

## FISHWAY STATUS REPORT

**Date:** 10/19/2019  
**Inspection Period:** 10/13/2019 thru 10/19/2019

### 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: 59 F
			Secchi: 6.0 Ft.	
<b>NORTH FISHWAY</b>			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	
<b>SOUTH FISHWAY</b>			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	5	depth (≥ 8')	AVG 7.9	OOC at 7.4' - 7.8' 10/14 - 10/16 due to brake failure/ stuck weir, fixed on 16
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 8.9	
Entrance weir NE2	0	depth (≥ 8')	AVG 9.5	
<b>JUVENILE PASSAGE</b>				
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 8/29. Very little debris was found.
Vert barrier screen drawdown	0	<1.5', wkly	N/A	
Spill volume	0	per FPP	1.6Kcfs	
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:

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.

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 underlying 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.

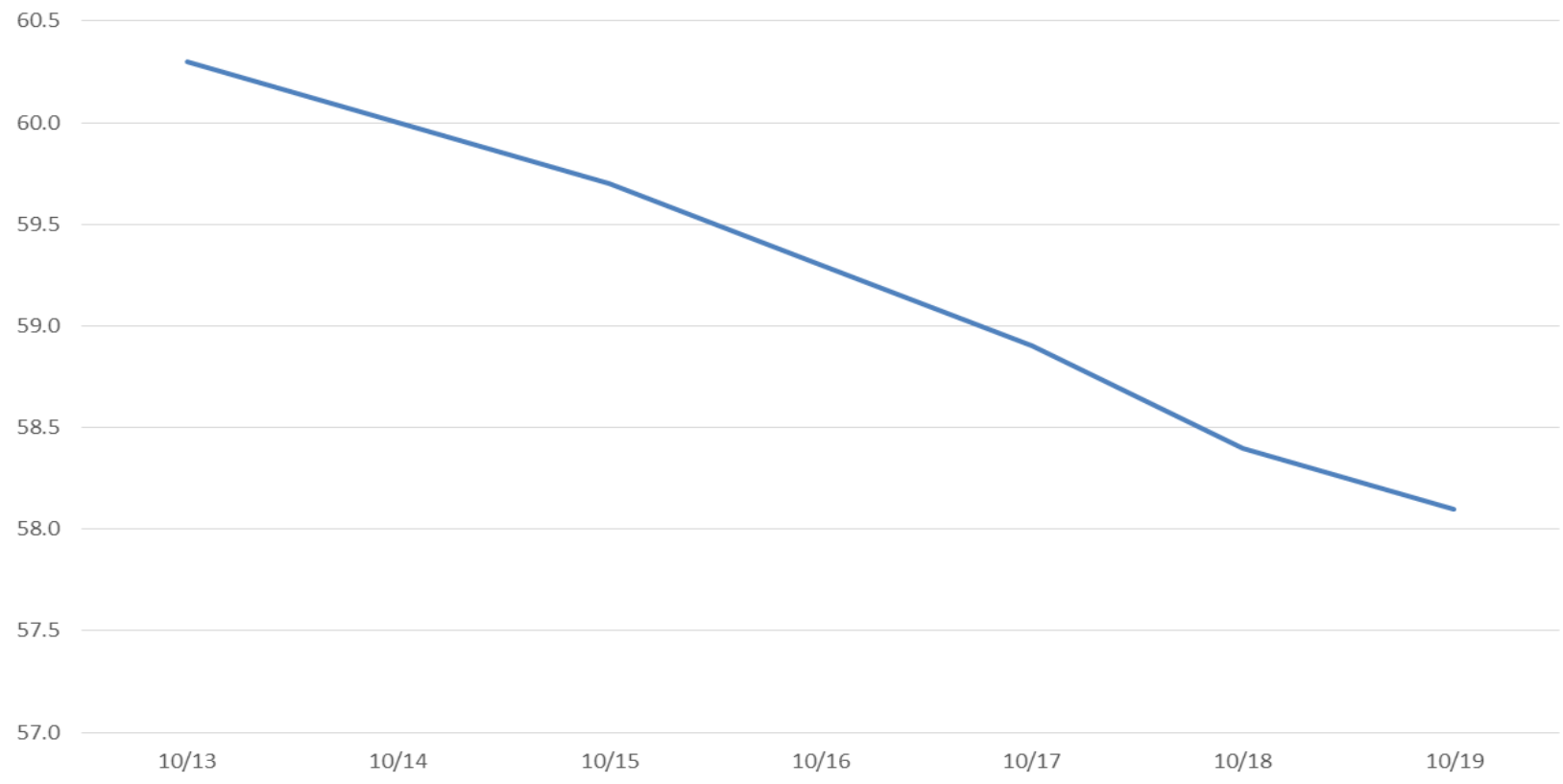
Washington F & W NPM dam angling ended with the season total of 1,835 fish in mid-September.

