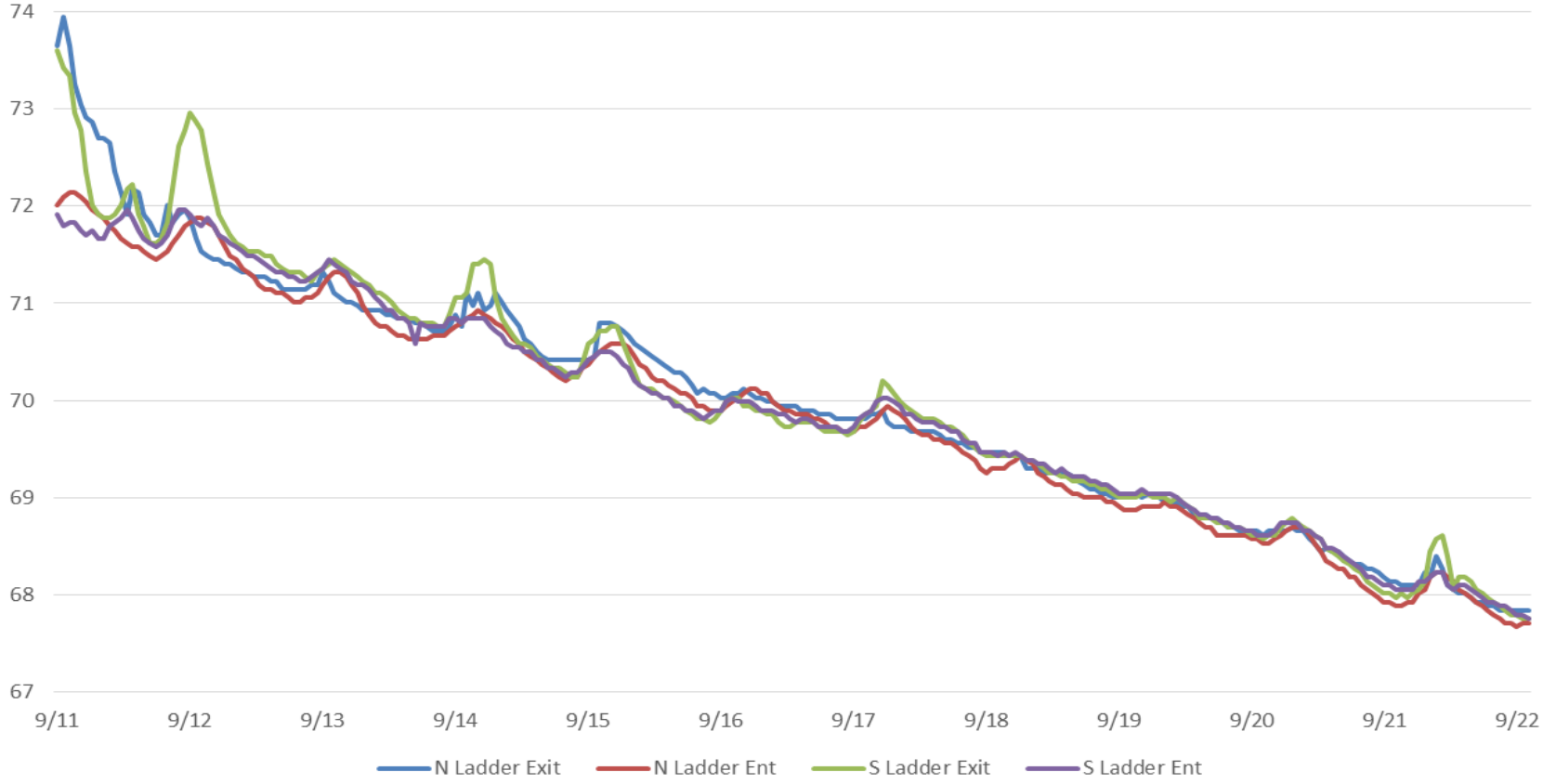
Research:

WDFW angling crew ended the pikeminnow removal from JD PH tailrace on 10/08. Great annual catch of 3,472 NPM in 2017.

PSMFC crew continues with Wi-Fi installation for the adult PIT Systems. Both ladders will be ready to detect PITs by 1 March 2018.

