

FISHWAY STATUS REPORT

Date: 2/23/2019
Inspection Period: 2/17/2019 thru 2/23/2019

JOHN DAY DAM



**US Army Corps
of Engineers**
Portland District

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, Dec. 1 - Feb. 28.
Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspection OOC	Criteria Limit	Total Number of Inspections: 7	Temperature: 36 F
				Secchi: 6.0 Ft.
NORTH FISHWAY			Pump 2 OOS due to oil leak since 2/9/19. 5 out of 6 pumps available, 3 are in service.	
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	OOS		OOS since 1/22. RTS is 2/26.	
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 2.54	
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		Dewatered for annual inspection on 1/30/19. RTS is 2/26/2019.	
Forebay/bypass conduit differential	OOS	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	OOS	visual inspect	STs are scheduled to be installed into MU 1-4 before 1 March deadline.	
Turbine trashrack drawdown	0	<1.5', wkly	N/A	
Vert barrier screen drawdown	0	<1.5', wkly	N/A	
Spill volume	OOS	per FPP	All gates on seal since 1 December 2018. 2019 Fish Spill season starts on 10 April.	
Spill pattern	OOS	per FPP	None	
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

SMOLT MONITORING FACILITY

Operation:

Planned RTS is 1 March with first sample date on 2 March 2019. A possible one week delay in RTS due to the inclement, winter weather is considered. SMF has cold sensitive pipes and valves which could be damaged in freezing temperatures if charged with water. Also, ice and snow accumulation on SMF gratings and staircases create unsafe walking conditions for personnel.

Maintenance:

SMF SCADA update by JD Electrical/ Portland District's engineers is underway but its completion is delayed by one year to February 2020. Due to complexity of electronic components and incomplete as-builts which are pending at this time.

Research: None

ADULT FISHWAYS & TW AVIAN GRID

Birds:

Bird numbers have declined significantly due to low juvenile shad abundance in winter. See Avian Numbers tab for details. All 125 avian lines in place without any deficiencies.

Operations:

JD North in service since 1/17/ 19 with 5 out of 6 AWS pumps available (#2 OOS due to oil leak.) Additionally, two more pumps are frequently OOS short term due to SKF alarms. Their auto greasing device needs minor mechanical service before returning to service (long term problem.) MU Gatewell Drawdown All MUs trashrack differentials are 1.5' or below according to twice a week inspections.

Maintenance:

JD North AWS pump 2 OOS due to oil leak since 2/9/19, it needs its motor replaced (spare one is on hand.) Planning for its repair underway. JD North AWS pumps frequent SKF alarms (auto greasing issues) continue and are cleared by JD Maintenance & Ops immediately. Planning for a long term fix underway.

JD North Fishway's LPS improvements contract is complete. LPS is expected to go into service in May 2019.

JD South AWS turbine 1 is OOS, in poor condition and urgently awaiting its overhaul as soon as \$ 3 million becomes available (?)

