

FISHWAY STATUS REPORT

Date: 2/24/2018
 Inspection Period: 2/18/2018 thru 2/24/2018



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 the 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:	40 F
	Out of Criteria	Limit			Secchi:	5.6 Ft.
NORTH FISHWAY			5 out 6 AWS pumps available since 2/7 when pump 1 was found binding up/resisting to turn.			
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	1.4		
SOUTH FISHWAY	OOS		OOS since dewatered on 1/08. RTS is the week of 2/22/18.			
Exit differential	OOS	≤ 0.5'				
Exit Control weirs	OOS	Mid setting	Mid setting is normal for JDS			
Count station differential	OOS	≤ 0.3'				
Weir crest depth (US gauge)	OOS	1.0' ± 0.1'				
South entrance differential	OOS	1.0' - 2.0'	AVG	#DIV/0!		
Entrance weir SE1	OOS	depth (≥ 8')	AVG	#DIV/0!		
Collection channel velocity	OOS	1.5 - 4 fps	AVG	2.64		
N. Entrance PH(Bay 19)differential	OOS	1.0' - 2.0'	AVG	#DIV/0!		
Entrance weir NE1	OOS	depth (≥ 8')	AVG	#DIV/0!		
Entrance weir NE2	OOS	depth (≥ 8')	AVG	#DIV/0!		
JUVENILE PASSAGE	OOS		JBS season completed on 12/15/17. It was dewatered on 1/23. RTS is week of 2/20.			
Forebay/bypass conduit differential	OOS	4.0' - 5.0'	AVG	#DIV/0!		
Submersible traveling screens	OOS	visual inspect	STs will be installed at MU1-4 starting on 2/26 and more will be installed shortly after.			
Turbine trashrack drawdown	OOS	<1.5', wkly				
Vert barrier screen drawdown	OOS	<1.5', wkly				
Spill volume	NA	per FPP	Unplanned spill underway since early February.			
Spill pattern	NA	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

SMOLT MONITORING FACILITY

Operation:

SMF OOS since 11/30/17. It will return to service on 1 March 2018 which is one month earlier than the normal starting date at JD, per FPOM request.

Maintenance:

Switch Gate's Lower Seals replacement/ improvements to reduce water leakage is complete.

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

Research: None

Birds :

Only a few birds, mostly cormorants are present at JD at this time. See the Avian Numbers tab for details.

Avian lines' contractor is making fantastic progress due to mild and non-windy winter and is expected to complete all work early, by 3/1/18.

The Spillway section's new tensioning winches are currently installed.

Operations:

JD South Fishway OOS/ dewatered since 1/08. RTS is 2/22/18.

JD North Ladder in service since 12/21/17.

JBS OOS/ dewatered since 1/23. RTS is the week of 2/20/18.

MU Gatewell Drawdowns: none due to winter maintenance season. Will commence in early March 2018.

Maintenance:

JD North AWS pump 1 OOS since 2/7 when it was found binding up/ resisting to turn. Mechanical bearing issues have been excluded by 2/15 which is great news.

JD Electrical crew troubleshooting and hopefully will fix it soon. 5 AWS pumps available out of 6 total is more than sufficient for all TW elevations.

Maintenance of JBS Tainter gate, orifices' hardware and one expansion joint repairs are underway.

JD South Fishway OOS/ dewatered since 1/08. Expansion joints and AWS turbine 3 oil leak's repairs by JD Maintenance underway.

