

FISHWAY STATUS REPORT

Date: 10/26/2019
Inspection Period: 10/20/2019 thru 10/26/2019

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 OOC	Criteria Limit	Total Number of Inspections: 14	Temperature: 57 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 1.4	
Entrance weir SE1	1	depth (≥ 8')	AVG 8.3	OOO at 7.9' on 10/22. Immediately adjusted to criteria of 8.0' minimum.
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 9.0	
Entrance weir NE2	0	depth (≥ 8')	AVG 9.6	
JUVENILE PASSAGE				
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect	MU15A STS was found damaged during a routine inspection on 10/15. See 19JDA17 MFR for details.	
Turbine trashrack drawdown	0	<1.5', wkly	N/A Trashrack raking completed by 9/26. Very little debris was found.	
Vert barrier screen drawdown	0	<1.5', wkly	N/A	
Spill volume	0	per FPP	1.6k at bay 2 since 9/1/19.	
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:

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:

Line 1 returned to service on 10/24. However, its high voltage bushing was not replaced due to the underestimated complexities of the job. JD Maintenance has repaired the old bushing with a hope that it will last until its replacement is coordinated for October 2020.

Entrance SE 1 weir's brakes and electrical control failure occurred 10/14 -10/16 resulting in 5 OOC ranging 7.4'-7.8'. Weir was fixed on 10/16.

STS 15A was found damaged during a routine camera inspection on 10/15. See 19JDA17MFR 15A STS FAILURE for details.

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:

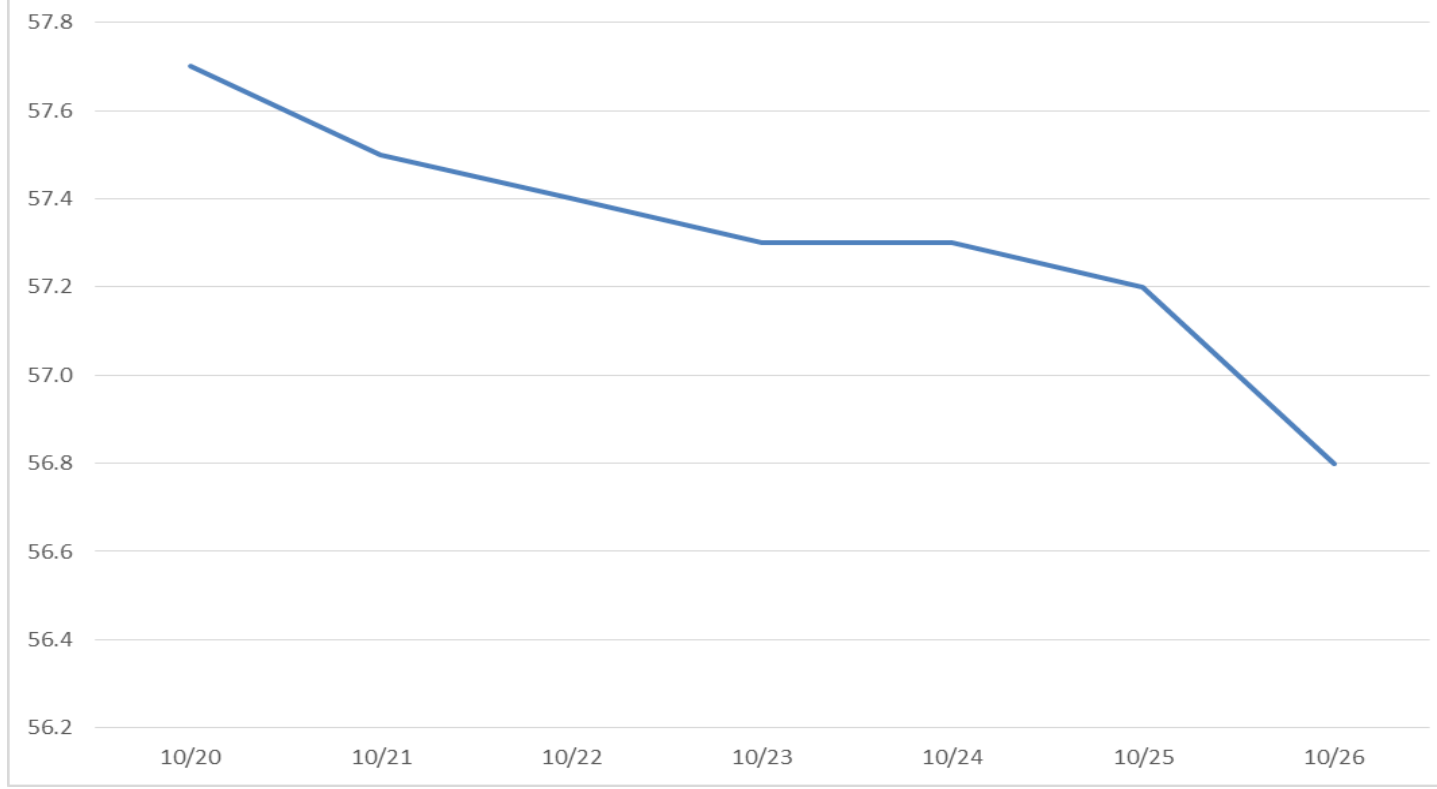
Four Peaks Env. adult salmonids counting at both JD fishways continues since 1 April 2019. The night video counting is ongoing as well.

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.

