

FISHWAY STATUS REPORT

Date: 12/29/2018
 Inspection Period: 12/23/2018 thru 12/29/2018

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	Inspections	Criteria	Total Number of Inspections:	5	Temperature:	44 F
	Out of Criteria	Limit			Secchi:	6.0 Ft.
NORTH FISHWAY			OOS since 11/30. Winter maintenance activities underway. RTS in mid-January 2019.			
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	0		In service with two AWS turbines and two FOGs. Planned dewatering in mid- January 2019.			
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	1.5		
Entrance weir SE1	0	depth (≥ 8')	AVG	8.1		
Collection channel velocity	0	1.5 - 4 fps	AVG	2.61		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.7		
Entrance weir NE1	0	depth (≥ 8')	AVG	8.4		
Entrance weir NE2	0	depth (≥ 8')	AVG	8.4		
JUVENILE PASSAGE	0		In service since 2/28.			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.6		
Submersible traveling screens	0	visual inspect	STS removal started on 12/16 after JBS season ended on 12/15.			
Turbine trashrack drawdown	0	<1.5', wkly	Monthly trashrack raking completed by 11/29. Some wooden debris was removed.			
Vert barrier screen drawdown	0	<1.5', wkly	Trashrack and VBS differentials are below the criterion of 1.5'.			
Spill volume	0	per FPP	Bay 2 spill ended on 12/1. No fish spill of any kind occurs until April 2019.			
Spill pattern	0	per FPP	None			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

SMOLT MONITORING FACILITY

Operation:

End of season SMF dewatering was successfully accomplished on 11/28 PM. Estimated 60 adult chinook, 15 steelhead, 2 lamprey, 2 sturgeon, 20 cats along with a few minor resident species were safely evacuated via the Fish Drain Pipe and JBS outfall into the river. Thanks to Erin and Greg Kovalchuk for assistance! Fish Drain Pipe was left with auxiliary flow to assure the all lamprey were evacuated. The flow will be shut down the next week. Winterization of SMF Building along with the Auxiliary Water Supply pipes and valves completed by 12/10.

Maintenance:

SMF SCADA update/mods' by JD Electrical/ Portland District Engineers is underway. Estimated completion by the end of February 2019.

Fallbacks: AVG: 0 MAX: 0 MIN: 0

Typical fall water birds feeding on the abundant juvenile shad. See Avian Numbers tab for details.

All 125 avian lines in place without any deficiencies.

Operations:

JD North Fishway continues OOS since 11/30. RTS is in mid-January 2019.

JD South Fishway in service, with two AWS turbines and two FOGs since 2/28/18.) Planned dewatering is in mid-January 2019.

MU Gatewell Drawdowns: All MUs trashrack differentials are 1.5' or below according to twice a week inspections.

Maintenance:

JD North Fishway winter maintenance and LPS improvements contract continue as planned. RTS is in mid- January 2019.

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

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

Research:

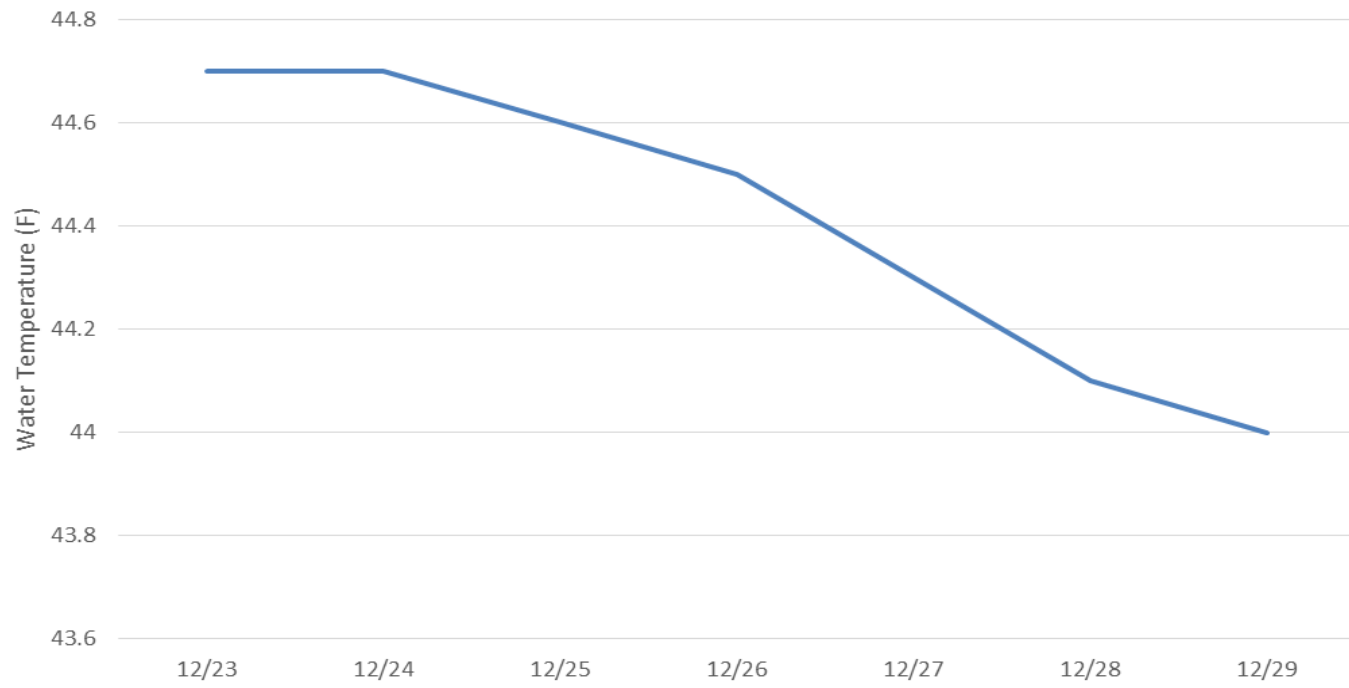
JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18.