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

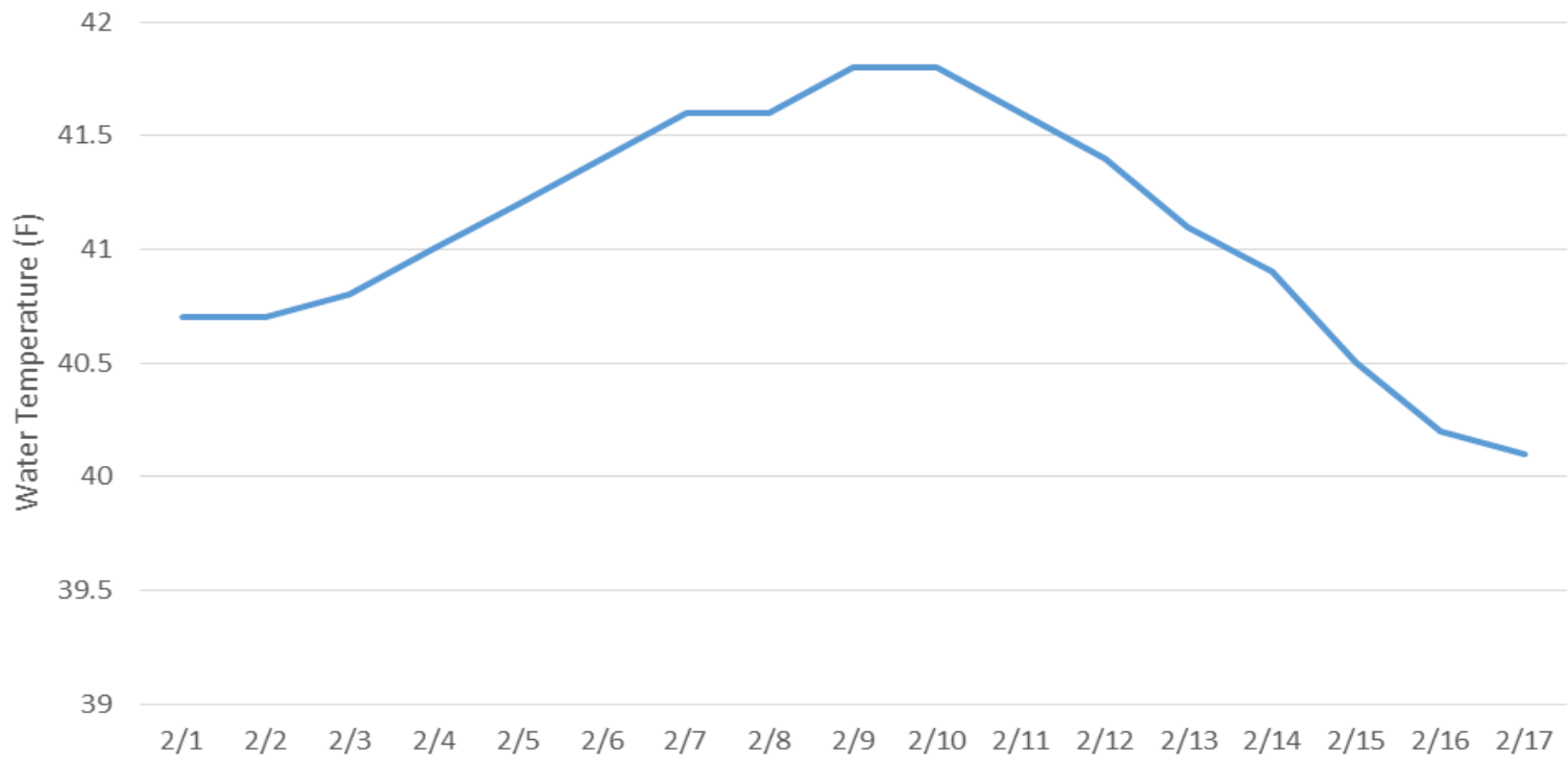
Research:

Adult PIT tag detection computer hardware - PSMFC crew completed all installations on 2/15. Both JDS and JDN systems in service and detecting PIT tags.

Coordinating with Uof I crew for their JD Adult Lamprey RT installation/ monitoring at both adult fishways in 2018.

