


FISHWAY STATUS REPORT

Date: 11/30/2019
Inspection Period: 11/24/2019 thru 11/30/2019



**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.
 Additional and frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspection OOB	Criteria Limit	Total Number of Inspections: 14	Temperature: 49 F
				Secchi: 6.0 Ft.
NORTH FISHWAY			In service with 4 out of 6 AWS pumps available; AWS shutdown 4/30 for dewatering on 12/2.	
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			2 out of 3 AWS turbines in service	
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 1.4	
Entrance weir SE1	0	depth (≥ 8')	AVG 8.0	
Collection channel velocity	0	1.5 - 4 fps	AVG 2.59	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.6	
Entrance weir NE1	0	depth (≥ 8')	AVG 9.3	
Entrance weir NE2	0	depth (≥ 8')	AVG 9.8	
JUVENILE PASSAGE				
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.3	
Submersible traveling screens	0	visual inspect		
Turbine trashrack drawdown	0	<1.5', wkly	N/A Trashrack raking complete by 11/27. Considerable amount of debris was removed.	
Vert barrier screen drawdown	0	<1.5', wkly		
Spill volume	0	per FPP	1.6 Kcfs at bay 2 during daylight hours only.	
Spill pattern	0	per FPP	Bay 2 open at 1.6K during daylight hours for adult attraction to North Entrance until 11/30.	
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

SMOLT MONITORING FACILITY

Operation:

End-of-season dewatering aborted due to failure of the critical Transport Flume's flushing valve on 11/26. SMF bypass operation has to continue until the valve is fixed by JD Maintenance (it's tricky job due to its high elevation and difficult access.) Next attempt to dewater is tentatively scheduled for 12/ 9.

Maintenance:

No maintenance issues of any kind at this time. Planning for the upcoming winter's SCADA update underway.

Research: None

ADULT FISHWAYS & TW AVIAN GRID

Birds:

Winter birds only without much impact on fish passage. See Bird Count tab for details.

All 125 avian lines in place without any deficiencies.

Operations:

Operations:

November STS/ VBS camera inspection complete by 11/21. All screens were found undamaged and working properly.

JD South Adult Fishway maintaining criteria with 2 AWS Turbines. Turbine 3 is currently under maintenance and will return to service by 1 March 2020.

JD North Fishway continues operating in criteria with 2 out of 6 pumps in service. Pumps # 3 & 4 are OOS and will be repaired by 1 March 2020.

JD North is scheduled for its annual dewatering on 12/2/19.

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

Maintenance:

JD South Fishway continues operating with two AWS turbines (No. 1 & 2) since early April. AWS turbine No. 3 waiting for the replacement of its thrust bearing which is on order/ in contracting (at approx. \$ 20 K.)

JD North Fishway continues operating in criteria. However, 2 out of 6 ASW pumps are OOS due to auto greaser and oil leaks issues since mid June.

JD Maintenance unstacked pumps 3 & 4 during the trouble shooting efforts in August - September. Both pumps are expected to be available for service, for 2020 passage season starting on 1 March.

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

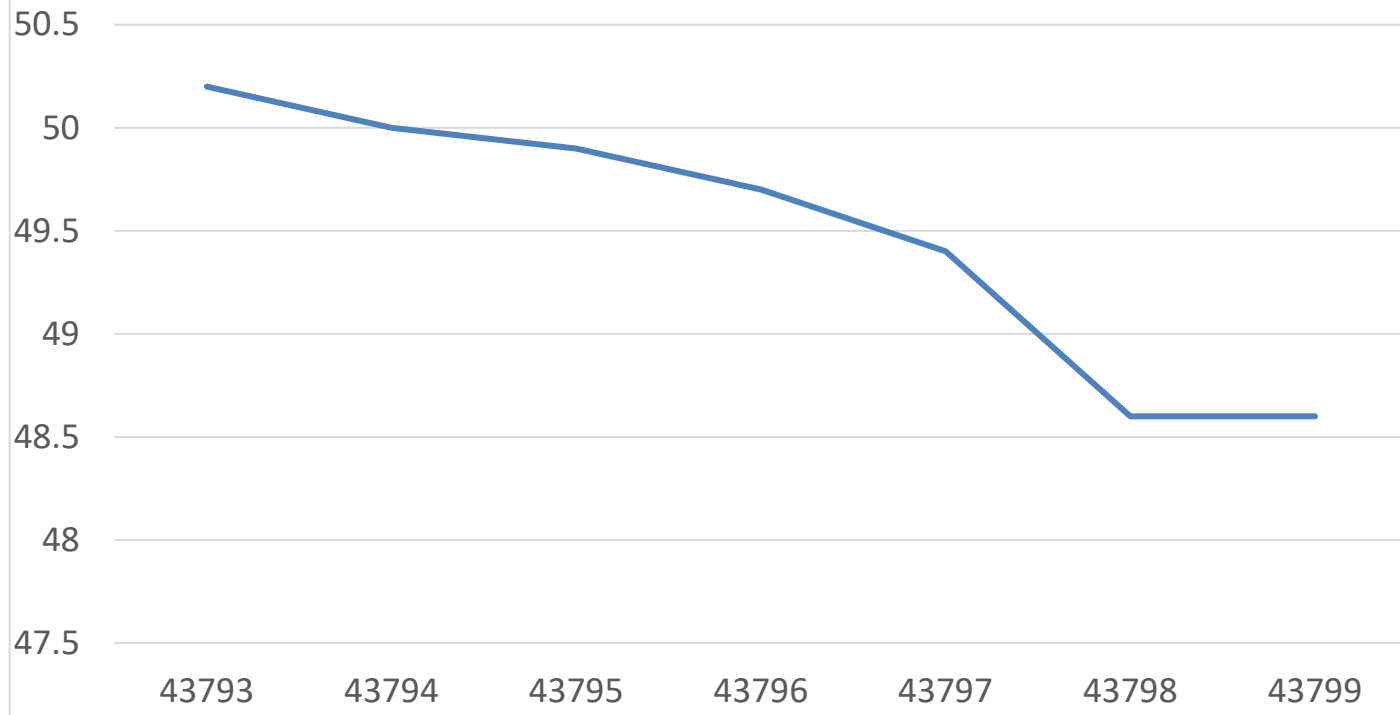
Research:

