

FISHWAY STATUS REPORT

Date: 12/16/2017
 Inspection Period: 12/10/2017 thru 12/16/2017



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:	9	Temperature:	45 F
	Out of Criteria	Limit			Secchi:	6.0 Ft.
NORTH FISHWAY	OOS		Dewatered since 12/4. RTS is by 12/ 21/17.			
Exit differential	OOS	≤ 0.5'				
Exit Control weirs	OOS	High setting	High setting is normal for JDN			
Count station differential	OOS	≤ 0.3'				
Weir crest depth (DS gauge)	OOS	1.0' ± 0.1'				
Entrance differential	OOS	1.0' - 2.0'	AVG	#DIV/0!		
SOUTH FISHWAY			Annual dewatering scheduled for 1/08/18. Orifice flow 1/05 AM.			
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	8.7		
Collection channel velocity	0	1.5 - 4 fps	AVG	2.64		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.5		
Entrance weir NE1	0	depth (≥ 8')	AVG	10.3		
Entrance weir NE2	0	depth (≥ 8')	AVG	10.1		
JUVENILE PASSAGE			JBS continues in service through 12/15/17 for kelt passage protection.			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.5		
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	NA	per FPP				
Spill pattern	NA	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

SMOLT MONITORING FACILITY

Operation:

End-of-season dewatering of SMF was performed on 11/30. Estimated 200 fish (100 adult salmonids) were evacuated from the PDS via the adult drain pipe. SMF will return to service on 1 March 2018 which is one month earlier than the normal starting date at JD, per FPOM request.

Maintenance:

Planning for the Switch Gate's Lower Seals replacement/ improvements to reduce water leakage and risk to passing juvenile lamprey.

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.

The avian lines' contractor will be mobilizing the week of 12/18/17. All original lines will be replaced by 1 April 2018 (likely that work will be completed sooner.)

Operations:

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

JD North upper was dewatered on 12/04. Due to the thorough "flushing" by JD Structural crew, the record low fish numbers were encountered by JD Fisheries during this dewatering operation. Only 3 juvenile salmonids and one adult lamprey were bagged and manually released into Tailrace. A few more fish were "pushed" downstream, into the lower fishway by Fisheries personnel (notably one small adult steelhead.) RTS by 12/21/17.

MU Gatewell Drawdowns: weekly or more frequently as necessary.

Maintenance:

JD North Ladder - minor CS repairs underway. New chain and sprockets will be installed for the window cleaning brush.

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:

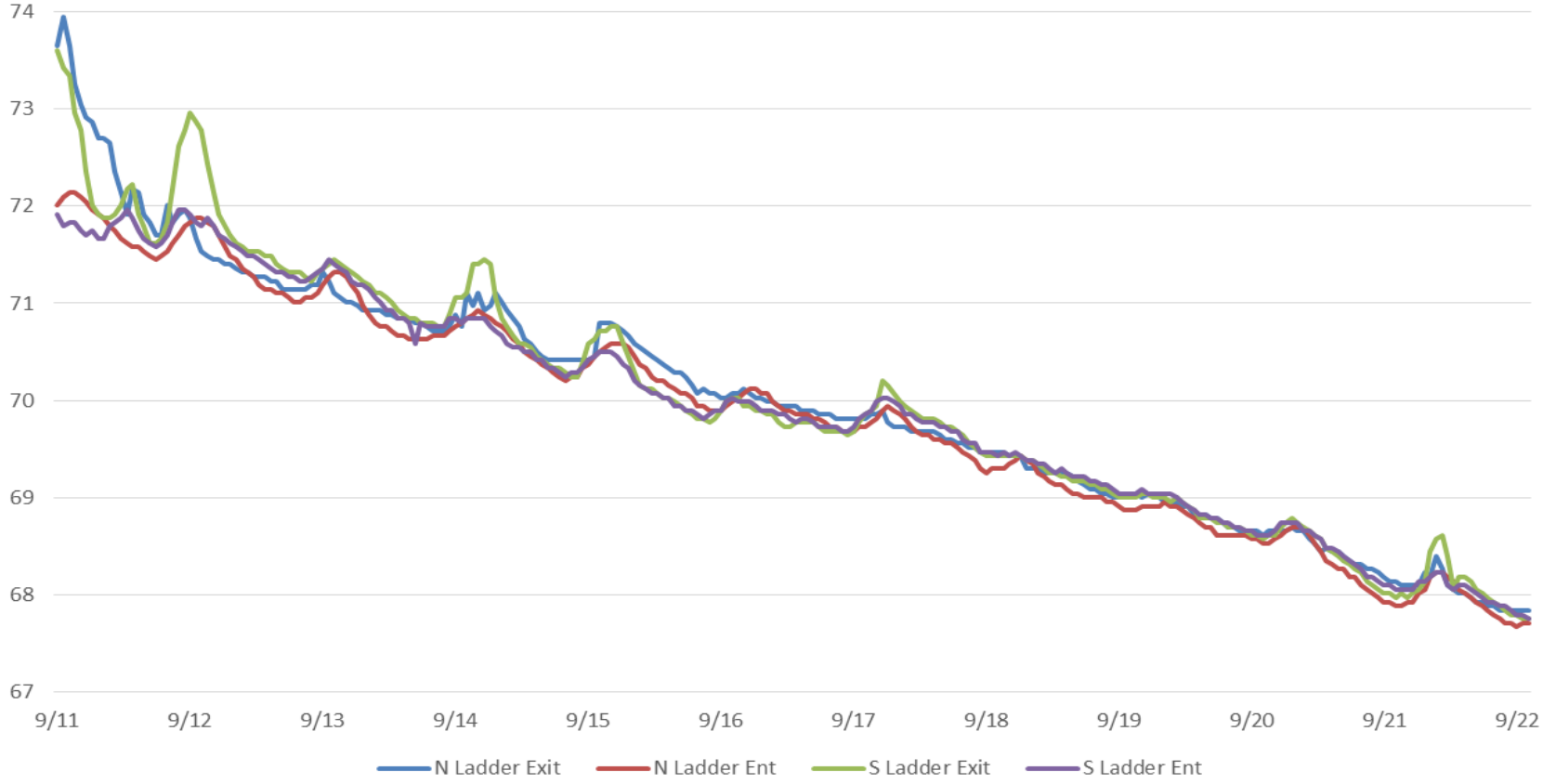
Adult PIT Support contract had been completed by early November with the office spaces installed and wired at both JD Adult Fishways.