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

JDA Water Temperatures



JDA Collection Channel Velocity

Date	<i>13-Dec-17</i>
By:	<i>MDL</i>

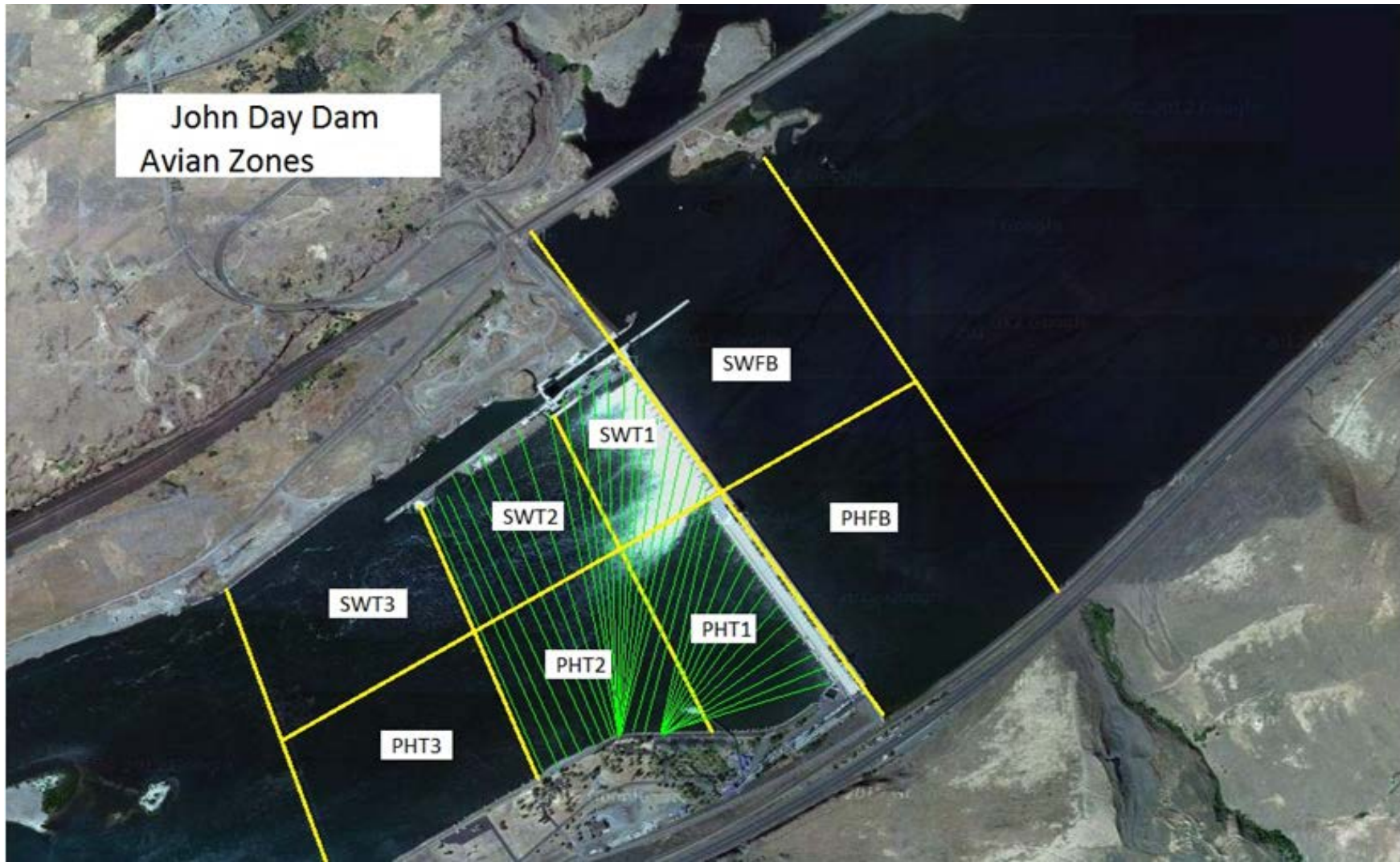
Bay(s)	Time	Sec.	Velocity (f/s)
<i>0-2</i>	<i>1:04</i>	<i>64</i>	<i>2.81</i>
<i>2 - 4</i>	<i>2:11</i>	<i>131</i>	<i>2.69</i>
<i>4 - 6</i>	<i>3:19</i>	<i>199</i>	<i>2.65</i>
<i>6 - 8</i>	<i>4:28</i>	<i>268</i>	<i>2.61</i>
<i>8 - 10</i>	<i>5:39</i>	<i>339</i>	<i>2.54</i>
<i>10 - 12</i>	<i>6:50</i>	<i>410</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	40	6.0	NA
Mon	40	6.0	NA
Tue	40	6.0	NA
Wed	40	5.5	NA
Thur	39	5.5	NA
Fri	39	5.5	NA
Sat	39	5.0	NA
AVG:	40	AVG: 5.6	AVG NA
			MAX NA
			MIN NA

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	oos	oos	oos	oos	1.5	oos	oos
Sun							
Mon	oos	oos	oos	oos	1.6	oos	oos
Mon							
Tues	oos	oos	oos	oos	1.5	oos	oos
Tues							
Wed	oos	oos	oos	oos	1.5	oos	oos
Wed							
Thur	oos	oos	oos	oos	1.6	oos	oos
Thur							
Fri	oos	oos	oos	oos	0.9	oos	oos
Fri							
Sat	oos	oos	oos	oos	1.4	oos	oos
Sat							
AVG:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.4	#DIV/0!	#DIV/0!

