### FISHWAY STATUS REPORT

**Date:** 2/9/2019

**Inspection Period:** 2/3/2019 thru 2/9/2019

### JOHN DAY DAM



JD/WC Project-Fisheries P.O. Box 823

Rufus, Oregon 97050 Phone: 541-506-7860

All JD Fishways are inspected once per day during winter maintenance, Dec. 1 - Feb. 28. Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspection	Criteria	<b>Total Num</b>	ber of Ins	pections:	7	Temperature:		<b>40</b> F
	оос	Limit					Secchi:	<b>6.0</b> Ft.	
NORTH FISHWAY			In service v	with all 6 A	WS pumps av	ailable since	1/17/19 PM.		
Exit differential	0	≤ 0.5′							
Exit Control weirs	0	High setting	High settin	g is norma	al for JDN				
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	OOS		Dewatered	d on 1/22.	RTS end of Fe	ebruary.			
Exit differential	OOS	≤ 0.5′							
Exit Control weirs	OOS	Mid setting	Mid setting	g is norma	l 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	#DIV/0!					
Entrance weir SE1	OOS	depth (≥ 8')	AVG	#DIV/0!					
Collection channel velocity	OOS	1.5 - 4 fps	AVG	2.54					
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	008		Dewatered	for annua	al inspection o	n 1/30/19. I	RTS is 2/25/2019.		
Forebay/bypass conduit differential	OOS	4.0' - 5.0'	AVG	4.6					
Submersible traveling screens	008	visual inspect	All STSs rei	moved for	winter mainte	enance after	12/16/18.		
Turbine trashrack drawdown	0	<1.5', wkly	N/A						
Vert barrier screen drawdown	0	<1.5', wkly	N/A						
Spill volume	OOS	per FPP	All gates o	n seal sinc	e 1 December	2018. 2019	Fish Spill season star	ts on 10 April	•
Spill pattern	OOS	per FPP	None						
Turbine Unit Priority	0	per FPP							
Turbine 1% Efficiency	0	per FPP							

#### **SMOLT MONITORING FACILITY**

#### Operation:

SMF continues OOS since 11/28/18. RTS is 1 March with first sample date on 2 March 2019.

#### Maintenance:

SMF SCADA update by JD Electrical/ Portland District Engineers is underway but its completion is delayed by one year to February 2020. Due to complexity of electronic components and incomplete as-builts which are pending at this time.

Research: None

#### **ADULT FISHWAYS & TW AVIAN GRID**

#### Birds:

Bird numbers have declined significantly due to low juvenile shad abundance in winter. See Avian Numbers tab for details. All 125 avian lines in place without any deficiencies.

#### Operations:

JD North Fishway continues in service since 1/17/19. All six AWS pumps are available.

JBS Collection Channel was dewatered on 1/30. One adult steelhead mortality was found (see 19 JDA 01 MFR.) Two live adult steelhead were salvaged and released into Forebay in good condition. RTS is 2/25/19.

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

#### Maintenance:

MU1 oil leak emergency required tail logs installation on 1/30. No oil was found but the tail logs were deployed for 120 hrs (24 hrs over the FPP limit) before they were removed and MU1 was watered back up on Monday, 2/4 AM. See 19 JDA MFR for MU1 over 96 hrs.

JD South Collection Channel's diffuser gratings were ROVed on 1/31. All segments were found properly attached without any bolts missing.

JD North Fishway's LPS improvements contract continues on schedule. RTS May 2019. A minor vibration of the installed AWS pipes was found and notification was issued to correct on 1/29. Construction Office determined that the attachment bolts needed final torqueing which has been completed by 2/08/19.

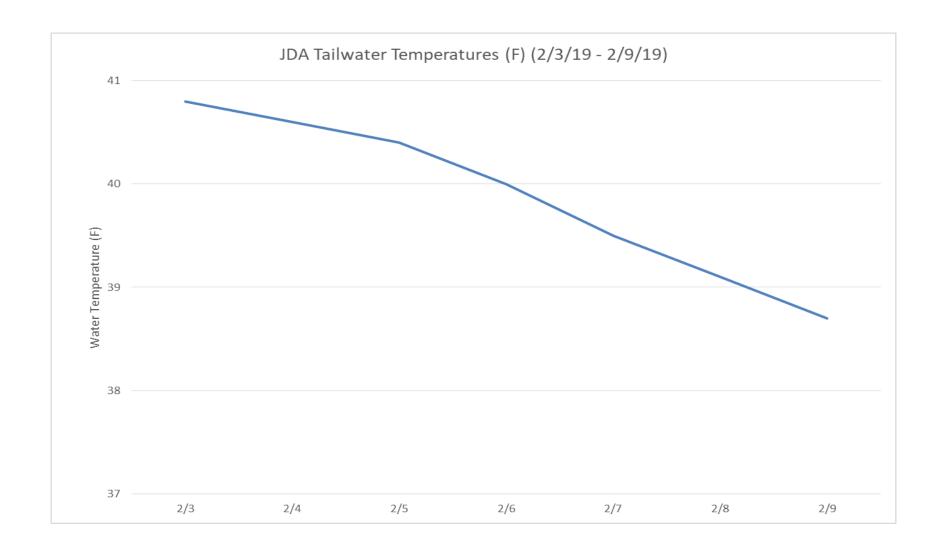
JD South AWS turbine 1 is OOS, in poor condition and urgently awaiting its overhaul as soon as \$ 3 million becomes available (?) Calibration: All gauges/ sensors are within the criteria of 0.3'.