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

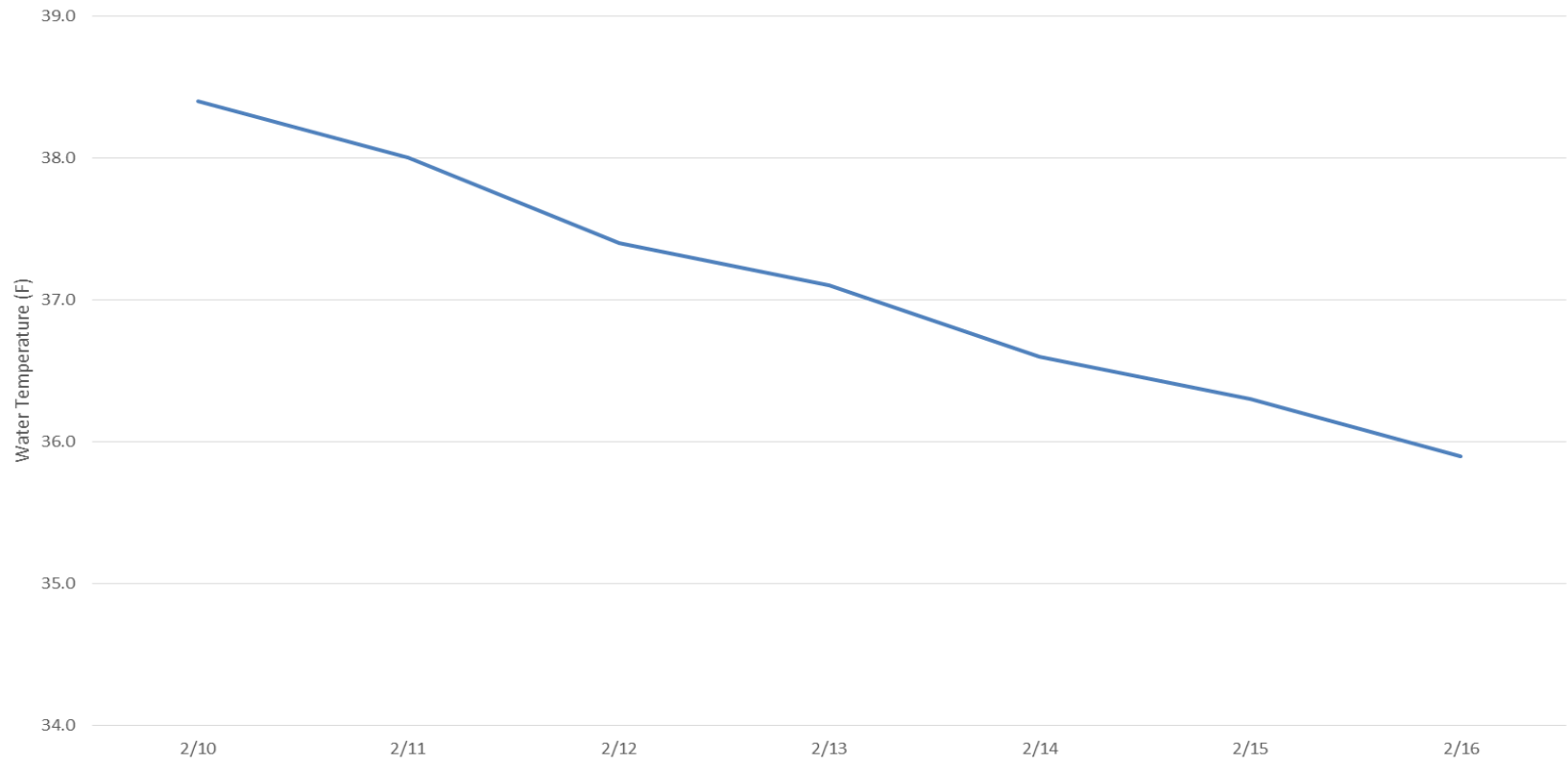
Research:

JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18.

Uof I crew continues monitoring the RT Adult Lamprey passage at both JD Adult Fishways.

Approved by: Ron Twiner, Acting OPM

JDA Tailwater Temperatures (F) (2/10/19 - 2/16/19)



JDA Collection Channel Velocity

Date 9-Jan-19

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:08	68	2.65
2 - 4	2:19	139	2.54
4 - 6	3:31	211	2.50
6 - 8	4:45	285	2.43
8 - 10	5:57	357	2.50
10 - 12	7:05	425	2.65
12 - 14	8:19	499	2.43
14 - 16	9:36	576	2.34
16 - 18	10:40	640	2.81
			2.54

Bay 19 TW:	160.5
Turbine 2-3:	68 RPM

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

John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	36	6.0	NA
Mon	36	6.0	NA
Tue	36	6.0	NA
Wed	36	6.0	NA
Thur	36	6.0	NA
Fri	36	6.0	NA
Sat	35	6.0	NA
AVG:	36	AVG: 6.0	AVG/Sample #DIV/0!
			MAX 0
			MIN 0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	OOS	OOS	OOS	OOS	1.6	OOS	OOS
Sun	OOS	OOS	OOS	OOS		OOS	OOS
Mon	OOS	OOS	OOS	OOS	1.6	OOS	OOS
Mon	OOS	OOS	OOS	OOS		OOS	OOS
Tues	OOS	OOS	OOS	OOS	1.7	OOS	OOS
Tues	OOS	OOS	OOS	OOS		OOS	OOS
Wed	OOS	OOS	OOS	OOS	1.6	OOS	OOS
Wed	OOS	OOS	OOS	OOS		OOS	OOS
Thur	OOS	OOS	OOS	OOS	1.5	OOS	OOS
Thur	OOS	OOS	OOS	OOS		OOS	OOS
Fri	OOS	OOS	OOS	OOS	1.4	OOS	OOS
Fri	OOS	OOS	OOS	OOS		OOS	OOS
Sat	OOS	OOS	OOS	OOS	1.5	OOS	OOS
Sat	OOS	OOS	OOS	OOS		OOS	OOS
AVG:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.6	#DIV/0!	#DIV/0!

JDA Bird Counts: 2/17/19 to 2/23/19

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)	
17-Feb	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Feb	PH1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
17-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Feb	SW1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17-Feb	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Feb	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
18-Feb	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Feb	PH1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
18-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Feb	SW1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18-Feb	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Feb	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
19-Feb	PHFB	0	0	3	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	14
19-Feb	SWFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19-Feb	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Feb	SW2	0	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	33
19-Feb	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	2	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
20-Feb	PHFB	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
20-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Feb	PH1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
20-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Feb	SW2	0	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	37
20-Feb	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		1	0	0	2	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43

John Day Dam
Avian Zones