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 Temperature 11/24/19 - 11/30/19



JDA Collection Channel Velocity

Date	29-Nov-19
By:	KRM

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:07	67	2.69
2 - 4	2:15	135	2.65
4 - 6	3:23	203	2.65
6 - 8	4:34	274	2.54
8 - 10	5:44	344	2.57
10 - 12	6:52	412	2.65
12 - 14	8:05	485	2.47
14 - 16	9:17	557	2.50
16 - 18	10:25	625	2.65
			2.59

Tail Water	Level	160.5
Turbines 1 & 2	RPM	68

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

John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	50	6.0	NA
Mon	50	6.0	NA
Tue	50	6.0	NA
Wed	50	6.0	NA
Thur	49	6.0	NA
Fri	49	6.0	NA
Sat	49	6.0	NA
AVG:	49.5	AVG: 6.0	AVG/Sample #DIV/0!
			MAX 0
			MIN 0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.2	9.7	1.4	8.0	1.5	4.5	1.5
Sun	9.2	9.8	1.5	8.0	1.5	4.6	1.6
Mon	9.6	10.2	1.4	8.0	1.4	4.5	1.4
Mon	8.8	9.4	1.4	8.0	1.6	4.6	1.5
Tues	9.4	10.0	1.3	8.1	1.4	4.7	1.5
Tues	8.8	9.4	1.5	8.1	1.6	4.6	1.6
Wed	9.8	10.2	1.5	8.0	1.0	4.6	1.6
Wed	9.3	9.8	1.2	8.1	1.4	3.6	1.5
Thur	9.1	9.6	1.5	8.0	1.5	4.1	1.8
Thur	9.0	9.5	1.4	8.0	1.7	3.9	1.4
Fri	9.9	10.5	1.5	8.0	1.4	4.2	1.7
Fri	9.6	10.1	1.3	8.0	1.5	4.0	1.3
Sat	9.2	9.7	1.4	8.0		4.2	1.6
Sat	8.9	9.4	1.5	8.0		4.0	1.7
AVG:	9.3	9.8	1.4	8.0	1.5	4.3	1.6

JDA Bird Counts: 11/24/19 to 11/30/19

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)	
24-Nov	PHFB	0	0	455	511	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	970
24-Nov	SWFB	0	0	211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	211
24-Nov	PH1	30	36	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
24-Nov	PH2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
24-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Nov	SW2	0	0	0	0	0	0	20	48	0	0	0	0	0	0	0	0	0	0	0	0	68
24-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		34		589		2		34		0		0		0		0		1		1		1319
25-Nov	PHFB	0	0	491	499	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	994
25-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Nov	PH1	65	49	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	117
25-Nov	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Nov	SW2	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
25-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		57		495		2		8		0		0		0		0		1		1		1126
26-Nov	PHFB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2
26-Nov	SWFB	0	0	450	234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	684
26-Nov	PH1	0	33	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
26-Nov	PH2	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
26-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Nov	SW2	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	27
26-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		20		342		6		14		0		0		0		0		1		0		764
27-Nov	PHFB	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
27-Nov	SWFB	0	0	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88
27-Nov	PH1	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
27-Nov	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
27-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Nov	SW1	0	0	0	30	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
27-Nov	SW2	0	0	0	0	0	0	24	20	0	0	0	0	0	0	0	0	0	0	0	0	44
27-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		2		59		21		22		0		0		0		0		0		0		208

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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)	
28-Nov	PHFB	0	0	200	700	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	905
28-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Nov	PH1	10	50	5	14	5	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94
28-Nov	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Nov	SW2	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	40
28-Nov	SW3	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Avg/Survey		30		460		8		30		0		0		0		0		3		0	1059	
29-Nov	PHFB	0	0	300	200	0	0	2	2	0	0	0	0	0	0	0	0	0	6	0	0	510
29-Nov	SWFB	0	0	100	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	250
29-Nov	PH1	100	50	25	20	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	207
29-Nov	PH2	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
29-Nov	PH3	0	0	0	0	0	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12
29-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Nov	SW2	0	0	0	0	0	0	20	30	0	0	0	0	0	0	0	0	0	0	0	0	50
29-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		80		398		6		33		0		0		0		0		3		0	1039	
30-Nov	PHFB	0	0	50	50	0	0	5	0	0	0	0	0	0	0	0	0	0	6	0	0	111
30-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6
30-Nov	PH1	100	75	0	0	15	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200
30-Nov	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Nov	PH3	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
30-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Nov	SW2	0	0	0	0	0	0	25	50	0	0	0	0	0	0	0	0	0	0	0	0	75
30-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		88		50		13		50		0		0		0		0		6		0	412	
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		620		4783		111		381		0		0		0		0		28		4	5927	
Avg/Survey		44		342		8		27		0		0		0		0		2		0	423	

John Day Dam
Avian Zones

