


FISHWAY STATUS REPORT

Date: 4/7/2018
 Inspection Period: 4/1/2018 thru 4/7/2018



**US Army Corps
of Engineers**
Portland District

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.
 Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspections	Criteria	Total Number of Inspections:	14	Temperature:	45 F
	Out of Criteria	Limit			Secchi:	5.6 Ft.
NORTH FISHWAY			5 out 6 AWS pumps available with pump 1 OOS since 2/7. See maintenance section for details.			
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	0		In service since 2/28 with two AWS turbines and two FOGs.			
Exit differential	0	≤ 0.5'				
Exit Control weirs	0	Mid setting	Mid setting is normal 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	1.4		
Entrance weir SE1	0	depth (≥ 8')	AVG	8.6		
Collection channel velocity	0	1.5 - 4 fps	AVG	2.46		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.7		
Entrance weir NE1	0	depth (≥ 8')	AVG	10.5		
Entrance weir NE2	0	depth (≥ 8')	AVG	10.5		
JUVENILE PASSAGE	0		In service since 2/28, with all STSs deployed by 3/30/18.			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.6		
Submersible traveling screens	0	visual inspect	STS camera inspection of MU 1-4, 8 and 9 occurred on 3/28 - all STSs working properly			
Turbine trashrack drawdown	0	<1.5', wkly	MUs intake trashrack raking occurred on 3/29 - only small amount of debris was removed			
Vert barrier screen drawdown	0	<1.5', wkly				
Spill volume	0	per FPP	Fish Spill Season at Gas Cap starting on 4/10.			
Spill pattern	0	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

SMOLT MONITORING FACILITY

Operation:

SMF in service since 2/28 with every other day, 24 hrs condition sampling. First 2018 sample was collected/processed on 1 March.

Maintenance:

All winter repairs/ PMs of SMF equipment were completed by 1 March. No issues of any kind at this time.

SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway. Awaiting for \$ 170 K UFR to continue working in FY18.

Research: None

Birds :

Only a few birds, mostly cormorants are present at JD at this time. See the Avian Numbers tab for details.

Installation of all avian lines by a contractor completed by 3/30/18. Minor connecting hardware mods underway. USDA boat hazing planned for the second half of April. The Spillway section's new tensioning winches have been already installed and will allow for the lines' adjustments.

Operations:

Line 4 (MUs 13-16) returned to service ahead of schedule by 3/30/18.

JD South Fishway in service, with two AWS turbines and two FOGs since 2/28/18. Awaiting special funding to overhaul turbines 1 & 2 (\$ 3 million each.)

JD North Ladder in service since 12/21/17. 5 out of 6 AWS pumps are available due to pump 1 failure on 2/02/18.

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

Maintenance:

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 ?)

JD North AWS pump 1 OOS since 2/7 due to failed motor. It will be replaced with spare the next week starting 4/2/18.

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

Research:

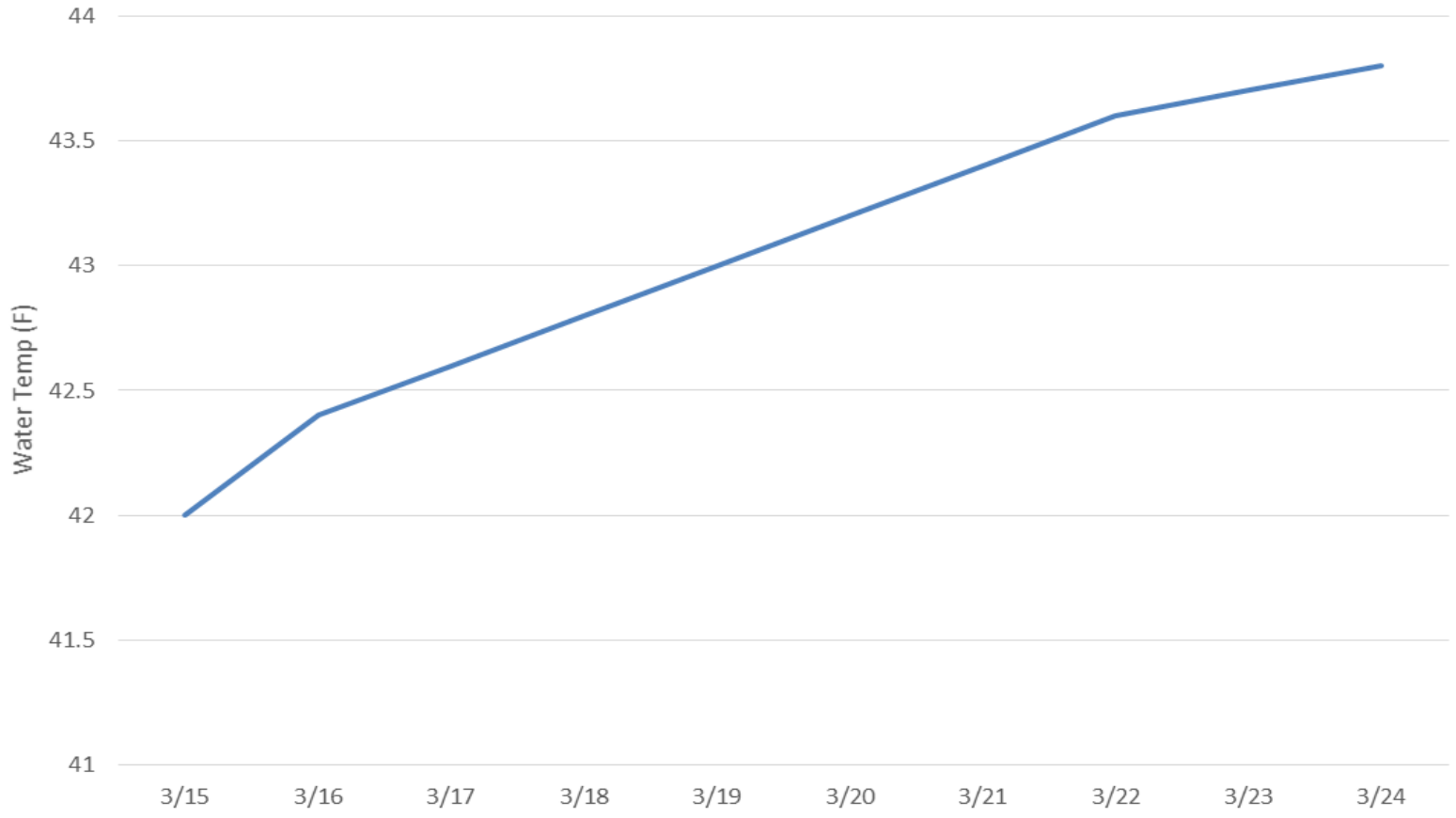
JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18.

