# **FISHWAY STATUS REPORT**

**Date:** 4/11/2020

**Inspection Period:** 4/5/2020 thru 4/11/2020

# 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	Criteria	<b>Total Num</b>	ber of Inspe	ctions:	Temperature:	<b>47</b> F		
	оос	Limit					Secchi:	<b>5.5</b> Ft.	
NORTH FISHWAY			NFW rts or	า 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	g is normal f	or 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	8.8					
Collection channel velocity	0	1.5 - 4 fps	AVG	2.40					
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.7					
Entrance weir NE1	0	depth (≥ 8')	AVG	8.9					
Entrance weir NE2	0	depth (≥ 8')	AVG	9.0					
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 se	al since 11/29 afte	er 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 activies 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.

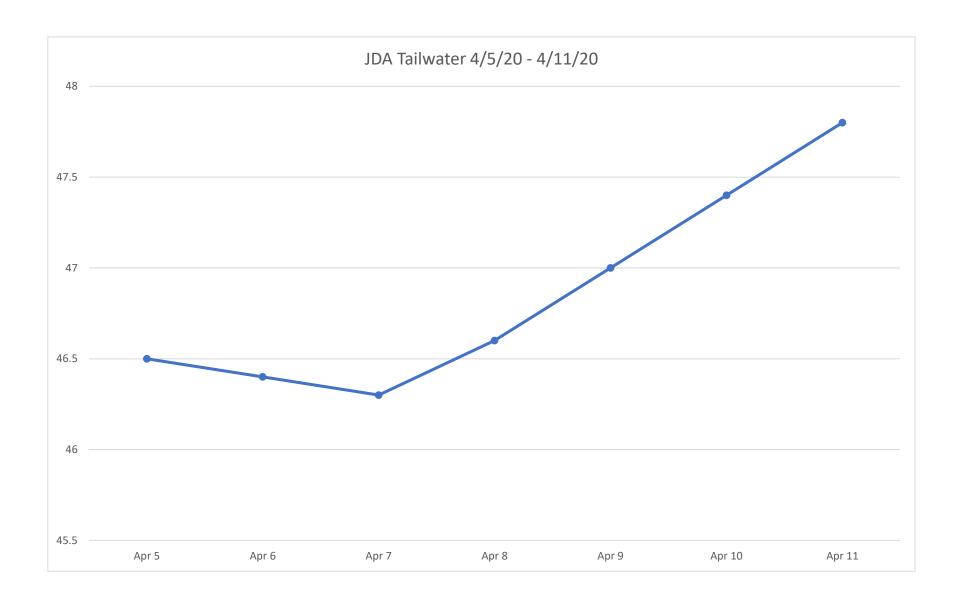
NFL LPS water supply pumps were pulled and inspected. No defencies where found and the supply pumps where reinstalled.

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

#### Research:

Critfc genetics study at SMF

Approved by: Ron Twiner, Acting OPM



# **JDA Collection Channel Velocity**

Date	7-Apr-20
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:14	74	2.43
2 - 4	2:34	154	2.25
4 - 6	3:53	233	2.28
6 - 8	5:08	308	2.40
8 - 10	6:25	385	2.34
10 - 12	7:41	461	2.37
12 - 14	8:59	539	2.31
14 - 16	10:14	614	2.40
16 - 18	11:17	677	2.86
			2.40

Bay 19 TW	Level	160.2
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:
Sun	46
Mon	46
Tue	46
Wed	46
Thur	47
Fri	48
Sat	48

Secchi:	
5.5	
5.5	
5.5	
5.5	
5.5	
5.5	
5.5	
-	

Fallbacks
NA

AVG:	46.7

AVG:	5.5	AVG/Sa
•		

AVG/Sample	#DIV/0!
MAX	0
MIN	0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.9	10.0	1.2	9.3	1.5	4.6	1.3
Sun	9.4	9.5	1.5	8.8	1.6	4.5	1.4
Mon	9.2	9.2	1.4	9.1	1.5	4.6	1.7
Mon	8.9	8.9	1.5	8.9	1.5	4.6	1.5
Tues	9.2	9.2	1.3	9.0	1.5	4.7	1.7
Tues	9.0	9.1	1.4	8.8	1.6	4.6	1.6
Wed	9.1	9.1	1.3	9.1	1.5	4.6	1.7
Wed	8.9	9.0	1.4	8.8	1.6	4.6	1.8
Thur	9.3	9.3	1.3	9.3	1.5	4.6	1.7
Thur	8.4	8.5	1.2	9.0	1.6	4.5	1.8
Fri	8.3	8.4	1.3	8.4	1.4	4.6	1.7
Fri	8.1	8.2	1.5	8.3	1.7	4.5	1.5
Sat	8.8	8.8	1.3	8.4	1.5	4.6	1.9
Sat	8.7	8.7	1.4	8.1	1.8	4.6	2.0
AVG:	8.9	9.0	1.4	8.8	1.6	4.6	1.7

JDA Bird Counts: <u>4/5/20</u> <u>to</u> <u>4/11/20</u>

NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Date	Zone		G	ulls			Corı	morant			Caspia	n tern			White	Pelica	n	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)	
5-Apr	PHFB	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	5	0	13
5-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Apr	SW2	0	0	0	0	0	0	2	19	0	0	0	0	0	0	0	0	0	0	0	0	21
	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/St		0		(	0	(	0	1	5		0		)	(	0	(	0	•	0		3	34
	PHFB	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	16	14	0	0	53
-	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW2	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
<u> </u>	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/S		0	_		0	_	0	1			0		)		0		1		.5		)	64
1	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	13	0	0	24
1	SWFB	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Apr		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
1	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Si		0			2	_	0		)	_	0		)		1		0		2		)	30
	PHFB	0	0	0	2	0	0	24	0	0	0	0	0	0	0	0	0	12	6	0	0	44
1	SWFB	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8-Apr		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Apr		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-	SW2	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/S	urvey	0		3	3	(	0	1	7		0		0		0	(	D		9		0	57

JDA Bird Counts: <u>4/5/20</u> <u>to</u> <u>4/11/20</u>

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)	
9-Apr	PHFB	0	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0	13	11	0	0	66
9-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
9-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Apr	SW2	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	31
9-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 0 0				0 37				0 0			1 0			12 0			0	98				
10-Apr	PHFB	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	19	16	0	0	58
10-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
10-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Apr	SW3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Avg/Su	ırvey	0		(	)	(	)	1	2		0	(	0	:	1	(	0	1	.8	(	0	60
11-Apr	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	12	0	0	25
11-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Apr	PH1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	ırvey	1			)	:	1	(	)		0		0		0		0	1	.3		0	27

Totals	G	ulls	Cori	morant	Caspia	n tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	1	10	1	192	0	0	4	1	156	5	370
Avg/Survey	0	1	0	14	0	0	0	0	11	0	26