#### Research:

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 Collection Channel Velocity**

Date	9-Jan-19
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:08	68	2.65
2 - 4	2:19	139	2.54
4 - 6	3:31	211	2.50
6 - 8	4:45	285	2.43
8 - 10	5:57	357	2.50
10 - 12	7:05	425	2.65
12 - 14	8:19	499	2.43
14 - 16	9:36	576	2.34
16 - 18	10:40	640	2.81
			2.54

Bay 19 TW:	160.5
Turbine 2-3:	68 RPM

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

# John Day Weekly Averages

	Temp:
Sun	41
Mon	41
Tue	41
Wed	40
Thur	40
Fri	39
Sat	39
	-

41 41 40 40 39 39	41		
40 40 39	41		
40 39	41		
39	40		
39	39		
	39		
		·	

ecchi:	_	Fallback
6.0		NA
	_	

AVG:	40	AVG: 6.0	AVG/Sample	#DIV/0!
			MAX	0
			MIN	0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	oos	oos	oos	oos	1.4	oos	oos
Sun	oos	oos	oos	oos		oos	oos
Mon	oos	oos	oos	oos	1.5	oos	oos
Mon	oos	oos	oos	oos		oos	oos
Tues	oos	oos	00S	oos	1.4	008	00S
Tues	oos	oos	oos	oos		oos	oos
Wed	oos	oos	oos	oos	1.6	oos	oos
Wed	oos	oos	oos	oos		oos	oos
Thur	oos	oos	oos	oos	1.4	oos	oos
Thur	oos	oos	00S	oos		00S	00S
Fri	oos	oos	oos	oos	1.4	oos	oos
Fri	oos	oos	oos	oos		oos	oos
Sat	oos	oos	oos	oos	1.4	oos	oos
Sat	oos	oos	oos	oos		oos	oos
				•		•	•

AVG:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.4	#DIV/0!	#DIV/0!

JDA Bird Counts: <u>2/3/19</u> to <u>2/9/19</u>

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

Date	Zone		G	iulls			Cor	morant	:		Caspia	n tern			White	e Pelica	ın		G	rebe		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)	
3-Feb	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Feb	PH1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
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	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
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/Su	urvey	:	1	(	0	:	1	1	1		0	(	)	(	0	(	)	(	0	(	0	25
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Feb	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-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	urvey	(	)	(	0	(	)	(	0		0	(	)	(	0	(	)	(	0		0	0
5-Feb	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	PH1	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	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Feb	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-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	urvey	(	)	(	0	(	)	(	0		0	(	)	(	0	(	)	(	0		0	0
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	55	0	0	0	0	0	0	0	0	0	0	0	0	0	55
6-Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	urvey		)	(	0		)	2	8		0	(	)		0	(	)	(	0		0	55

## JDA Bird Counts: <u>2/3/19</u> <u>to</u> <u>2/9/19</u>

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

Date	Zone		G	Gulls			Cori	morant			Caspia	n tern			White	e Pelica	n		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)	
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	55	0	0	0	0	0	0	0	0	0	0	0	0	0	55
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	ırvey		0	(	0	(	0	2	8		0		0		0	(	0		0		0	55
8-Feb	PHFB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8-Feb	SWFB	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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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		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	55	0	0	0	0	0	0	0	0	0	0	0	0	0	55
8-Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su			0	(	)	(	0	2	8		0	•	0	•	0	(	0	•	0		0	56
9-Feb	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Feb	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Feb		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Feb	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-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	(	)		0		0	(	0	(	0	(	0		0	0

Totals	Gulls		Cormorant		Caspian tern		White Pelican		Grebe		Total
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	2	0	2	187	0	0	0	0	0	0	191
Avg/Survey	0	0	0	13	0	0	0	0	0	0	14