Coordinating with CRITFC and Tribes for the upcoming adult lamprey collection season starting in late May.

Coordinating with Uof I crew for their JD Adult Lamprey RT installation/ monitoring at both adult fishways in 2018.

E-Signed by MOYNAHAN, KEVIN, PATRICK, 1393959157
VERIFY authenticity with ApproveIt

JDA Tailwater Temperature (3/15/18 - 3/24/18)



JDA Collection Channel Velocity

Date 12-Mar-18

By: pete

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:15	75	2.40
2 - 4	2:33	153	2.31
4 - 6	3:45	225	2.50
6 - 8	5:01	301	2.37
8 - 10	6:27	387	2.09
10 - 12	7:30	450	2.86
12 - 14	8:46	526	2.37
14 - 16	9:55	595	2.61
16 - 18	11:04	664	2.61
			2.46

TW=160.8
turbine 2,3=68rpm

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	45	6.0	bypass
Mon	45	6.0	23
Tue	45	6.0	bypass
Wed	45	6.0	42
Thur	45	6.0	bypass
Fri	45	4.5	56
Sat	46	4.5	bypass
AVG:	45	AVG: 5.6	AVG/Sample #DIV/0!
			MAX 56
			MIN 0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.2	9.2	1.5	8.8	1.4	4.5	1.8
Sun	10.0	10.0	1.3	9.0	1.4	4.6	1.6
Mon	10.0	10.0	1.5	8.4	1.4	4.5	1.6
Mon	10.5	10.5	1.4	8.8	1.4	4.6	1.5
Tues	10.6	10.6	1.5	8.8	1.4	4.6	1.8
Tues	11.2	11.2	1.3	8.5	1.4	4.6	1.3
Wed	9.8	9.8	1.5	8.2	1.4	4.6	1.8
Wed	10.2	10.2	1.5	8.2	1.5	4.6	1.6
Thur	10.8	10.8	1.2	9.4	1.5	4.6	1.6
Thur	10.2	10.2	1.4	8.7	1.6	4.6	1.8
Fri	11.4	11.4	1.2	9.5	1.5	4.5	1.6
Fri	11.0	11.0	1.5	8.0	1.4	4.6	1.8
Sat	11.3	11.4	1.3	8.4	1.5	4.5	1.7
Sat	10.7	10.7	1.5	8.0	1.6	4.6	1.9
AVG:	10.5	10.5	1.4	8.6	1.5	4.6	1.7

JDA Bird Counts: 4/1/18 to 4/7/18

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)		
1-Apr	PHFB	0	0	0	0	0	0	28	8	0	0	0	0	0	0	0	0	8	0	0	8	52	
1-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
1-Apr	PH1	0	0	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0		7
1-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
1-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
1-Apr	SW1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		2
1-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
1-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	0	5	18	0	0	0	0	0	0	0	0	0	0	4	4	0	0		61
2-Apr	PHFB	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	8	8	17	
2-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
2-Apr	PH1	1	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		6
2-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
2-Apr	PH3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		4
2-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
2-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
2-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		4	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	8	0	0		27
3-Apr	PHFB	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	4	0	0	7	42	
3-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
3-Apr	PH1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		4
3-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
3-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
3-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
3-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
3-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		1	0	0	0	1	16	0	0	0	0	0	0	0	0	0	0	2	4	0	0		46
4-Apr	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	4	9	
4-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
4-Apr	PH1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0		2
4-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
4-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
4-Apr	SW1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0		2
4-Apr	SW2	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0		11
4-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	0	0	8	0	0	0	0	0	0	0	0	0	0	0	5	0	0		24

JDA Bird Counts: 4/1/18 to 4/7/18

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)	
5-Apr	PHFB	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	5	4	11
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	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5-Apr	SW2	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
5-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		5		0		0		0		0		0		5		19
6-Apr	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
6-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Apr	PH1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Apr	SW1	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6
6-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-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		1		0		3		0		1		0		0		8
7-Apr	PHFB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4	5	0	10
7-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Apr	SW1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
7-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-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		2		0		0		0		0		0		5		12
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		10		0		13		97		0		6		0		1		12		58		197
Avg/Survey		1		0		1		7		0		0		0		0		1		4		14