WDFW NPM angling concluded 10/07/18 with a respectable seasonal total of 3,089 NPM removed.

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

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

JDA Tailwater Temperature (F) (12/23/18 - 12/29/18)



JDA Collection Channel Velocity

Date 7-Dec-18

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:05	65	2.77
2 - 4	2:15	135	2.57
4 - 6	3:26	206	2.54
6 - 8	4:35	275	2.61
8 - 10	5:42	342	2.69
10 - 12	6:49	409	2.69
12 - 14	8:03	483	2.43
14 - 16	9:13	553	2.57
16 - 18	10:14	614	2.95
			2.65

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	45	6.0	NA
Mon	45	6.0	NA
Tue	44	6.0	NA
Wed	44	6.0	NA
Thur	44	6.0	NA
Fri	44	6.0	NA
Sat	44	6.0	NA
AVG:	44	AVG: 6.0	AVG/Sample #DIV/0!
			MAX 0
			MIN 0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.5	8.5	1.5	8.0	oos	4.6	1.6
Sun							
Mon	christmas eve						
Mon							
Tues	christmas						
Tues							
Wed	8.3	8.3	1.6	8.3	oos	4.6	1.8
Wed							
Thur	8.2	8.2	1.5	8.0	oos	4.6	1.6
Thur							
Fri	8.9	8.9	1.3	8.0	oos	4.6	1.6
Fri							
Sat	8.2	8.2	1.5	8.2	oos	4.6	1.8
Sat							
AVG:	8.4	8.4	1.5	8.1	#DIV/0!	4.6	1.7

JDA Bird Counts: 12/23/18 to 12/29/18

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)	
23-Dec	PHFB	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	4	0	0	0	39
23-Dec	SWFB	0	0	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	242
23-Dec	PH1	23	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
23-Dec	PH2	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
23-Dec	SW1	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	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
23-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		12		121		1		22		0		0		0		0		2		0		314
24-Dec	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Dec	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Dec	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		0		0		0		0		0		0		0		0
25-Dec	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Dec	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Dec	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		0		0		0		0		0		0		0		0
26-Dec	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
26-Dec	SWFB	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
26-Dec	PH1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
26-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Dec	SW3	0	0	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	55
Avg/Survey		0		0		1		31		0		0		0		0		1		1		65

JDA Bird Counts: 12/23/18 to 12/29/18

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)	
27-Dec	PHFB	0	0	50	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	1	0	54
27-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Dec	PH1	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
27-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Dec	SW1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
27-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Dec	SW3	0	0	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	55
Avg/Survey		2		25		2		29		0		0		0		0		1		1		116
28-Dec	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
28-Dec	SWFB	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
28-Dec	PH1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
28-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Dec	SW1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
28-Dec	SW2	0	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	29
28-Dec	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		16		2		15		0		0		0		0		1		0		66
29-Dec	PHFB	0	0	144	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	147
29-Dec	SWFB	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	21
29-Dec	PH1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
29-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Dec	SW3	0	0	0	0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	59
Avg/Survey		0		82		2		30		0		0		0		0		1		1		230
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		26		488		15		250		0		0		0		0		9		3		791
Avg/Survey		2		35		1		18		0		0		0		0		1		0		57

John Day Dam
Avian Zones