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VERIFY authenticity with ApproveIt

Fishladder Water Temps JDA (9/11/17 - 9/22/17)



JDA Collection Channel Velocity

Date	<i>18-Oct-17</i>
By:	<i>MDL</i>

Bay(s)	Time	Sec.	Velocity (f/s)
<i>0-2</i>	<i>1:20</i>	<i>80</i>	<i>2.25</i>
<i>2 - 4</i>	<i>2:39</i>	<i>159</i>	<i>2.28</i>
<i>4 - 6</i>	<i>4:00</i>	<i>240</i>	<i>2.22</i>
<i>6 - 8</i>	<i>5:27</i>	<i>327</i>	<i>2.07</i>
<i>8 - 10</i>	<i>6:40</i>	<i>400</i>	<i>2.47</i>
<i>10 - 12</i>	<i>7:54</i>	<i>474</i>	<i>2.43</i>
<i>12 - 14</i>	<i>9:10</i>	<i>550</i>	<i>2.37</i>
<i>14 - 16</i>	<i>10:22</i>	<i>622</i>	<i>2.50</i>
<i>16 - 18</i>	<i>11:32</i>	<i>692</i>	<i>2.57</i>
			2.35

TW Bay19 = 159.5

RPMs: 68/68 (2&3) (1 @ 0)

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

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	50	6.0	NA
Mon	50	6.0	NA
Tue	50	6.0	NA
Wed	50	6.0	NA
Thur	50	6.0	NA
Fri	50	6.0	NA
Sat	50	6.0	NA
AVG:	50	6.0	AVG NA
			MAX NA
			MIN NA

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	10.4	10.1	1.2	9.4	1.6	4.6	1.3
Sun	10.6	10.5	1.0	10.1	1.5	4.5	1.5
Mon	10.4	10.1	1.2	9.4	1.4	4.6	1.5
Mon	10.1	10.1	1.2	8.9	1.4	4.6	1.6
Tues	9.3	9.4	1.4	8.7	1.6	4.6	1.5
Tues	9.4	9.3	1.4	9.1	1.5	4.5	1.6
Wed	9.4	9.3	1.3	8.9	1.5	4.5	1.7
Wed	9.4	9.4	1.3	9.2	1.5	4.5	1.7
Thur	9.8	9.8	1.4	8.3	1.5	4.5	1.7
Thur							
Fri	9.8	9.8	1.4	8.3	1.6	4.6	1.7
Fri	10.2	10.2	1.3	8.7	1.5	4.5	1.7
Sat	10.1	9.9	1.4	8.5	1.5	4.6	1.4
Sat	10.0	9.8	1.5	8.3	1.6	4.6	1.6
AVG:	9.9	9.8	1.3	8.9	1.5	4.6	1.6

JDA Bird Counts: ### to ###

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

Date	Zone	Gulls		Cormorant				Caspian tern				White Pelican				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)
19-Nov	PHFB	0	0	251	355	0	0	0	1	0	0	0	0	0	0	0	6	19	6	19	657
19-Nov	SWFB	0	0	1121	1393	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2515
19-Nov	PH1	77	145	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	228
19-Nov	PH2	27	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
19-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Nov	SW2	0	0	0	0	0	0	30	55	0	0	0	0	0	0	0	0	0	0	0	85
19-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
avg/Survey		133		1560		3	43	0	0	0	0	0	0	0	0	13	13			3529	
20-Nov	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Nov	SWFB	0	0	1477	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1477
20-Nov	PH1	23	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
20-Nov	PH2	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
20-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Nov	SW2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
20-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
avg/Survey		22		739		1	2	0	0	0	0	0	0	0	0	0	0			1526	
21-Nov	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Nov	SWFB	0	0	981	617	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1598
21-Nov	PH1	88	72	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	172
21-Nov	PH2	67	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119
21-Nov	PH3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
21-Nov	SW1	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
21-Nov	SW2	0	0	0	0	0	0	31	17	0	0	0	0	0	0	0	0	0	0	0	48
21-Nov	SW3	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
avg/Survey		142		800		9	24	0	0	0	0	0	0	0	0	0	0			1948	
22-Nov	PHFB	13	7	0	0	0	0	0	0	0	0	0	0	0	0	34	19	0	0	73	
22-Nov	SWFB	0	0	714	701	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1415
22-Nov	PH1	62	48	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	112
22-Nov	PH2	7	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
22-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Nov	SW1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22-Nov	SW2	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	19
22-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
avg/Survey		94		708		2	10	0	0	0	0	0	0	0	27	0			1679		

