

FISHWAY STATUS REPORT

Date: 10/12/2019
Inspection Period: 10/6/2019 thru 10/12/2019

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 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 OOC	Criteria Limit	Total Number of Inspections:	Temperature:
			14	62 F
				Secchi: 6.0 Ft.
NORTH FISHWAY			In service with 4 out of 6 AWS pumps 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'	Returned to salmon setting of 1.0' on 7/29.	
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'	Returned to salmon setting of 1.0' on 7/29.	
South entrance differential	0	1.0' - 2.0'	AVG 1.5	
Entrance weir SE1	2	depth (≥ 8')	AVG 8.0	OOC on 10/11 @ 7.8' AM and 7.9' PM. Immediately adjusted.
Collection channel velocity	0	1.5 - 4 fps	AVG 2.52	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.5	
Entrance weir NE1	0	depth (≥ 8')	AVG 8.8	
Entrance weir NE2	0	depth (≥ 8')	AVG 9.4	
JUVENILE PASSAGE				
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect	Monthly inspection found one STS-MU4 and one VBS- MU16 with minor mesh tears, 8/19.	
Turbine trashrack drawdown	0	<1.5', wkly	N/A Trashrack raking completed by 8/29. Very little debris was found.	
Vert barrier screen drawdown	0	<1.5', wkly	N/A	
Spill volume	0	per FPP	Spill season ended on 8/31. Two TSWs were shut down on 8/29, the last work day.	
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:

SMF in bypass for the pit detection only since 9/15; it will continue through the end of November.

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:

See Bird Count tab for details.

All 125 avian lines in place without any deficiencies.

Operations:

September STS inspection incomplete on 9/19 due to line 3 outage work blocking access to the south half of PH. There were no bad STS found @ north half of PH.

Line 1 outage to replace the high voltage bushing started on 1 October per MOC (from 2018.) ETR is 10/23.

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 its ASW pumps are OOS due to auto greaser and oil leaks issues since mid June.

JD Maintenance is planning for unstocking/ inspection of pump # 3 to determine the undelaying causes in September 2019 (expensive work at \$ 45K)

North AWS pump 4 will be next to undergo similar repairs soon after #3 is done.

Delayed MU5 RTS on 9/25.

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

Research:

Four Peaks Env. adult salmonids counting at both JD fishways continues since 1 April 2019. The night video counting is ongoing as well.

