FISHWAY STATUS REPORT

Date: 1/25/2020

Inspection Period: 1/19/2020 thru 1/25/2020

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 Inspe	ections:		7	Temperature:		40 F
	00С	Limit						Secchi:	6.0 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			In service w	ith 2 AWS	turbines. Pla	anned de	watering fo	r winter maintenar	nce on 1/27/20.	
Exit differential	0	≤ 0.5′								
Exit Control weirs	0	Mid setting	Mid setting	is normal f	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	1.2						
Entrance weir SE1	0	depth (≥ 8')	AVG	8.9						
Collection channel velocity	0	1.5 - 4 fps	AVG	2.68						
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.5						
Entrance weir NE1	0	depth (≥ 8')	AVG	10.0						
Entrance weir NE2	0	depth (≥ 8')	AVG	10.5						
JUVENILE PASSAGE			Screens pull	led on all u	nits since ea	arly Janua	ry 2020.			
Forebay/bypass conduit differential	OOS	4.0' - 5.0'	AVG	4.6	out of ser	rvice as o	f 01-08-2020)		
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	eal since 11/	29 after s	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 3/1/2020.

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 maintaining criteria with 2 AWS Turbines. Turbine 3 is currently under maintenance and will return to service by 1 March 2020.

JD North Adult Fishway OOS since 11/30/19. 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 continues operating with two AWS turbines (No. 1 & 2) since early April. AWS turbine 3 will have the new bearing installed in February. with ETR by 1 March 2020.

JD North Fishway returned to service on 1/23. Pump 3 has returned to service, pump 4 has been pulled for maintenance.

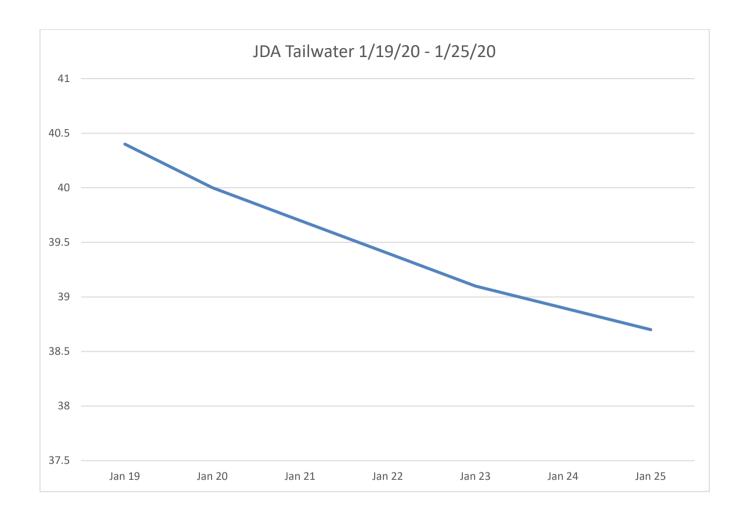
NFL LPS water supply pumps were pulled and inspected. No defencies where found and the supply pumps where reinstalled.

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

Research:

JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18.

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	41
Mon	40
Tue	39
Wed	39
Thur	39
Fri	39
Sat	41

Secchi:
6.0
6.0
6.0
6.0
6.0
6.0
6.0

Fallbacks
NA

AVG:	39.7	AVG:	6.

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

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.1	9.7	1.4	8.5	oos	00S	1.4
Sun					008		
Mon	10.5	11.0	1.1	9.3	oos	008	1.5
Mon					oos		
Tues	10.5	11.0	1.0	9.4	oos	oos	1.4
Tues					oos		
Wed	9.7	10.2	1.2	8.9	oos	oos	1.6
Wed					oos		
Thur	10.3	10.8	1.2	8.6	oos	oos	1.5
Thur					oos		
Fri	oos	oos	oos	oos	1.6	oos	oos
Fri							
Sat	oos	oos	oos	oos	1.5	008	oos
Sat							
	T			T			
AVG:	10.0	10.5	1.2	8.9	1.6	#DIV/0!	1.5

JDA Bird Counts: <u>1/19/20</u> <u>to</u> <u>1/25/20</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	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)	
19-Jan	PHFB	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jan	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jan	SW1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
19-Jan	SW2	0	0	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	55
19-Jan		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		2	2	8		0		0		0	()	(0		0	59
20-Jan	PHFB	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
20-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jan		0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
20-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jan		0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
20-Jan	_	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
20-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)	_	7		1		0)		0)		0)	36
21-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 0
21-Jan		0		0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
21-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Jan 21-Jan		0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
21-Jan 21-Jan		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
21-Jan 21-Jan		0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
21-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su			י ס ס)		3		7	~	0	1)	l	l ° 2)	1	0))	43
22-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jan		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jan	SW2	0	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	37
22-Jan	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)	()	:	1	1	9		0	•)	•	0	(ס	•	0		0	39

JDA Bird Counts: <u>1/19/20</u> <u>to</u> <u>1/25/20</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)	
23-Jan	PHFB	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
23-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Jan		0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
23-Jan		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
23-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
23-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Jan	SW2	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	36
23-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	Avg/Survey 0 0				2 25				0 0			1 2				0 0)	58		
24-Jan	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jan	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jan	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jan	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	(0	(0	()	(0	()	0
25-Jan	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jan	PH1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
25-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
25-Jan	_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jan	SW2	0	0	0	0	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	47
25-Jan		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	()	3	3	2	4		0		0		2	()	(0	()	55

Totals	G	Gulls	Cori	morant	Caspia	n tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	2	0	53	223	0	0	8	4	0	0	290
Avg/Survey	0	0	4	16	0	0	1	0	0	0	21

