

FISHWAY STATUS REPORT

Date: 10/20/2018
 Inspection Period: 10/14/2018 thru 10/20/2018



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:	14	Temperature:	61 F
	Out of Criteria	Limit			Secchi:	6.0 Ft.
NORTH FISHWAY			In service with all 6 AWS pumps total 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	0		In service with two AWS turbines and two FOGs.			
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	8.4		
Collection channel velocity	0	1.5 - 4 fps	AVG	2.50		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.6		
Entrance weir NE1	0	depth (≥ 8')	AVG	9.8		
Entrance weir NE2	0	depth (≥ 8')	AVG	9.9		
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	Monthly STS inspection was completed 10/18. All STSs found in good working order.			
Turbine trashrack drawdown	0	<1.5', wkly	Monthly trashrack raking scheduled for the next week, 10/22.			
Vert barrier screen drawdown	0	<1.5', wkly	Trashrack and VBS differentials are below the criterion of 1.5'.			
Spill volume	0	per FPP	Spill Season ended on 8/31. Bay 2 open at 1.6K for adult attraction to North Entrance on 9/1.			
Spill pattern	0	per FPP	Bay 2 open at 1.6K during daylight hours for adult attraction to North Entrance since 9/1.			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

SMOLT MONITORING FACILITY

Operation:

2018 SMF Sampling Season ended on 9/15. Bypass at Switch Gate for full flow PIT detections will continue thru 30 November.

SMF SCADA update/mods' planning by JD Electrical/ Portland District Engineers is underway. Implementation during this coming winter's outage season.

Research: None

Fallbacks: AVG: 0 MAX: 0 MIN: 0

Birds :

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 South Fishway in service, with two AWS turbines and two FOGs since 2/28/18. Awaiting special funding to overhaul turbines 1 & 2 (\$ 3 million each.)

JD North Ladder in service since 12/21/17. 6 out of 6 AWS pumps available again since 4/18/18.

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

Maintenance:

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:

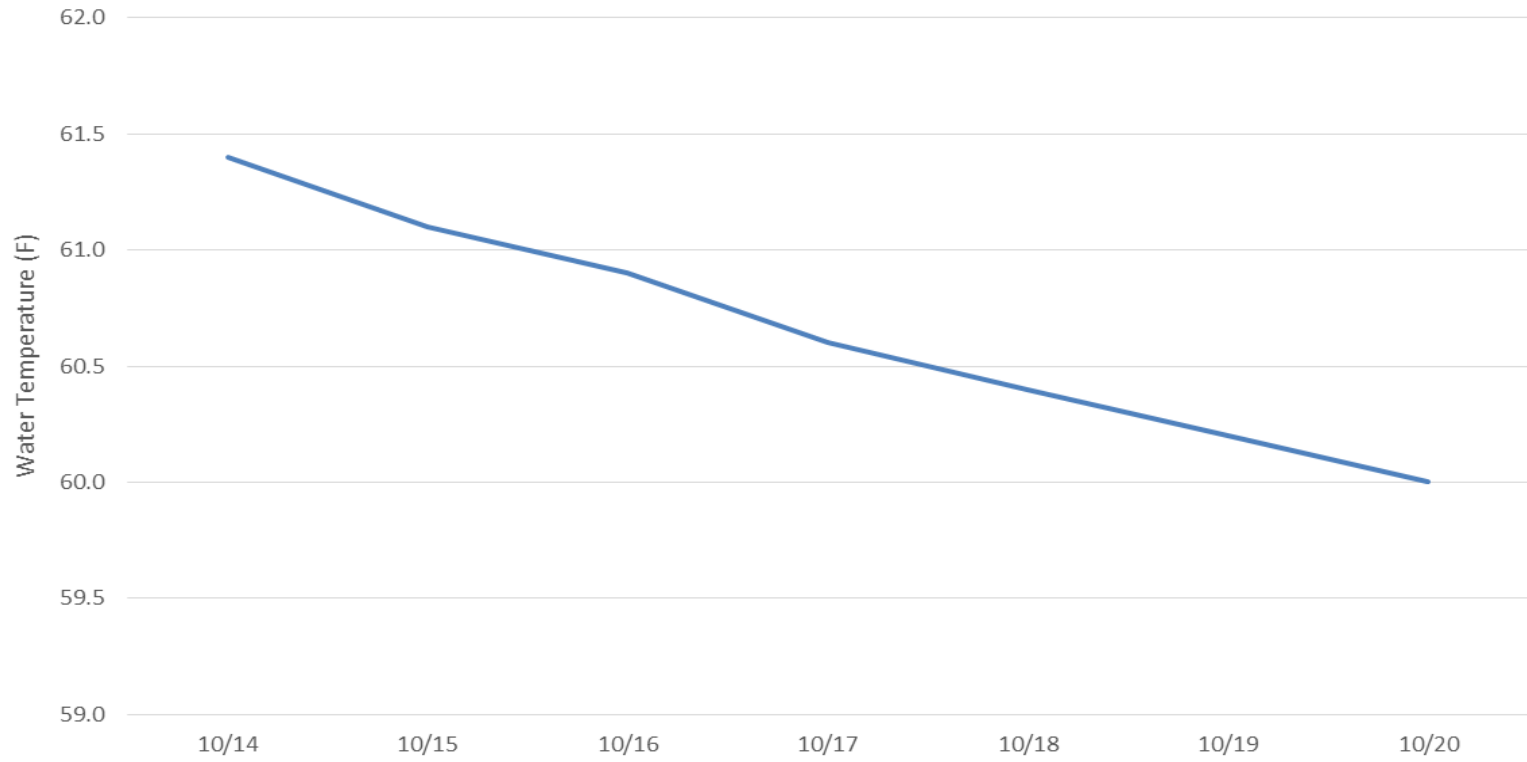
JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18.