However, the PSMFC crew continues with the Wi-Fi antennas installation. Both ladders will be ready to detect Adult PITs by 1 March 2018.

E-Signed by MOYNAHAN, KEVIN, PATRICK, 1393959157
VERIFY authenticity with ApproveIt

MOYNAHAN, KEVIN, PATRICK, 1393959157

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



JDA Collection Channel Velocity

Date *13-Dec-17*

By: *MDL*

Bay(s)	Time	Sec.	Velocity (f/s)
<i>0-2</i>	<i>1:04</i>	<i>64</i>	<i>2.81</i>
<i>2 - 4</i>	<i>2:11</i>	<i>131</i>	<i>2.69</i>
<i>4 - 6</i>	<i>3:19</i>	<i>199</i>	<i>2.65</i>
<i>6 - 8</i>	<i>4:28</i>	<i>268</i>	<i>2.61</i>
<i>8 - 10</i>	<i>5:39</i>	<i>339</i>	<i>2.54</i>
<i>10 - 12</i>	<i>6:50</i>	<i>410</i>	<i>2.54</i>
<i>12 - 14</i>	<i>8:03</i>	<i>483</i>	<i>2.47</i>
<i>14 - 16</i>	<i>9:08</i>	<i>548</i>	<i>2.77</i>
<i>16 - 18</i>	<i>10:14</i>	<i>614</i>	<i>2.73</i>
			2.64

TW Bay19 = 161.2

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	46	6.0	NA
Mon	46	6.0	NA
Tue	45	6.0	NA
Wed	45	6.0	NA
Thur	45	6.0	NA
Fri	44	6.0	NA
Sat	44	6.0	NA
AVG:	45	AVG: 6.0	AVG NA
			MAX NA
			MIN NA

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	10.2	10.2	1.4	8.3	OSS	4.5	1.5
Sun					OSS		
Mon	9.4	9.4	1.4	9.9	OSS	4.5	1.4
Mon					OSS		
Tues	9.2	9.6	1.3	8.3	OSS	4.5	1.6
Tues					OSS		
Wed	11.3	10.9	1.3	8.4	OSS	4.5	1.5
Wed					OSS		
Thur	11.1	10.7	1.4	8.1	OSS	4.5	1.4
Thur					OSS		
Fri	10.4	10.0	1.3	8.9	OSS	4.6	1.4
Fri					OSS		
Sat	10.5	10.1	1.3	8.8	OSS	4.6	1.8
Sat					OSS		
AVG:	10.3	10.1	1.3	8.7	#DIV/0!	4.5	1.5