JDA Forebay Water Temperature (10/20/19 - 10/26/19)



JDA Collection Channel Velocity

Date	<i>18-Oct-19</i>
By:	<i>ERIC/KRM</i>

Bay(s)	Time	Sec.	Velocity (f/s)
<i>0-2</i>	<i>1:12</i>	<i>72</i>	<i>2.50</i>
<i>2 - 4</i>	<i>2:19</i>	<i>139</i>	<i>2.69</i>
<i>4 - 6</i>	<i>3:33</i>	<i>213</i>	<i>2.43</i>
<i>6 - 8</i>	<i>4:48</i>	<i>288</i>	<i>2.40</i>
<i>8 - 10</i>	<i>5:58</i>	<i>358</i>	<i>2.57</i>
<i>10 - 12</i>	<i>7:12</i>	<i>432</i>	<i>2.43</i>
<i>12 - 14</i>	<i>8:27</i>	<i>507</i>	<i>2.40</i>
<i>14 - 16</i>	<i>9:40</i>	<i>580</i>	<i>2.47</i>
<i>16 - 18</i>	<i>10:45</i>	<i>645</i>	<i>2.77</i>
			2.52

Tail Water	Level	159.8
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	58	6.0	NA
Mon	58	6.0	NA
Tue	57	6.0	NA
Wed	57	6.0	NA
Thur	57	6.0	NA
Fri	57	6.0	NA
Sat	57	6.0	NA
AVG:	57.3	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	1.6	8.0	1.6	4.6	1.4
Sun	9.5	10.1	1.5	8.0	1.6	4.6	1.3
Mon	9.2	9.8	1.4	8.0	1.6	4.6	1.4
Mon	9.3	9.9	1.3	8.2	1.6	4.6	1.0
Tues	8.7	9.2	1.5	7.9	1.7	4.6	1.7
Tues	9.2	9.8	1.2	8.3	1.7	4.6	1.4
Wed	9.1	9.7	1.4	8.2	1.6	4.6	1.5
Wed	9.1	9.6	1.4	8.6	1.7	4.6	1.6
Thur	8.8	9.4	1.3	8.2	1.4	4.5	1.5
Thur	8.8	9.4	1.5	8.3	1.8	4.5	1.7
Fri	8.8	9.3	1.5	8.6	1.6	4.6	1.6
Fri	9.0	9.6	1.4	8.7	1.6	4.5	1.6
Sat	9.0	9.6	1.3	8.6	1.6	4.6	1.6
Sat	9.1	9.7	1.4	8.5	1.6	4.6	1.6
AVG:	9.0	9.6	1.4	8.3	1.6	4.6	1.5

JDA Bird Counts: 10/20/19 to 10/26/19

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)	
20-Oct	PHFB	0	0	0	0	2	0	30	20	0	0	0	0	0	0	0	0	61	0	0	0	113
20-Oct	SWFB	0	0	510	513	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1023
20-Oct	PH1	0	25	3	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
20-Oct	PH2	0	75	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	79
20-Oct	PH3	0	82	0	20	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	132
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Oct	SW3	0	0	5	0	0	0	4	20	0	0	0	0	0	0	0	0	0	0	0	0	29
Avg/Survey		91		528		3		54		0		0		0		0		31		0		1411
21-Oct	PHFB	0	25	2	0	0	0	16	28	0	0	0	0	0	0	0	0	60	60	0	0	191
21-Oct	SWFB	0	0	426	426	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	852
21-Oct	PH1	109	75	0	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	194
21-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Oct	PH3	0	0	0	0	0	0	21	22	0	0	0	0	0	0	0	0	0	0	0	0	43
21-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Oct	SW3	0	10	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	17
Avg/Survey		110		431		3		46		0		0		0		0		60		0		1297
22-Oct	PHFB	0	0	0	437	0	0	3	0	0	0	0	0	0	0	0	0	57	138	0	0	635
22-Oct	SWFB	0	0	632	632	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1264
22-Oct	PH1	22	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	24
22-Oct	PH2	45	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
22-Oct	PH3	64	17	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	121
22-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Oct	SW3	0	12	30	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	63
Avg/Survey		81		866		0		32		0		0		1		0		98		0		2154
23-Oct	PHFB	0	0	21	205	0	0	0	0	0	0	0	0	0	0	0	0	60	60	59	59	464
23-Oct	SWFB	0	0	638	449	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1087
23-Oct	PH1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
23-Oct	PH2	10	59	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	70
23-Oct	PH3	5	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
23-Oct	SW1	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59
23-Oct	SW2	2	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
23-Oct	SW3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Avg/Survey		90		657		0		1		0		0		1		0		60		59		1734

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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)	
24-Oct	PHFB	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	44	45	43	44	179
24-Oct	SWFB	0	0	477	612	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1089
24-Oct	PH1	7	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
24-Oct	PH2	22	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
24-Oct	PH3	1	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
24-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Oct	SW2	3	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
24-Oct	SW3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Avg/Survey		44		546		0		1		0		0		0		0		45		44		1356
25-Oct	PHFB	0	0	10	7	0	0	0	0	0	0	0	0	0	0	0	0	33	38	32	37	157
25-Oct	SWFB	0	0	401	245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	646
25-Oct	PH1	55	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
25-Oct	PH2	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
25-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Oct	SW2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
25-Oct	SW3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Avg/Survey		42		332		2		0		0		0		0		0		36		35		890
26-Oct	PHFB	0	0	125	139	0	0	1	0	0	0	0	0	0	0	0	0	46	14	46	13	384
26-Oct	SWFB	0	0	311	550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	861
26-Oct	PH1	0	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
26-Oct	PH2	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
26-Oct	PH3	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
26-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Oct	SW2	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	21
26-Oct	SW3	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Avg/Survey		51		563		0		11		0		0		0		0		30		30		1367
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		1015		7839		14		289		0		0		3		0		716		333		
Avg/Survey		73		560		1		21		0		0		0		0		51		24		729

John Day Dam
Avian Zones

