

FISHWAY STATUS REPORT

Date: 9/21/2019
Inspection Period: 9/15/2019 thru 9/21/2019

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	70 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	0	depth (≥ 8')	AVG 8.6	
Collection channel velocity	0	1.5 - 4 fps	AVG 2.42	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.4	
Entrance weir NE1	0	depth (≥ 8')	AVG 9.1	
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	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 primary bypass w/ pit detection as of 15 Sept

Maintenance:

Sample and pit holding tanks being painted

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 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 issues until 9/18.

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.

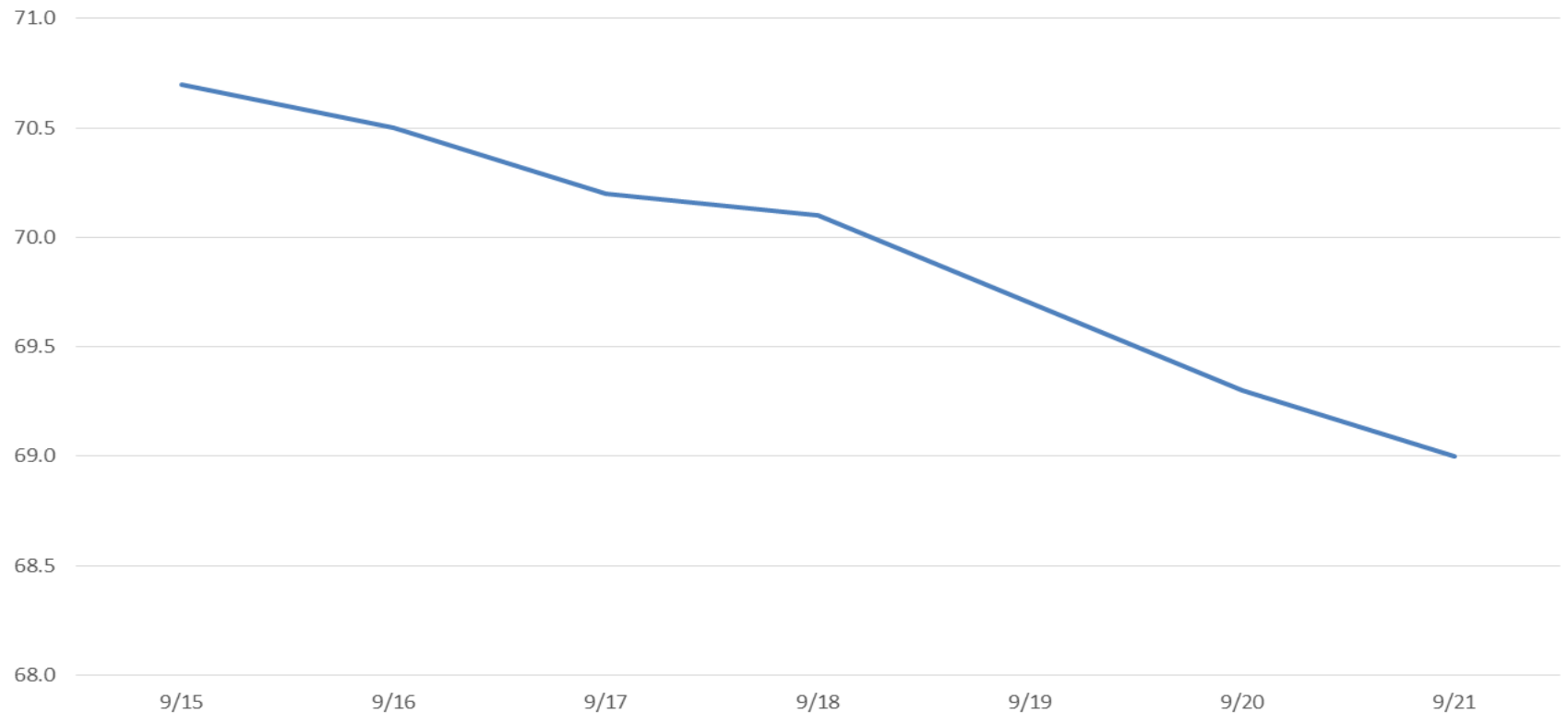
Washington F & W NPM dam angling continues since late April with the season total of 1,835 fish as of September 1. No fishing occurred this week due to low catches.

