

FISHWAY STATUS REPORT

Date: 12/23/2017
 Inspection Period: 12/17/2017 thru 12/23/2017



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 once per day during Winter Maintenance season, Dec.1 - Feb. 28
 Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspections	Criteria	Total Number of Inspections:	7	Temperature:	42 F
	Out of Criteria	Limit			Secchi:	6.0 Ft.
NORTH FISHWAY			Returned to service 12/22/17 with all six AWS pumps 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	1.0' ± 0.1'				
Entrance differential	0	1.0' - 2.0'	AVG	1.5		
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	1.4		
Entrance weir SE1	0	depth (≥ 8')	AVG	8.4		
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	10.7		
Entrance weir NE2	0	depth (≥ 8')	AVG	10.3		
JUVENILE PASSAGE	OOS		JBS season completed on 12/15/17. STS removal commenced on 12/16/17.			
Forebay/bypass conduit differential	OOS	4.0' - 5.0'	AVG	4.6		
Submersible traveling screens	OOS	visual inspect	All STSs removed from PH gatewells by 12/21/17.			
Turbine trashrack drawdown	OOS	<1.5', wkly				
Vert barrier screen drawdown	OOS	<1.5', wkly				
Spill volume	N/A	per FPP	Spillway on seal since 9/01/17.			
Spill pattern	N/A	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

SMOLT MONITORING FACILITY

Operation:

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 started mobilizing on 12/18/17. All original lines will be replaced by 1 April 2018.

Operations:

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

JD North Ladder returned to service on 12/21/17. All 6 AWS pumps are available.

MU Gatewell Drawdowns: weekly or more frequently as necessary.

Maintenance:

JD North Ladder - minor CS repairs completed: Crowder bottom seals were replaced with new parts & New chain and sprockets were installed for the window's cleaning brush by JD Mechanical crew.

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' .

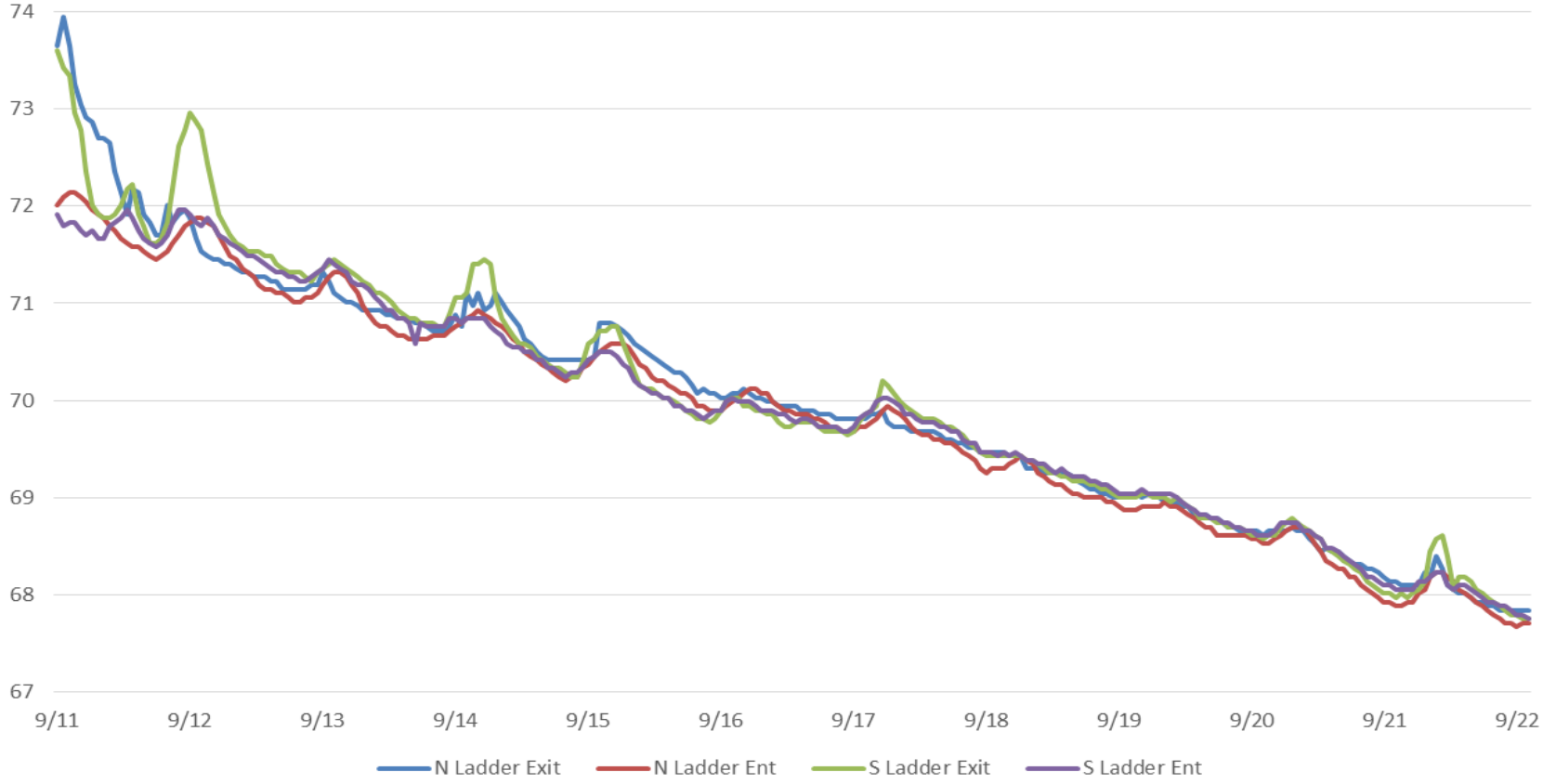
Research:

