


FISHWAY STATUS REPORT

Date: 4/18/2020
Inspection Period: 4/12/2020 thru 4/18/2020



**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: 14	Temperature: 49 F
				Secchi: 5.5 Ft.
NORTH FISHWAY			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 1.6	
SOUTH FISHWAY			SFW rts on 2/28	
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'		
South entrance differential	0	1.0' - 2.0'	AVG 1.4	
Entrance weir SE1	0	depth (≥ 8')	AVG 8.5	
Collection channel velocity	0	1.5 - 4 fps	AVG 2.60	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.7	
Entrance weir NE1	0	depth (≥ 8')	AVG 8.4	
Entrance weir NE2	0	depth (≥ 8')	AVG 8.4	
JUVENILE PASSAGE				
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	JBS rts 3/9/20
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:

RTS on 03/24/20. Condition sampling on 4/1/2020.

Maintenance:

All winter maintenance activities are completed for this winter maintenance period.

SMF SCADA update completed 17 March 2020. JD Electricians are working on SCADA programming and controls.

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 taken oos for Winter maintenance on 24 January.

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 returned to service on 9 March.

Maintenance:

JD South Fishway rts on 27 Feb. 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 is completed.

JD North Fishway's pump 4 has been pulled for maintenance. Pump 1 breaker issue was resolved and is available.

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

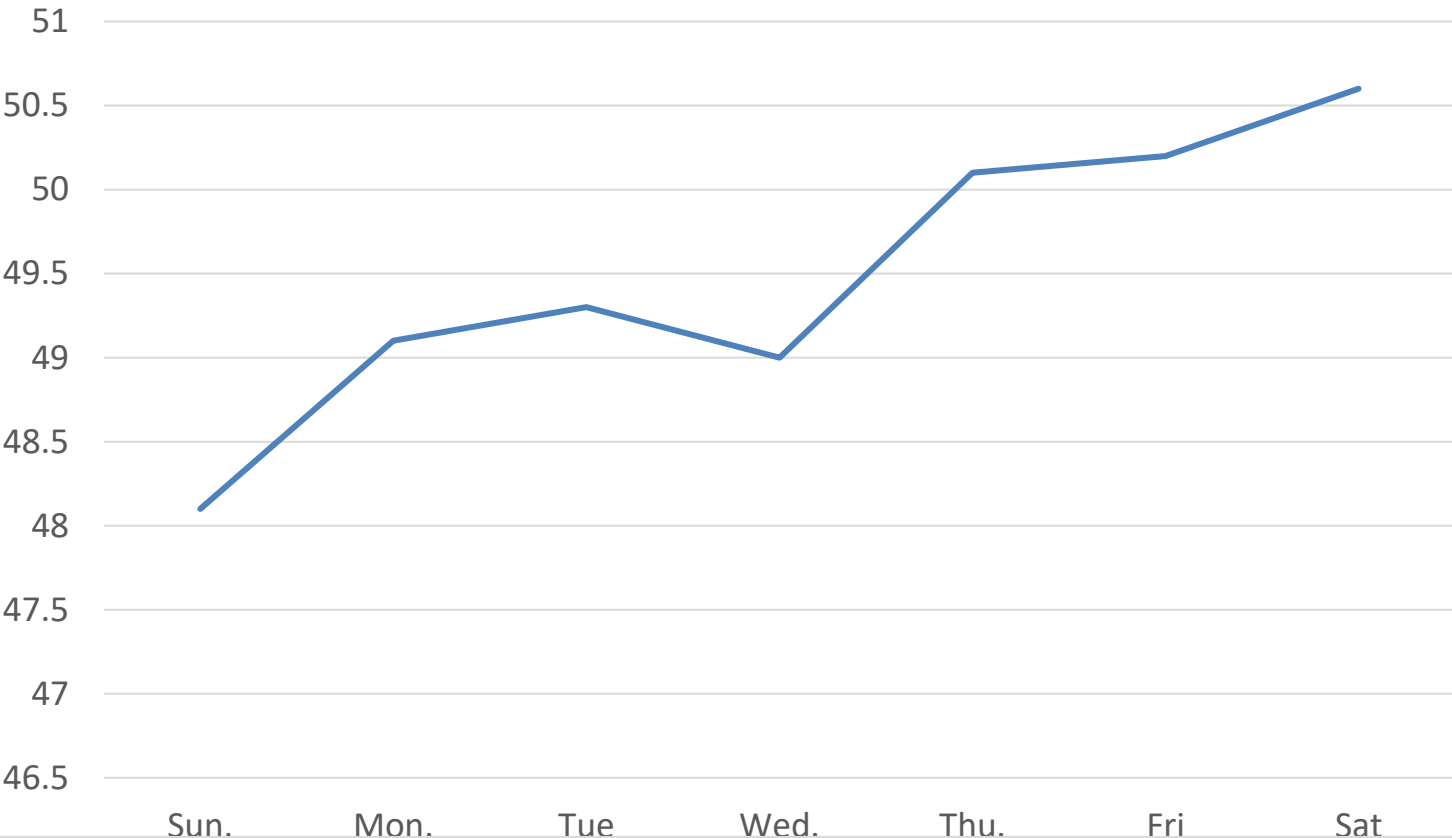
Calibration: All gauges/ sensors are within the criteria of 0.3'.

