## FISHWAY STATUS REPORT

Date:	2/2/2019		
Inspection Period:	1/27/2019	thru	2/2/2019



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US Army Corps of Engineers Portland District 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	Total Number of Inspections:	7	Temperature:	<b>41</b> F
	000	Limit			Secchi:	<b>6.0</b> Ft.
NORTH FISHWAY			In service with all 6 AWS pumps availa	able since 1,	/17/19 PM.	
Exit differential	0	≤ 0.5'				
Exit Control weirs	0	High setting	High setting is normal 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 on 1/22. RTS end of Febr	uary.		
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 #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	0		Dewatered for annual inspection on 1	./30/19. RT	S is 2/25/2019.	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6			
Submersible traveling screens	OOS	visual inspect	All STSs removed for winter maintena	nce after 12	2/16/18.	
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 on seal since 1 December 20	18. 2019 Fis	sh Spill season start	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.

JD South Fishway was successfully dewatered on 22 January 2019. 4 juvenile steelhead and 26 adult lamprey were encountered, bagged and released in good condition (steelhead into Tailrace, lamprey upstream FB.) Low fish numbers attributed to thorough flushing of fishway before salvage operation.

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

#### Maintenance:

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 is pending.

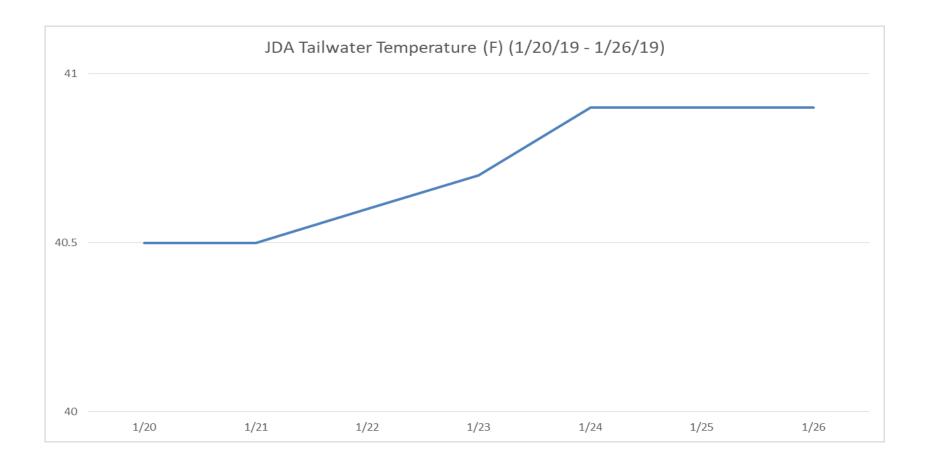
JD South AWS turbine 1 is OOS, in poor condition and urgently awaiting its overhaul as soon as \$ 3 million becomes available (hopefully in a year or two ?) Calibration: All gauges/ sensors are within the criteria of 0.3'.

#### 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.

MOYNAHAN, KEVIN PATRICK, 1393959157 MOYNAHAN, KEVIN PATRICK, 1393959157 MOYNAHAN, KEVIN PATRICK, 1393959157



# 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)

	Temp:		Secchi:		Fallbacks
Sun	41	ſ	6.0		NA
Mon	41		6.0		NA
Tue	41	[	6.0		NA
Wed	41	[	6.0		NA
Thur	41		6.0		NA
Fri	41		6.0		NA
Sat	41		6.0		NA
VG:	41	AVG:	6.0	AVG/Sample	#DIV/0!
		-		MAX	0
				MIN	0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	OOS	005	OOS	OOS	1.5	4.6	005
Sun	OOS	005	OOS	OOS			005
Mon	OOS	005	OOS	OOS	1.6	4.5	005
Mon	OOS	OOS	OOS	OOS			005
Tues	OOS	005	OOS	OOS	1.3	4.4	005
Tues	OOS	005	OOS	OOS			005
Wed	OOS	005	OOS	OOS	1.4	005	005
Wed	OOS	OOS	OOS	OOS		005	005
Thur	OOS	OOS	OOS	OOS	1.3	005	005
Thur	OOS	005	OOS	OOS		005	005
Fri	OOS	OOS	OOS	OOS	1.3	005	005
Fri	OOS	OOS	OOS	OOS		005	005
Sat	OOS	OOS	OOS	OOS	1.4	005	00S
Sat	OOS	OOS	OOS	OOS		OOS	OOS
AVG:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.4	4.5	#DIV/0!

### JDA Bird Counts: <u>1/27/19</u> to <u>2/2/19</u>

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

Date	Zone		Ģ	alls			Cori	morant	;		Caspia	an tern			White	e Pelica	n		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)	
27-Jan	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan		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	(	)		0	(	0	. (	0	(	)	. (	0	(	)	0
28-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jan		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	(	-	_	0		0		0		)		0		)	0
29-Jan		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
29-Jan		0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
29-Jan		0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
29-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Jan		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
29-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Jan		0	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	33
29-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	-		)		1		2	36	8	0	0		0		)		)		)			41
30-Jan		0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	36
	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Jan		1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
30-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	U
30-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Jan		0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	24
30-Jan		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	(	U	-	L	3	0		U	(	U	(	J	(	J	(	J		J	63

## JDA Bird Counts: <u>1/27/19</u> <u>to</u> <u>2/2/19</u>

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

Date	Zone		G	iulls			Cori	morant	:		Caspia	n tern			White	e Pelica	in		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)	
31-Jan P	PHFB	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
31-Jan S	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Jan P	PH1	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
31-Jan P	PH2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
31-Jan P	РН3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Jan S	5W1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Jan S	SW2	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	28
31-Jan S		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Surv		1	L	(	)	3	3	1	.7		0	(	0	(	)	(	)	(	0	(	0	40
1-Feb P		0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	27
1-Feb S	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Feb P	PH1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
1-Feb P	-	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1-Feb P	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Feb S	SW1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1-Feb S	SW2	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22
1-Feb S		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Surv	vey	0	)	(	)	Į.	5	2	5		0	(	0	(	)	(	)	(	0	(	0	59
2-Feb P	_	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	31
2-Feb S	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Feb P	-	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2-Feb P	-	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2-Feb P	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Feb S	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Feb S	-	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
2-Feb S		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Surv	vey	1	L	(	)	2	2	2	3		0	(	D	(	)	(	0	(	0	(	0	50

Totals	Ģ	Gulls	Cor	morant	Caspia	an tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	3	1	25	224	0	0	0	0	0	0	253
Avg/Survey	0	0	2	16	0	0	0	0	0	0	18

