

FISHWAY STATUS REPORT

Date: 8/31/2019
Inspection Period: 8/25/2019 thru 8/31/2019

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 OOB	Criteria Limit	Total Number of Inspections: 14	Temperature: 72 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	0		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	0	depth (≥ 8')	AVG 8.4	
Collection channel velocity	0	1.5 - 4 fps	AVG 2.64	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.7	
Entrance weir NE1	0	depth (≥ 8')	AVG 9.5	
Entrance weir NE2	0	depth (≥ 8')	AVG 10.1	
JUVENILE PASSAGE	0			
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		
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

SMOLT MONITORING FACILITY

Operation:

SMF continues in service, and in criteria since 13 March 2019.

Limited, twice a week sampling (Mondays and Thursdays) commenced after the JD forebay temperature reached 70 F on 25 July. Limited sampling will continue until river temperature drops down below 69.5 F.

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:

USDA gull hazing ended on 31 July 2019.

The white pelicans numbers have been declining since mid August. See Bird Count tab for details.

All 125 avian lines in place without any deficiencies.

Operations:

Monthly STS inspection completed by 8/22. STS@MU4 and VBS@MU16 were found with minor mesh tears on 8/19. Both were repaired by the next day.

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 South Fishway Collection Channel's gratings ROV inspection was completed on 8/14 with help of Mr. Jeff Randall, TD Fisheries. All gratings were found in place and properly attached without any brackets/bolts missing.

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.

MU5 RTS originally scheduled for August, has been delayed due to unforeseen mechanical issues.

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.

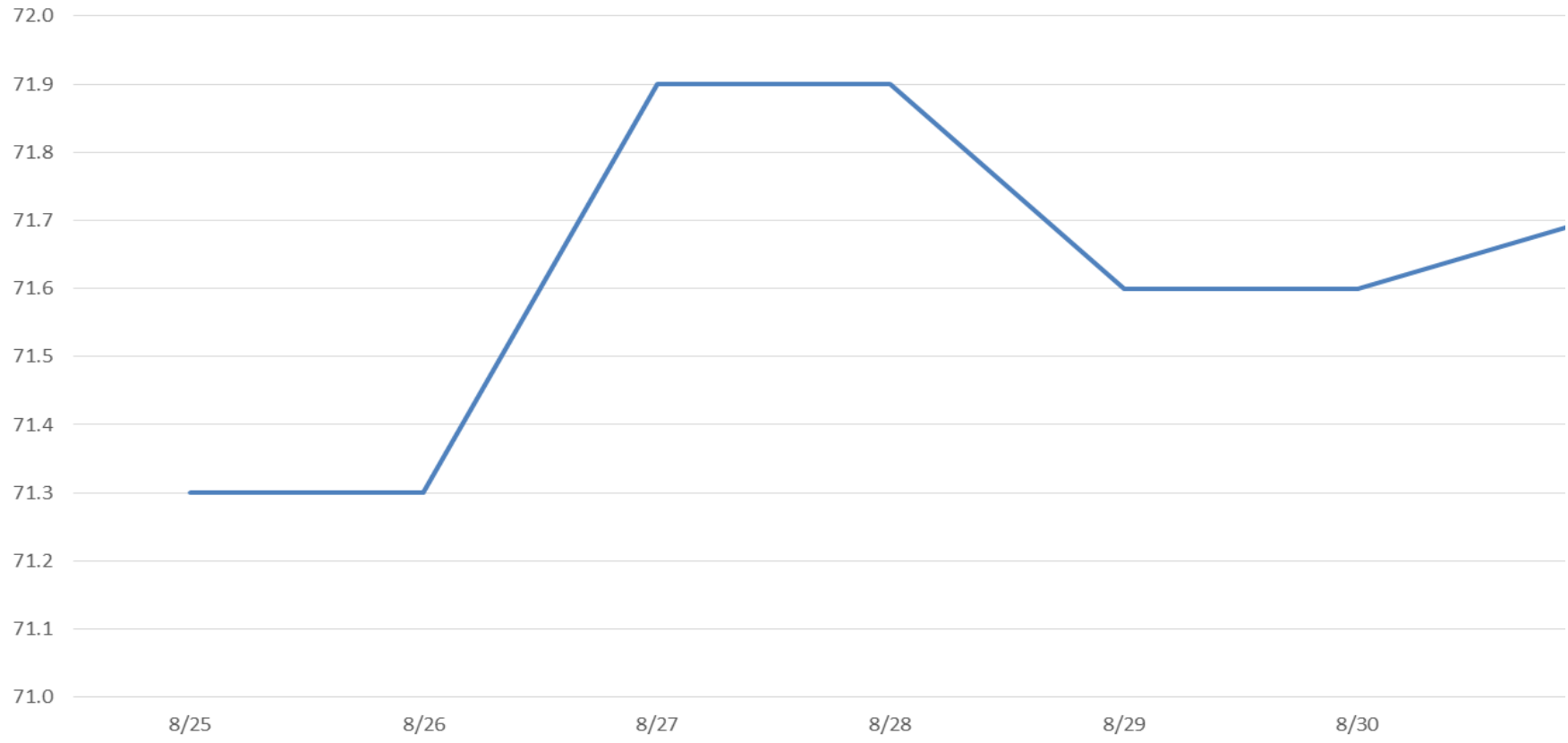
Washington F & W NPM dam angling continues since late April with the season total of 1,835 fish as of September 1. No fishing occurred this week due to low catches.