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.

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

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	43	6.0	NA
Mon	43	6.0	NA
Tue	43	6.0	NA
Wed	42	6.0	NA
Thur	42	6.0	NA
Fri	42	6.0	NA
Sat	42	6.0	NA
AVG:	42	AVG: 6.0	AVG NA
			MAX NA
			MIN NA

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	na	na	na	na	na	na	na
Sun							
Mon	na	na	na	na	na	na	na
Mon							
Tues	11.1	10.7	1.3	9.1	1.5	4.6	1.5
Tues							
Wed	11.1	10.7	1.4	8.7	1.5	4.6	1.5
Wed							
Thur	10.5	10.1	1.3	8.4	1.5	4.6	1.5
Thur							
Fri	10.4	10.0	1.4	8.1	1.5	4.6	1.4
Fri							
Sat	10.2	9.8	1.7	7.7	1.6	4.7	1.5
Sat							
AVG:	10.7	10.3	1.4	8.4	1.5	4.6	1.5

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)	NF(2)	
21-Dec	PHFB	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
21-Dec	SWFB	0	0	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
21-Dec	PH1	8	0	12	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
21-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
avg/Survey		4		42		5		19		0		0		0		0		0		0		0	139
22-Dec	PHFB	0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
22-Dec	SWFB	0	0	49	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
22-Dec	PH1	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
22-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Dec	SW1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
22-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
avg/Survey		11		25		2		19		0		0		0		0		0		0		0	111
23-Dec	PHFB	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
23-Dec	SWFB	0	0	61	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65
23-Dec	PH1	14	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
23-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
avg/Survey		7		31		2		16		0		0		0		0		0		0		0	111
Totals		Gulls		Cormorant				Caspian tern				White Pelican				Grebe				Total			
		F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF			Total			
Weekly Total		70	929	19	162	0	0	0	0	0	0	0	0	0	0	0	0			1180			
avg/Survey		5	66	1	12	0	0	0	0	0	0	0	0	0	0	0	0			84			