# **FISHWAY STATUS REPORT**

**Date:** 2/8/2020

**Inspection Period:** 2/2/2020 thru 2/8/2020

## 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	Total Numb	er of Inspec	tions:	7	Temperature:		<b>40</b> F
	000	Limit					Secchi:	<b>6.0</b> 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	1.5					
SOUTH FISHWAY			In service w	ith 2 AWS tu	ırbines. Planne	ed dewatering	for winter maintena	nce on 1/27/20.	
Exit differential	OOS	≤ 0.5′							
Exit Control weirs	oos	Mid setting	Mid setting	is normal fo	r 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	#DIV/0!					
Entrance weir SE1	oos	depth (≥ 8')	AVG	#DIV/0!					
Collection channel velocity	oos	1.5 - 4 fps	AVG	2.68					
N. Entrance PH(Bay 19)differential	oos	1.0' - 2.0'	AVG	#DIV/0!					
Entrance weir NE1	oos	depth (≥ 8')	AVG	#DIV/0!					
Entrance weir NE2	oos	depth (≥ 8')	AVG	#DIV/0!					
JUVENILE PASSAGE			Screens pul	led on all un	its since early J	anuary 2020.			
Forebay/bypass conduit differential	OOS	4.0' - 5.0'	AVG	4.6	out of service	as of 01-08-20	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 sea	ll since 11/29 a	fter 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 early December 2019. Winter maintenance of SMF hardware underway.

SMF SCADA update underway and is to be completed by 1 March 2020. JD Electricians are bench building the new control pannels to be installed in February. Portland District's Electrical Engineers will be resposible 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 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 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.

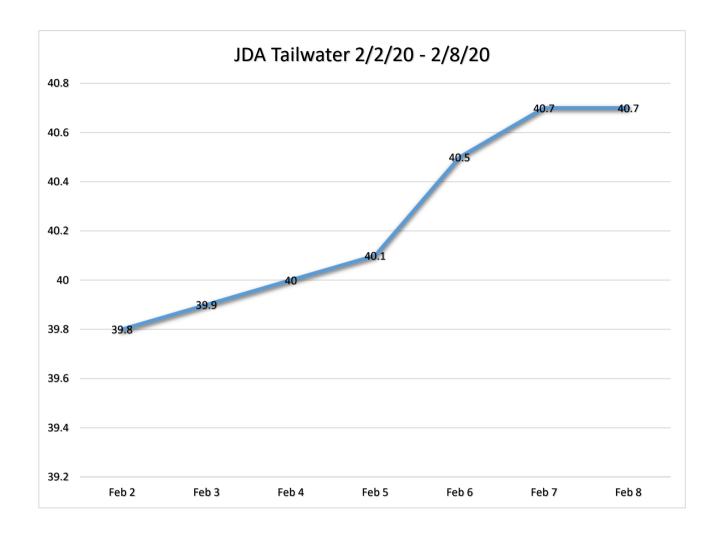
NFL LPS water supply pumps were pulled and inspected. No defencies where found and the supply pumps where reinstalled.

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

#### Research:

None at this time.

Approved by: Ron Twiner, Acting OPM



# **JDA Collection Channel Velocity**

Date	10-Jan-20		
By:	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
			2.68

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:
Sun	40
Mon	40
Tue	40
Wed	40
Thur	40
Fri	41
Sat	41
	-

Secchi:
6.0
6.0
6.0
6.0
6.0
6.0
6.0
<u>.                                      </u>

Fallbacks	
NA	
NA	ſ
	•

AVG:	40.2	AVG:	6.0	AVG

AVG/Sample	#DIV/0!
MAX	
MIN	0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	oos	oos	oos	oos	1.6	008	oos
Sun							
Mon	oos	oos	oos	oos	1.5	oos	oos
Mon							
Tues	oos	oos	oos	oos	1.6	oos	oos
Tues							
Wed	oos	oos	oos	oos	1.7	008	oos
Wed							
Thur	oos	oos	oos	oos	1.4	008	oos
Thur							
Fri	oos	oos	oos	oos	1.6	oos	oos
Fri							
Sat	oos	oos	oos	oos	1.4	008	oos
Sat							

AVG:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.5	#DIV/0!	#DIV/0!

JDA Bird Counts: <u>2/2/20</u> <u>to</u> <u>2/8/20</u>

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

Date	Zone		ulls		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)	
2-Feb	PHFB	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Feb	PH1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
2-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Feb	SW2	0	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0	0	0	0	0	44
2-Feb	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	ırvey	0		(	0	1	1	2	2		0	(	)	3	3	(	)		0		0	51
3-Feb	PHFB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3-Feb	SWFB	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
3-Feb	PH1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Feb	SW2	0	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	33
3-Feb	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/St	ırvey	1		4	4	(	)	1	7		0		)	(	)	(	)		0		0	43
4-Feb	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Feb	SWFB	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4-Feb	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Feb		0	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	33
4-Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/St		0		:	1	(	)	1	7		0		)	(	)	(	)	•	0		0	35
	PHFB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Feb		0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22
5-Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	ırvey	0		(	0	(	)	1	2		0		)	(	)	(	)		0		0	23

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

Date	Zone	Gulls				Cormorant					Caspia	n 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)	
6-Feb	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Feb	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Feb	SW2	0	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	33
6-Feb	SW3	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Avg/Su	irvey	0		(	0	(	0	2	3		0	(	)	(	0	(	)		0		0	45
7-Feb	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Feb	PH1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
7-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Feb	SW2	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	36
7-Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	irvey	1		(	0	(	0	1	8		0	(	)		3	(	)	(	0		0	43
8-Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Feb	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Feb	PH2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Feb		0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	35
8-Feb	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	ırvey	0			0	:	1	1	8		0	(	)	(	0	(	)		0		0	36

Totals	G	ulls	Cori	morant	Caspia	ın tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	2	10	3	250	0	0	11	0	0	0	276
Avg/Survey	0	1	0	18	0	0	1	0	0	0	20