Research:

Critical genetics study at SMF

Approved by: Ron Twiner, Acting OPM

JDA Tailwater Temperature 04/12/20 - 04/18/20



JDA Collection Channel Velocity

Date	<i>17-Apr-20</i>
By:	<i>KRM</i>

Bay(s)	Time	Sec.	Velocity (f/s)
<i>0-2</i>	<i>1:08</i>	<i>68</i>	<i>2.65</i>
<i>2 - 4</i>	<i>2:20</i>	<i>140</i>	<i>2.50</i>
<i>4 - 6</i>	<i>3:30</i>	<i>210</i>	<i>2.57</i>
<i>6 - 8</i>	<i>4:39</i>	<i>279</i>	<i>2.61</i>
<i>8 - 10</i>	<i>5:43</i>	<i>343</i>	<i>2.81</i>
<i>10 - 12</i>	<i>6:51</i>	<i>411</i>	<i>2.65</i>
<i>12 - 14</i>	<i>8:02</i>	<i>482</i>	<i>2.54</i>
<i>14 - 16</i>	<i>9:14</i>	<i>554</i>	<i>2.50</i>
<i>16 - 18</i>	<i>10:23</i>	<i>623</i>	<i>2.61</i>
			2.60

Bay 19 TW	Level	160.0
Turbine 1	RPM	0
Turbine 2	RPM	68
Turbine 3	RPM	68

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

John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	48	5.5	NA
Mon	49	5.5	3
Tue	49	5.5	NA
Wed	49	5.5	1
Thur	50	5.5	NA
Fri	50	5.5	2
Sat	51	5.5	NA
AVG:	49.5	AVG: 5.5	AVG/Sample 2
			MAX 3
			MIN 1

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.4	8.4	1.4	8.2	1.4	4.5	1.9
Sun	8.1	8.1	1.4	8.2	1.7	4.6	1.9
Mon	8.2	8.2	1.4	8.2	1.5	4.6	1.9
Mon	8.0	8.0	1.4	8.2	1.7	4.5	1.9
Tues	8.5	8.5	1.3	8.8	1.4	4.5	1.6
Tues	8.5	8.5	1.4	8.1	1.5	4.5	1.8
Wed	8.0	8.0	1.3	8.5	1.5	4.6	1.7
Wed	8.0	8.0	1.3	8.7	1.5	4.5	1.9
Thur	8.4	8.4	1.3	9.0	1.5	4.6	1.9
Thur	8.5	8.5	1.4	8.6	1.7	4.5	1.9
Fri	9.1	9.1	1.5	8.5	1.5	4.6	1.6
Fri	8.6	8.6	1.4	8.3	1.7	4.6	1.2
Sat	8.9	8.9	1.2	8.6	1.7	4.6	1.5
Sat	9.0	9.0	1.3	8.4	1.5	4.7	1.6
AVG:	8.4	8.4	1.4	8.5	1.6	4.6	1.7

JDA Bird Counts: 4/12/20 to 4/18/20

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)		
12-Apr	PHFB	0	1	0	0	0	0	16	6	0	0	0	0	0	0	0	0	23	17	0	0	63	
12-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
12-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
12-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
12-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
12-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
12-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
12-Apr	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Avg/Survey		1		0		0		11		0		0		0		0		20		0			63
13-Apr	PHFB	0	0	0	0	0	0	19	12	0	0	0	0	0	0	0	0	22	19	0	0	72	
13-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
13-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
13-Apr	PH2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		3
13-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
13-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
13-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
13-Apr	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Avg/Survey		2		0		0		16		0		0		0		0		21		0			75
14-Apr	PHFB	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	20	21	0	0	51	
14-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
14-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
14-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
14-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
14-Apr	SW1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		5
14-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
14-Apr	SW3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		3
Avg/Survey		4		0		0		5		0		0		0		0		21		0			59
15-Apr	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	11	0	0	32	
15-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
15-Apr	PH1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		1
15-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
15-Apr	PH3	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0		3
15-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
15-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
15-Apr	SW3	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		11

Avg/Survey	7	0	0	1	0	0	1	0	16	0	47
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JDA Bird Counts: 4/12/20 to 4/18/20

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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)		
16-Apr	PHFB	0	0	0	0	0	0	17	11	0	0	0	0	0	0	0	0	24	22	0	0	74	
16-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Apr	PH1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
16-Apr	PH2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16-Apr	PH3	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
16-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Apr	SW3	2	4	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	8
Avg/Survey		8		0		0		14		0		0		1		0		23		0		92	

17-Apr	PHFB	0	0	0	0	0	0	20	5	0	0	0	0	0	0	0	0	28	25	0	0	78	
17-Apr	SWFB	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
17-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
17-Apr	SW2	0	2	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	6
17-Apr	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		1		0		0		18		0		0		3		0		27		0		95	

18-Apr	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	30	70	
18-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Apr	SW3	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		0		0		0		0		0		0		35		70	

Totals	Gulls		Cormorant		Caspian tern		White Pelican		Grebe		Total
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	43	0	0	127	0	0	8	0	253	70	501
Avg/Survey	3	0	0	9	0	0	1	0	18	5	36

John Day Dam
Avian Zones