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 (8/25/19 - 8/31/19)



JDA Collection Channel Velocity

Date 30-Aug-19

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:05	65	2.77
2 - 4	2:19	139	2.43
4 - 6	3:25	205	2.73
6 - 8	4:33	273	2.65
8 - 10	5:41	341	2.65
10 - 12	6:49	409	2.65
12 - 14	7:55	475	2.73
14 - 16	9:05	545	2.57
16 - 18	10:14	614	2.61
			2.64

Bay 19 TW:	161.2
Turbine 1&2:	68 RPM

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

John Day Weekly Averages

	Temp:	Secchi:	Fallbacks	
Sun	71	6.0		
Mon	71	6.0	2	70° Sample
Tue	72	6.0		
Wed	72	6.0		
Thur	72	6.0	9	70° Sample
Fri	72	6.0		
Sat	72	6.0		
AVG:	72	AVG: 6.0	AVG/Sample 6	
			MAX 9	
			MIN 2	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.9	9.5	1.4	8.2	1.5	4.6	1.6
Sun	9.6	10.2	1.5	8.0	1.4	4.6	1.6
Mon	8.9	9.4	1.4	8.1	1.6	4.6	1.7
Mon	9.5	9.9	1.4	8.1	1.6	4.6	1.5
Tues	9.4	10.0	1.3	8.4	1.5	4.6	1.5
Tues	9.6	10.3	1.5	8.4	1.7	4.6	1.7
Wed	9.6	10.1	1.4	8.8	1.5	4.6	1.6
Wed	9.5	10.1	1.4	8.4	1.6	4.6	1.6
Thur	10.1	10.6	1.3	8.9	1.4	4.6	1.8
Thur	9.5	10.2	1.2	8.6	1.7	4.6	2.0
Fri	10.0	10.6	1.4	8.1	1.5	4.6	2.0
Fri	9.5	10.1	1.5	8.3	1.6	4.6	2.0
Sat	9.8	10.4	1.4	8.5	1.5	4.6	1.8
Sat	9.6	10.2	1.5	8.4	1.6	4.5	1.8
AVG:	9.5	10.1	1.4	8.4	1.6	4.6	1.7

JDA Bird Counts: 8/25/19 to 8/31/19

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)	
25-Aug	PHFB	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	13
25-Aug	SWFB	20	25	150	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	345
25-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
25-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	20	91	0	0	0	0	0	0	0	111
25-Aug	SW3	50	0	0	0	0	0	0	0	0	0	0	30	30	0	0	0	0	0	0	0	110
Avg/Survey		53		150		0		0		0		0	88		0		1		0			584
26-Aug	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0		6
26-Aug	SWFB	0	104	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		179
26-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
26-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
26-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0		30
26-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
26-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	25	31	0	0	0	0	0	0		56
26-Aug	SW3	15	22	0	0	0	0	0	0	0	0	0	75	15	0	0	0	0	0	0		127
Avg/Survey		71		38		0		0		0		0	88		0		3		0			398
27-Aug	PHFB	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0		3
27-Aug	SWFB	5	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		34
27-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
27-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0		1
27-Aug	PH3	0	11	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0		16
27-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0		7
27-Aug	SW2	23	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0		27
27-Aug	SW3	21	13	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0		38
Avg/Survey		37		16		0		0		0		0	11		0		1		0			126
28-Aug	PHFB	0	0	0	1	0	0	22	0	0	0	0	0	0	0	0	4	0	0	0		27
28-Aug	SWFB	0	0	43	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		75
28-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
28-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0		1
28-Aug	PH3	23	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	0		31
28-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
28-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0		7
28-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	53	10	0	0	0	0	0	0		63
Avg/Survey		12		38		0		11		0		0	40		0		2		0			204

JDA Bird Counts: 8/25/19 to 8/31/19

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)	
29-Aug	PHFB	0	0	0	1	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	21
29-Aug	SWFB	0	0	73	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114
29-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
29-Aug	PH2	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
29-Aug	PH3	2	4	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	8
29-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
29-Aug	SW3	1	2	0	0	0	0	0	0	0	0	0	0	3	22	0	0	0	0	0	0	28
Avg/Survey		6		58		0		10		0		0		15		0		0		0		177
30-Aug	PHFB	0	0	1	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	17
30-Aug	SWFB	0	0	15	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68
30-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	PH3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
30-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	SW2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
30-Aug	SW3	2	8	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	16
Avg/Survey		8		35		0		8		0		0		3		0		0		0		106
31-Aug	PHFB	0	0	0	70	0	0	22	5	0	0	0	0	0	0	0	0	6	5	0	0	108
31-Aug	SWFB	0	0	50	146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	196
31-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug	SW3	8	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	11
Avg/Survey		5		133		0		14		0		0		1		0		6		0		315
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		380		932		0		85		0		0		489		0		24		0		1910
Avg/Survey		27		67		0		6		0		0		35		0		2		0		136

John Day Dam
Avian Zones