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 Forebay Water Temperature (10/13/19 -10/19/19)



## JDA Collection Channel Velocity

<b>Date</b>	<i>18-Oct-19</i>
<b>By:</b>	<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>
			<b>2.52</b>

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	60	6.0	NA
Mon	60	6.0	NA
Tue	60	6.0	NA
Wed	60	6.0	NA
Thur	59	6.0	NA
Fri	59	6.0	NA
Sat	59	6.0	NA
<b>AVG:</b>	<b>59.4</b>	<b>AVG: 6.0</b>	<b>AVG/Sample #DIV/0!</b>
			<b>MAX 0</b>
			<b>MIN 0</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.8	9.4	1.5	8.0	1.4	4.6	1.4
Sun	8.9	9.4	1.4	8.0	1.5	4.6	1.5
Mon	9.0	9.6	1.5	7.7	1.0	4.5	1.7
Mon	8.6	9.2	1.6	7.4	1.5	4.6	1.5
Tues	9.6	9.6	1.4	8.4	1.5	4.5	1.4
Tues	8.6	9.2	1.7	7.4	1.7	4.6	1.7
Wed	9.1	9.7	1.3	7.8	1.5	4.6	1.5
Wed	8.5	9.1	1.6	7.5	1.6	4.6	1.7
Thur	8.9	9.5	1.4	8.2	1.5	4.6	1.5
Thur	8.9	9.4	1.5	8.0	1.4	4.6	1.5
Fri	9.2	9.8	1.2	8.1	1.5	4.6	1.6
Fri	9.2	9.8	1.3	8.1	1.6	4.6	1.6
Sat	8.6	9.2	1.1	8.0	1.5	4.6	1.0
Sat	8.9	9.5	1.6	8.1	1.6	4.6	1.6
<b>AVG:</b>	<b>8.9</b>	<b>9.5</b>	<b>1.4</b>	<b>7.9</b>	<b>1.5</b>	<b>4.6</b>	<b>1.5</b>



**JDA Bird Counts: 10/13/19 to 10/19/19**

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)	
13-Oct	PHFB	0	0	0	111	0	0	0	0	0	0	0	0	0	0	0	0	45	45	44	44	289
13-Oct	SWFB	0	0	351	289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	640
13-Oct	PH1	30	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89
13-Oct	PH2	17	18	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	41
13-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Oct	SW1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
13-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Oct	SW3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Avg/Survey		64		376		1		0		0		0		3		0		45		44		1064
14-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	0	38	0	77
14-Oct	SWFB	0	0	405	307	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	712
14-Oct	PH1	75	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	126
14-Oct	PH2	44	59	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	104
14-Oct	PH3	0	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111
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	7	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
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		174		356		5		0		0		0		1		0		20		19		1146
15-Oct	PHFB	2	0	0	0	0	0	11	5	0	0	0	0	0	0	0	0	0	22	0	0	40
15-Oct	SWFB	0	0	376	210	0	0	0	10	0	0	0	0	0	0	0	0	31	0	0	0	627
15-Oct	PH1	0	52	0	0	2	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	58
15-Oct	PH2	118	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	133
15-Oct	PH3	12	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
15-Oct	SW1	0	30	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
15-Oct	SW2	0	24	0	0	0	0	7	21	0	0	0	0	0	0	0	0	0	0	0	0	52
15-Oct	SW3	2	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	27
Avg/Survey		130		293		3		40		0		0		2		0		27		0		987
16-Oct	PHFB	4	0	9	0	0	0	34	4	0	0	0	0	0	0	0	0	25	63	0	0	139
16-Oct	SWFB	0	0	283	108	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	404
16-Oct	PH1	0	22	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	27
16-Oct	PH2	17	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
16-Oct	PH3	0	10	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	40
16-Oct	SW1	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
16-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Oct	SW3	0	0	9	0	0	0	24	12	0	0	0	0	0	0	0	0	0	0	0	0	45
Avg/Survey		34		209		0		52		0		0		3		0		51		0		695

**JDA Bird Counts: 10/13/19 to 10/19/19**

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)	
17-Oct	PHFB	0	0	0	102	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	129
17-Oct	SWFB	0	200	210	225	0	0	0	0	0	0	0	0	0	0	0	0	89	71	0	0	795
17-Oct	PH1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
17-Oct	PH2	20	10	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	34
17-Oct	PH3	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	32
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	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
17-Oct	SW3	0	0	2	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Avg/Survey		123		270		2		42		0		0		0		2		80		0		1035
18-Oct	PHFB	0	0	50	0	2	0	0	27	0	0	0	0	0	0	0	0	61	61	0	0	201
18-Oct	SWFB	0	0	351	379	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	730
18-Oct	PH1	25	100	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	131
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	35	18	0	0	0	0	0	0	0	0	0	0	0	0	53
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		63		391		1		40		0		0		0		0		63		0		1115
19-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	0	0	71	146
19-Oct	SWFB	0	0	406	306	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	712
19-Oct	PH1	100	20	0	0	6	1	0	0	0	0	0	0	1	0	0	0	2	0	0	0	130
19-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
19-Oct	PH3	0	0	0	0	0	0	35	3	0	0	0	0	0	0	0	0	0	0	0	0	38
19-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-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		356		4		19		0		0		1		0		39		36		1027
<b>Totals</b>		<b>Gulls</b>				<b>Cormorant</b>				<b>Caspian tern</b>				<b>White Pelican</b>				<b>Grebe</b>				<b>Total</b>
		F		NF		F		NF		F		NF		F		NF		F		NF		
<b>Weekly Total</b>		1292		4499		28		385		0		0		18		4		646		197		7069
<b>Avg/Survey</b>		92		321		2		28		0		0		1		0		46		14		505



John Day Dam  
Avian Zones