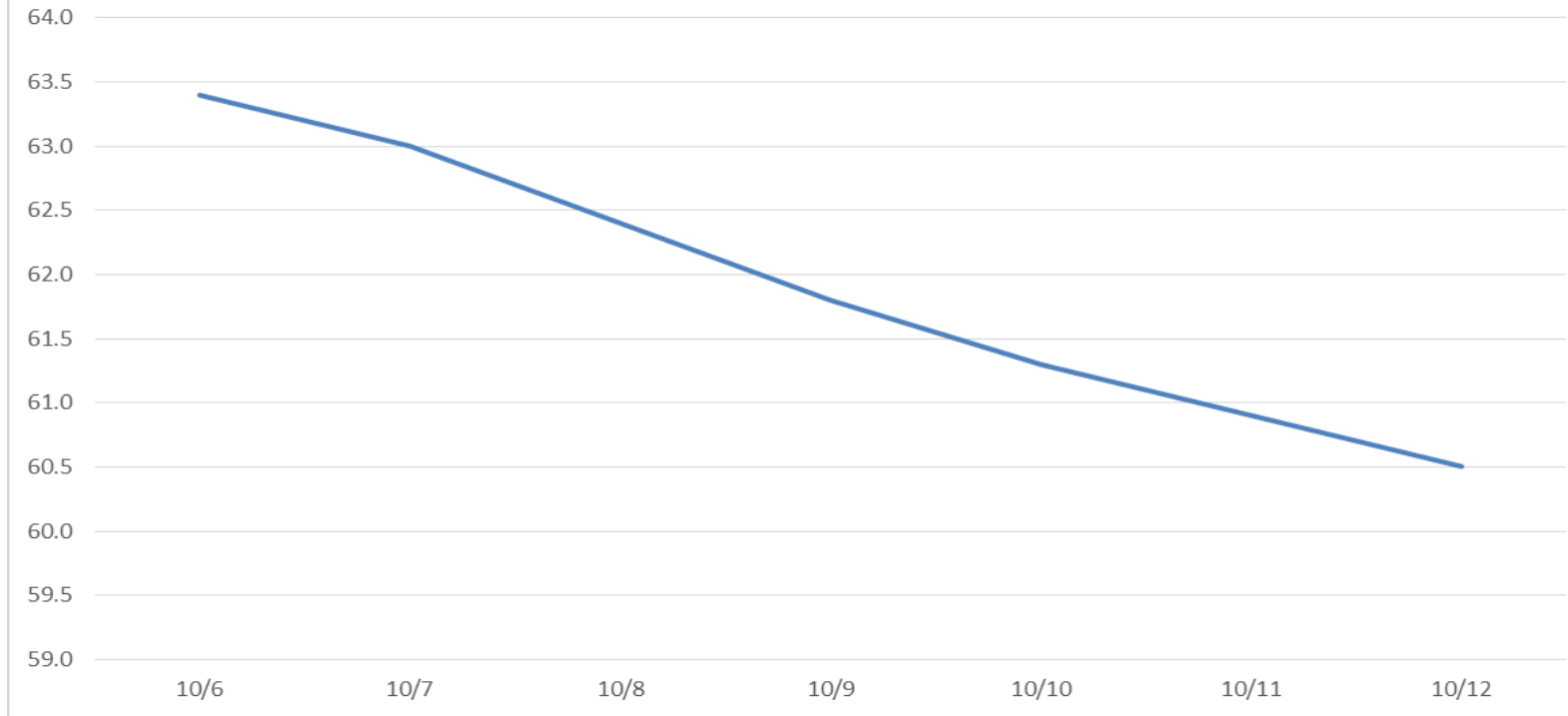
Washington F & W NPM dam angling ended with the season total of 1,835 fish in mid-September.

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 (10/6/19 - 10/12/19)



JDA Collection Channel Velocity

Date 12-Oct-19

By: pete

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:13	73	2.47
2 - 4	2:25	145	2.50
4 - 6	3:43	223	2.31
6 - 8	4:58	298	2.40
8 - 10	6:07	367	2.61
10 - 12	7:20	440	2.47
12 - 14	8:32	512	2.50
14 - 16	9:44	584	2.50
16 - 18	10:46	646	2.90
			2.52

tailwater= 159.6'

turbine 1&2 = 68 rpm

John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	63	6.0	NA
Mon	63	6.0	NA
Tue	63	6.0	NA
Wed	62	6.0	NA
Thur	61	6.0	NA
Fri	61	6.0	NA
Sat	61	6.0	NA
AVG:	62.0	AVG: 6.0	AVG/Sample #DIV/0!
			MAX 0
			MIN 0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.9	9.5	1.4	8.1	1.6	4.6	1.7
Sun	8.8	9.5	1.5	8.0	1.7	4.6	1.7
Mon	9.0	9.6	1.5	8.1	1.6	4.5	1.6
Mon	8.9	9.5	1.5	8.0	1.4	4.6	1.5
Tues	8.9	9.5	1.5	8.0	1.4	4.6	1.2
Tues	9.0	9.6	1.4	8.0	1.4	4.6	1.8
Wed	9.4	10.0	1.5	8.0	1.5	4.5	1.8
Wed	9.0	9.5	1.4	8.1	1.6	4.6	1.4
Thur	8.7	9.3	1.5	8.0	1.4	4.6	1.5
Thur	8.9	9.5	1.4	8.1	1.5	4.7	1.4
Fri	9.1	9.7	1.5	7.8	1.5	4.6	1.5
Fri	8.8	9.3	1.5	7.9	1.4	4.6	1.3
Sat	8.3	8.9	1.4	8.1	1.6	4.6	1.6
Sat	8.1	8.7	1.4	8.0	1.6	4.6	1.3
AVG:	8.8	9.4	1.5	8.0	1.5	4.6	1.5

