


# FISHWAY STATUS REPORT

**Date:** 2/29/2020  
**Inspection Period:** 2/23/2020 thru 2/29/2020



**US Army Corps  
of Engineers**  
Portland District

**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: 7	Temperature: 41 F
				Secchi: 3.9 Ft.
<b>NORTH FISHWAY</b>			NFW rts on 1/23	
Exit differential	0	≤ 0.5'		
Exit Control weirs	0	High setting		
Count station differential	0	≤ 0.3'		
Weir crest depth (DS gauge)	0	1.0' ± 0.1'		
Entrance differential	0	1.0' - 2.0'	AVG 1.4	
<b>SOUTH FISHWAY</b>			oos for winter maintenance on 24 JAN	
Exit differential	OOS	≤ 0.5'		
Exit Control weirs	OOS	Mid setting	Mid setting is normal for JDS	
Count station differential	OOS	≤ 0.3'		
Weir crest depth (US gauge)	OOS	1.0' ± 0.1'		
South entrance differential	OOS	1.0' - 2.0'	AVG 1.4	
Entrance weir SE1	OOS	depth (≥ 8')	AVG 9.1	
Collection channel velocity	OOS	1.5 - 4 fps	AVG 2.68	
N. Entrance PH(Bay 19)differential	OOS	1.0' - 2.0'	AVG 1.9	
Entrance weir NE1	OOS	depth (≥ 8')	AVG 9.3	
Entrance weir NE2	OOS	depth (≥ 8')	AVG 8.4	
<b>JUVENILE PASSAGE</b>			Screens pulled on all units since early January 2020.	
Forebay/bypass conduit differential	OOS	4.0' - 5.0'	AVG 4.6	out of service as of 01-08-2020
Submersible traveling screens	0	visual inspect		
Turbine trashrack drawdown	0	<1.5', wkly		
Vert barrier screen drawdown	0	<1.5', wkly		
Spill volume	0	per FPP	All spillway gates on seal since 11/29 after sunset.	
Spill pattern	0	per FPP		
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

## SMOLT MONITORING FACILITY

### Operation:

OOS since 12/5/19. Planned RTS 4/1/2020.

### Maintenance:

All AWS pipes winterized since early December 2019. Winter maintenance of SMF hardware underway.

SMF SCADA update underway and is to be completed by 12 March 2020. JD Electricians are bench building the new control panels to be installed in February. Portland District's Electrical Engineers will be responsible for loading of new software and testing to assure all components are working properly.

## ADULT FISHWAYS & TW AVIAN GRID

### Birds:

Winter birds only without much impact on JD fish passage. See Bird Count tab for details.

All 125 avian lines in place without any deficiencies.

### Operations:

JD South Adult Fishway was returned to service on 28 February.

JD North Adult Fishway RTS on 01/23/20. Dewatering pump 7 was re-installed with brand new components which will make the future dewaterings of lower fishway easier and less costly. JD Maintenance continue repairs of AWS fish pump 4. It's rts is unknown due to its serious issues.

JBS was dewatered on 9 Jan for Winter maintenance and scada upgrade

MU Gatewell Drawdown All MUs trashrack differentials are 1.5' or below according to twice a week inspections.

### Maintenance:

JD South Fishway oos on 24 Jan. The thrust bearing on turbine 3 has been replaced and the turbine is ready to return to service.

Joint repair work on the SFL exit control section is ongoing.

JD North Fishway returned to service on 1/23. Pump 3 has returned to service, pump 4 has been pulled for maintenance.

NFL LPS water supply pumps were pulled and inspected. No deficiencies were found and the supply pumps were reinstalled.

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

### Research:

None at this time.

Approved by: Ron Twiner, Acting OPM

JDA Tailwater 2/23/20 - 2/29/20



## JDA Collection Channel Velocity

<b>Date</b>	10-Jan-20
<b>By:</b>	LR

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:04	64	2.81
2 - 4	2:11	131	2.69
4 - 6	3:16	196	2.77
6 - 8	4:22	262	2.73
8 - 10	5:27	327	2.77
10 - 12	6:33	393	2.73
12 - 14	7:50	470	2.34
14 - 16	9:12	552	2.20
16 - 18	10:11	611	3.05
			<b>2.68</b>

Bay 19 TW	Level	160.9
Turbine 1	RPM	68
Turbine 2	RPM	68
Turbine 3	RPM	OOS

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

## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	41	3.0	NA
Mon	41	4.0	NA
Tue	41	4.0	NA
Wed	41	4.0	NA
Thur	41	4.0	NA
Fri	41	4.0	NA
Sat	41	4.5	NA
<b>AVG:</b>	<b>40.6</b>	<b>AVG: 3.9</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	oos	oos	oos	oos	1.5	oos	oos
Sun							
Mon	oos	oos	oos	oos	1.6	oos	oos
Mon							
Tues	oos	oos	oos	oos	1.4	oos	oos
Tues							
Wed	oos	oos	oos	oos	1.5	oos	oos
Wed							
Thur	oos	oos	oos	oos	1.3	oos	oos
Thur							
Fri	9.5	8.6	1.3	9.3	1.4	oos	1.8
Fri							
Sat	9.1	8.1	1.4	8.8	1.4	oos	2.0
Sat							
<b>AVG:</b>	<b>9.3</b>	<b>8.4</b>	<b>1.4</b>	<b>9.1</b>	<b>1.4</b>	<b>#DIV/0!</b>	<b>1.9</b>



**JDA Bird Counts: 2/23/20 to 2/29/20**

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)			
23-Feb	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Feb	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Feb	SW2	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
23-Feb	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0		0		0		9		0		0		0		0		0		0		0		17
24-Feb	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Feb	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Feb	SW2	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
24-Feb	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0		0		0		3		0		0		0		0		0		0		0		6
25-Feb	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Feb	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Feb	SW2	0	0	1	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
25-Feb	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0		1		0		9		0		0		0		0		0		0		0		19
26-Feb	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Feb	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Feb	SW2	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
26-Feb	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0		0		0		9		0		0		0		0		0		0		0		18





John Day Dam  
Avian Zones