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 Tailwater Temperature (9/15/19 - 9/21/19)



JDA Collection Channel Velocity

Date 20-Sep-19

By: KRM

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:14	74	2.43
2 - 4	2:35	155	2.22
4 - 6	3:50	230	2.40
6 - 8	5:00	300	2.57
8 - 10	6:17	377	2.34
10 - 12	7:30	450	2.47
12 - 14	8:50	530	2.25
14 - 16	10:10	610	2.25
16 - 18	11:14	674	2.81
			2.42

Bay 19 TW:	159.7
Turbine 1&2:	68 RPM

Turbine #3 OOS

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

John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	71	6.0	NA
Mon	71	6.0	NA
Tue	70	6.0	NA
Wed	70	6.0	NA
Thur	70	6.0	NA
Fri	70	6.0	NA
Sat	69	6.0	NA
AVG:	70.1	AVG: 6.0	AVG/Sample #DIV/0!
			MAX 0
			MIN 0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.0	9.5	1.3	8.5	1.7	4.6	1.3
Sun	9.0	9.6	1.4	8.6	1.6	4.5	1.5
Mon	9.0	9.5	1.5	8.4	1.5	4.6	1.4
Mon	9.4	10.0	1.3	8.9	1.5	4.7	1.3
Tues	9.4	9.9	1.3	8.9	1.4	4.5	1.5
Tues	9.2	9.8	1.3	8.6	1.6	4.6	1.7
Wed	9.3	9.8	1.3	8.7	1.6	4.5	1.1
Wed	9.3	9.9	1.2	8.8	1.5	4.6	1.4
Thur	8.8	8.3	1.3	8.7	1.5	4.6	1.4
Thur	9.3	10.0	1.4	8.9	1.8	4.6	1.0
Fri	8.5	9.1	1.5	8.2	1.6	4.6	1.4
Fri	9.2	9.8	1.3	8.5	1.0	4.6	1.7
Sat	9.1	9.7	1.4	8.1	1.6	4.6	1.4
Sat	9.0	9.7	1.5	8.4	1.6	4.6	1.8
AVG:	9.1	9.6	1.4	8.6	1.5	4.6	1.4

JDA Bird Counts: 9/15/19 to 9/21/19

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)	
15-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	20	10	0	40
15-Sep	SWFB	0	0	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
15-Sep	PH1	11	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
15-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Sep	PH3	55	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	62
15-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Sep	SW2	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
15-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		33		22		1		2		0		0		4		0		15		5		161
16-Sep	PHFB	3	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	30	0	0	73
16-Sep	SWFB	0	0	53	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154
16-Sep	PH1	0	27	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	33
16-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Sep	PH3	17	24	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	45
16-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Sep	SW3	7	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	10
Avg/Survey		44		78		0		2		0		0		4		0		31		0		315
17-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	32
17-Sep	SWFB	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
17-Sep	PH1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
17-Sep	PH2	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
17-Sep	PH3	28	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
17-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
17-Sep	SW3	0	2	0	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	8
Avg/Survey		59		5		0		3		0		0		2		0		16		0		167
18-Sep	PHFB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	35	30	0	0	66
18-Sep	SWFB	0	0	30	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82
18-Sep	PH1	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
18-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Sep	PH3	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81
18-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Sep	SW3	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Avg/Survey		58		41		1		1		0		0		0		0		33		0		264

JDA Bird Counts: 9/15/19 to 9/21/19

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)	
19-Sep	PHFB	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	38	32	0	0	95
19-Sep	SWFB	0	0	135	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210
19-Sep	PH1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
19-Sep	PH2	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
19-Sep	PH3	75	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	80
19-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Sep	SW2	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9
19-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		49		105		0		17		0		0		3		0		35		0		417
20-Sep	PHFB	0	0	2	11	0	0	3	0	0	0	0	0	0	0	0	0	46	0	0	32	94
20-Sep	SWFB	0	0	75	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	177
20-Sep	PH1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
20-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Sep	PH3	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
20-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Sep	SW2	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	20
20-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		9		95		1		12		0		0		0		0		23		16		309
21-Sep	PHFB	0	1	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	50	0	0	82
21-Sep	SWFB	0	0	213	125	0	0	0	0	0	0	0	0	0	0	0	0	56	0	0	0	394
21-Sep	PH1	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5
21-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Sep	PH3	0	12	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	13
21-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Sep	SW2	1	0	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	30
21-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		8		170		1		30		0		0		1		0		54		0		524
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		516		1031		4		130		0		0		23		0		411		42		2157
Avg/Survey		37		74		0		9		0		0		2		0		29		3		154

John Day Dam
Avian Zones

