

FISHWAY STATUS REPORT

Date: 3/3/2018
 Inspection Period: 2/25/2018 thru 3/3/2018



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 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:	10	Temperature:	38 F
	Out of Criteria	Limit			Secchi:	5.7 Ft.
NORTH FISHWAY			5 out of 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	1.5		
SOUTH FISHWAY	0		RTS on 2/28/18.			
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	1.2		
Entrance weir SE1	0	depth (≥ 8')	AVG	9.3		
Collection channel velocity	0	1.5 - 4 fps	AVG	2.64		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.8		
Entrance weir NE1	2	depth (≥ 8')	AVG	8.5		
Entrance weir NE2	2	depth (≥ 8')	AVG	8.1		
JUVENILE PASSAGE	0		RTS 2/28, screens in units 1,3,4,8 and 9.			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.6		
Submersible traveling screens	0	visual inspect				
Turbine trashrack drawdown	0	<1.5', wkly				
Vert barrier screen drawdown	0	<1.5', wkly				
Spill volume	0	per FPP	Unplanned spill underway since early February.			
Spill pattern	0	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

SMOLT MONITORING FACILITY

Operation:

SMF in service since 2/28 with every other day, 24 hrs condition sampling.

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 4/1/18.

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

Operations:

JD South Fishway RTS is 2/28/18.

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

JBS RTS 2/28/18.

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

PSMFC started sampling on 3/1/18

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.

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

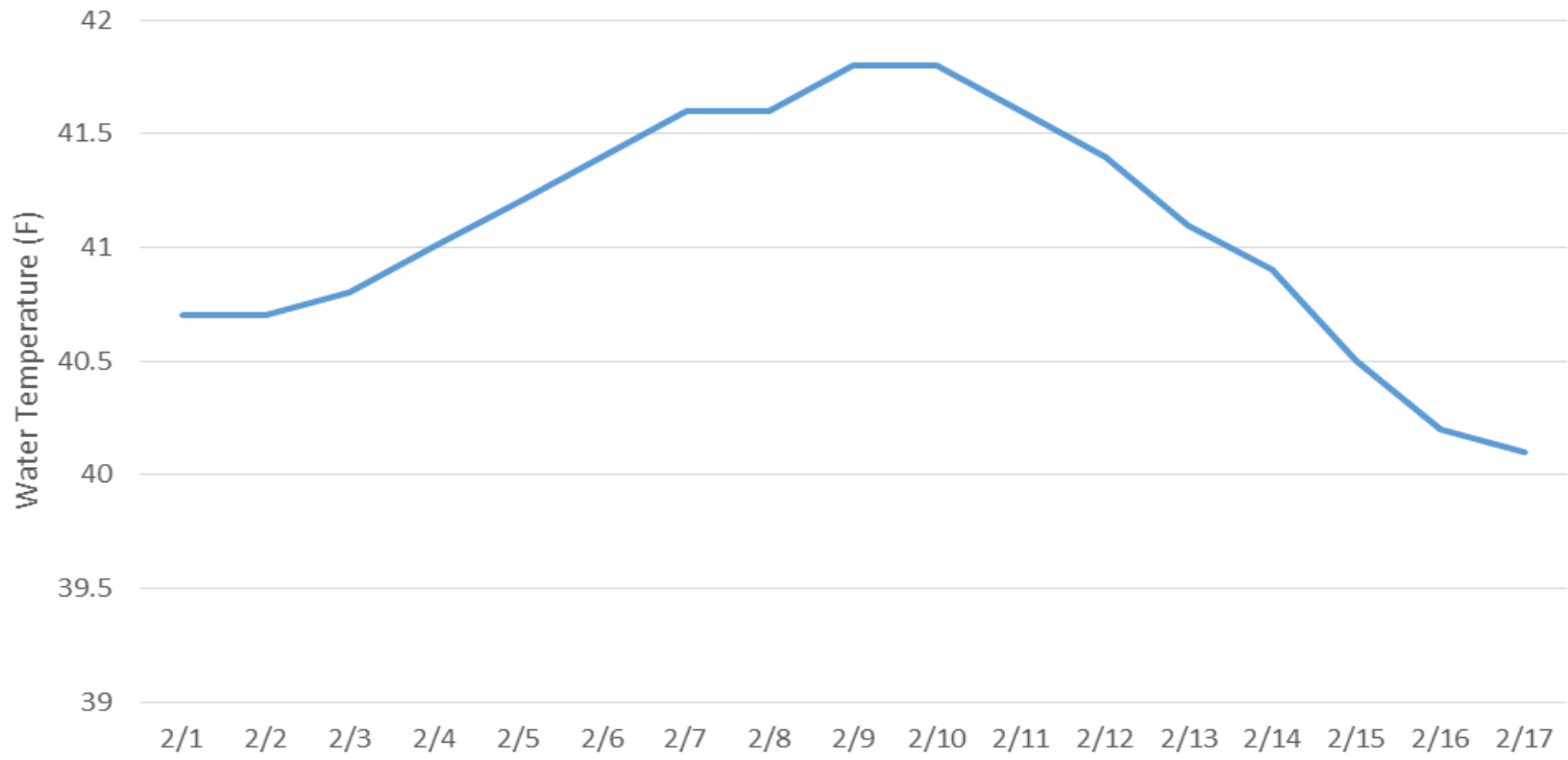
Research:

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.