WDFW NPM angling from JD PH Tailrace deck continues since 5/1. Catches continue slow since August, but with great seasonal total of 3,089 NPM thru 10/07.

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

Water Temperatures (F) at John Day Dam 10/14/18 - 10/20/18



JDA Collection Channel Velocity

Date 17-Oct-18

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:04	64	2.81
2 - 4	2:09	129	2.77
4 - 6	3:18	198	2.61
6 - 8	4:30	270	2.50
8 - 10	5:41	341	2.54
10 - 12	6:53	413	2.50
12 - 14	8:05	485	2.50
14 - 16	9:12	552	2.69
16 - 18	10:09	609	3.16
			2.67

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	62	6.0	NA
Mon	61	6.0	NA
Tue	60	6.0	NA
Wed	61	6.0	NA
Thur	61	6.0	NA
Fri	60	6.0	NA
Sat	60	6.0	NA
AVG:	61	AVG: 6.0	AVG/Sample #DIV/0!
			MAX 0
			MIN 0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.9	10.0	1.5	8.3	1.5	4.5	1.7
Sun	10.2	10.2	1.4	8.2	1.4	4.6	1.5
Mon	10.4	10.4	1.3	8.4	1.4	4.6	1.4
Mon	10.0	10.0	1.6	8.0	1.4	4.6	1.7
Tues	10.2	10.2	1.5	8.0	1.4	4.6	1.5
Tues	9.6	9.7	1.6	8.3	1.6	4.6	1.6
Wed	10.2	10.2	1.4	8.4	1.7	4.6	1.5
Wed	10.0	10.1	1.5	8.5	1.5	4.6	1.7
Thur	9.1	9.1	1.5	8.2	1.5	4.6	1.6
Thur	9.5	9.5	1.4	8.7	1.5	4.4	1.7
Fri	9.6	9.7	1.4	8.6	1.6	4.5	1.7
Fri	9.5	9.6	1.3	8.7	1.6	4.6	1.8
Sat	9.6	9.7	1.5	8.5	1.6	4.6	1.7
Sat	9.6	9.6	1.5	8.5	1.6	4.6	1.7
AVG:	9.8	9.9	1.5	8.4	1.5	4.6	1.6

JDA Bird Counts: 10/14/18 to 10/20/18

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)	
14-Oct	PHFB	0	0	142	118	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	285
14-Oct	SWFB	0	0	188	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268
14-Oct	PH1	69	13	0	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91
14-Oct	PH2	12	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
14-Oct	PH3	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
14-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Oct	SW2	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	22
14-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		58		264		5		24		0		0		0		0		0		0		700
15-Oct	PHFB	0	0	86	115	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	213
15-Oct	SWFB	0	0	203	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	283
15-Oct	PH1	71	13	0	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92
15-Oct	PH2	11	6	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
15-Oct	PH3	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
15-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Oct	SW2	0	0	0	0	0	0	8	22	0	0	0	0	0	0	0	0	0	0	0	0	30
15-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		60		242		5		21		0		0		0		0		0		0		655
16-Oct	PHFB	0	0	86	57	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	155
16-Oct	SWFB	0	0	203	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210
16-Oct	PH1	71	25	0	7	5	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	118
16-Oct	PH2	11	16	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
16-Oct	PH3	18	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	41
16-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Oct	SW2	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
16-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		71		180		9		22		0		0		0		0		0		0		561
17-Oct	PHFB	0	0	91	144	0	0	27	1	0	0	0	0	0	0	0	0	6	28	0	27	324
17-Oct	SWFB	0	0	23	40	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	66
17-Oct	PH1	77	155	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	249
17-Oct	PH2	23	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
17-Oct	PH3	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
17-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Oct	SW2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
17-Oct	SW3	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	19
Avg/Survey		130		149		9		34		0		0		0		0		17		14		704

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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)	
18-Oct	PHFB	0	0	71	144	0	0	0	2	0	0	0	0	0	0	0	0	75	8	75	8	383
18-Oct	SWFB	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	12	66
18-Oct	PH1	0	45	0	0	8	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71
18-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Oct	SW3	0	0	0	0	0	0	34	14	0	0	0	0	0	0	0	0	0	0	0	0	48
Avg/Survey		23		129		13		25		0		0		0		0		48		48		568
19-Oct	PHFB	0	0	212	227	0	0	0	1	0	0	0	0	0	0	0	0	41	0	0	0	481
19-Oct	SWFB	0	0	0	211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	211
19-Oct	PH1	15	175	0	0	2	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	217
19-Oct	PH2	2	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
19-Oct	PH3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19-Oct	SW1	0	10	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
19-Oct	SW2	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	32
19-Oct	SW3	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	17
Avg/Survey		112		335		14		25		0		0		0		0		21		0		1010
20-Oct	PHFB	0	0	19	181	0	0	2	2	0	0	0	0	0	0	0	0	64	0	63	0	331
20-Oct	SWFB	0	0	0	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	145
20-Oct	PH1	2	155	0	0	2	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183
20-Oct	PH2	12	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
20-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Oct	SW2	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
20-Oct	SW3	0	0	0	0	0	24	44	0	0	0	0	0	0	0	0	0	0	0	0	0	68
Avg/Survey		91		173		26		24		0		0		0		0		32		32		753
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		1084		2941		159		348		0		0		0		0		234		185		4951
Avg/Survey		77		210		11		25		0		0		0		0		17		13		354

John Day Dam
Avian Zones