JDA Bird Counts: 10/6/19 to 10/12/19

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)	
6-Oct	PHFB	0	0	0	0	0	0	38	6	0	0	0	0	0	0	0	0	61	0	0	0	105
6-Oct	SWFB	0	0	302	300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	602
6-Oct	PH1	30	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	36
6-Oct	PH2	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
6-Oct	PH3	10	0	0	0	2	0	0	10	0	0	0	0	2	0	0	2	0	0	0	0	26
6-Oct	SW1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6-Oct	SW2	1	0	0	0	0	0	15	20	0	0	0	0	1	0	0	0	0	0	0	0	37
6-Oct	SW3	0	0	4	20	0	0	12	10	0	0	0	0	0	0	0	0	0	0	0	0	46
Avg/Survey		25		313		3		56		0		0		2		1		32		0		859
7-Oct	PHFB	0	0	1	0	0	0	23	0	0	0	0	0	0	0	0	0	64	58	0	0	146
7-Oct	SWFB	0	0	402	390	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	792
7-Oct	PH1	28	10	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
7-Oct	PH2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
7-Oct	PH3	10	0	0	0	0	0	10	25	0	0	0	0	0	0	0	0	0	0	0	0	45
7-Oct	SW1	6	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
7-Oct	SW2	9	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	16
7-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12
Avg/Survey		36		397		4		33		0		0		0		6		61		0		1070
8-Oct	PHFB	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	50	0	0	0	150
8-Oct	SWFB	0	0	362	275	0	0	0	0	0	0	0	0	0	0	0	0	0	56	0	0	693
8-Oct	PH1	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
8-Oct	PH2	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
8-Oct	PH3	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	27
8-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Oct	SW3	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	20
Avg/Survey		11		369		0		24		0		0		0		0		53		0		912
9-Oct	PHFB	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	67	23	0	22	139
9-Oct	SWFB	0	0	342	505	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	847
9-Oct	PH1	28	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
9-Oct	PH2	5	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
9-Oct	PH3	0	107	4	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	131
9-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Oct	SW2	0	0	0	0	1	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	25
9-Oct	SW3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Avg/Survey		84		426		1		36		0		0		0		0		45		11		1202

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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)	
10-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	22	35	22	114
10-Oct	SWFB	0	0	395	399	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	794
10-Oct	PH1	77	11	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	90
10-Oct	PH2	49	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64
10-Oct	PH3	28	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83
10-Oct	SW1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10-Oct	SW2	21	0	0	0	0	0	0	61	0	0	0	0	0	2	0	0	0	0	0	0	84
10-Oct	SW3	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
Avg/Survey		146		397		1		31		0		0		2		0		29		29	1265	
11-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	38	37	37	150
11-Oct	SWFB	0	0	444	507	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	951
11-Oct	PH1	12	11	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
11-Oct	PH2	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
11-Oct	PH3	0	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
11-Oct	SW1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11-Oct	SW2	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
11-Oct	SW3	4	15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	20
Avg/Survey		78		476		1		0		0		0		1		0		38		37	1259	
12-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	34	35	31	136
12-Oct	SWFB	0	0	459	549	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1008
12-Oct	PH1	9	85	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	96
12-Oct	PH2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
12-Oct	PH3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
12-Oct	SW3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Avg/Survey		52		504		0		0		0		0		2		0		35		33	1250	
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		858		5760		17		355		0		0		10		14		584		219	7817	
Avg/Survey		61		411		1		25		0		0		1		1		42		16	558	

John Day Dam
Avian Zones