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

JDA Water Temperatures



JDA Collection Channel Velocity

Date 13-Dec-17

By: MDL

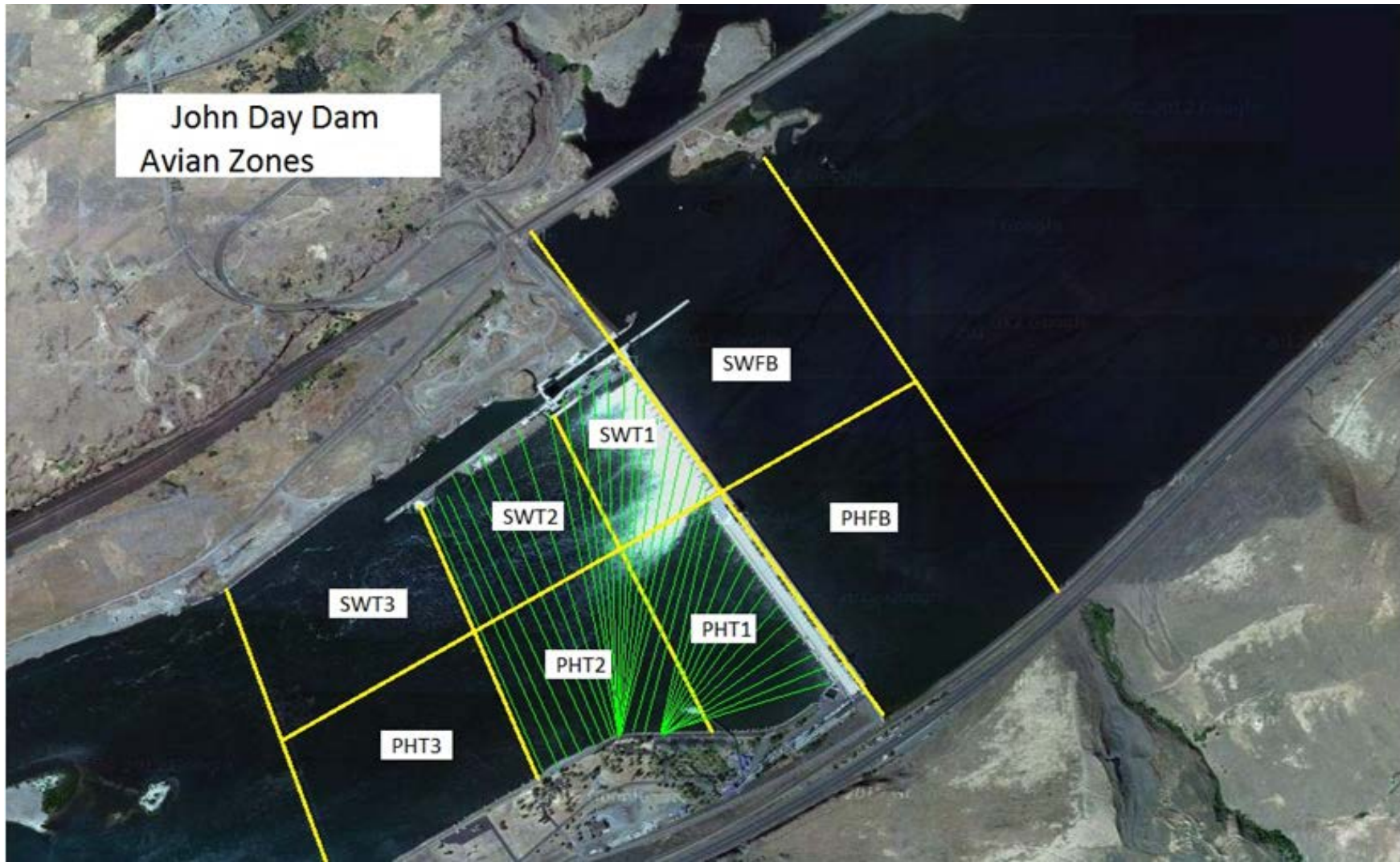
Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:04	64	2.81
2 - 4	2:11	131	2.69
4 - 6	3:19	199	2.65
6 - 8	4:28	268	2.61
8 - 10	5:39	339	2.54
10 - 12	6:50	410	2.54
12 - 14	8:03	483	2.47
14 - 16	9:08	548	2.77
16 - 18	10:14	614	2.73
			2.64

TW Bay19 = 161.2

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

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

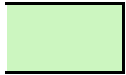
John Day Dam
Avian Zones



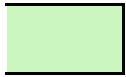
John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	38	5.0	0
Mon	38	5.5	0
Tue	38	5.5	0
Wed	38	6.0	0
Thur	38	6.0	11
Fri	38	6.0	0
Sat	38	6.0	12
AVG:	38	AVG: 5.7	AVG 11
			MAX 12
			MIN 11

	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	1.7	oos	oos
Mon							
Tues	oos	oos	oos	oos	1.6	oos	oos
Tues							
Wed	oos	oos	oos	oos	1.1	oos	oos
Wed							
Thur	6.8	6.3	1.2	9.1	1.6	4.6	2.0
Thur	6.6	6.6	1.3	8.9	1.7	4.6	1.8
Fri	9.3	8.9	1.2	9.7	1.6	4.7	1.7
Fri	9.1	8.7	1.2	9.6	1.6	4.6	1.7
Sat	9.6	9.2	1.1	9.9	1.5	4.6	1.7
Sat	9.4	8.9	1.3	8.8	1.5	4.5	1.8
AVG:	8.5	8.1	1.2	9.3	1.5	4.6	1.8



Total
1
0
0
0
0
0
0
0
0
1
0
0
0
0
0
0
0
0
18
0
1
0
0
0
0
0
19
4
0
7
0
0
0
0
3
14



Total

1
0
0
0
0
0
0
0

1

2
0
2
0
0
0
0
0

4

22
0
4
0
0
0
0
2

28

Total

67

5