FISHWAY STATUS REPORT

Date: 5/21/2016

Inspection Period: 5/15/2016 thru 5/21/2016

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 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: 59 F
•	Out of Criteria	Limit	Secchi: 5.4 Ft.
NORTH FISHWAY			In service; 5 AWS pumps available; # 5 OOS due to oil leak
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			In service with two AWS turbines; FOGs # 18 & 19 continue closed.
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 9.8
Collection channel velocity	0	1.5 - 4 fps	AVG 3.38
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.5
Entrance weir NE1	0	depth (≥ 8')	AVG 8.5
Entrance weir NE2	0	depth (≥ 8′)	AVG 8.6
JUVENILE PASSAGE			In service with STSs installed since 4/1
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6
Submersible traveling screens	0	visual inspect	Next monthly STS camera inspection scheduled for the week of 5/23/16
Turbine trashrack drawdown	0	<1.5', wkly	Moderate volume of river debris
Vert barrier screen drawdown	0	<1.5', wkly	
Spill volume	0	N/A	2016 Spill season started on 4/10/16 at 0001; TSWs in bays 18 & 19 in service.
Spill pattern	0	per FPP	
Turbine Unit Priority	0	per FPP	
Turbine 1% Efficiency	0	per FPP	

SMOLT MONITORING FACILITY

Operation:

In service since 1 April. Every other day sampling by PSMFC biologists in 2016; JD Fisheries crew moves the Switch Gate between sample-bypass modes daily AM.

Maintenance:

No maintenance issues to report. PDS screen cleaners have been working well.

SMF SCADA's investigation by JD Electrical underway. There is a current UFR of \$ 150 K, for the SCADA update's P&S.

Research:

None

Fallbacks: AVG: 35 MAX: 42 MIN: 29

OTHER JOHN DAY ISSUES:

Birds:

see the Avian Numbers tab. We report all species and locations, but in reality only gulls in the tailrace BRZ are relevant at JD.

13 Navlock and 3 Spillway (# 70 lost on 5/16) lines are missing out of 125 grid's total; no funding is available to reinstall for 2016 season. UFR for \$ 250K is pending.

New in April 2016, the JD Avian Lines Improvements' PDT will assess their reliability and design a better/ cheaper methods for their maintenance.

USDA boat avian hazing downstream of JD Tailrace BRZ commenced on 4/29; light gull presence so far.

Operations:

JBS and SMF in regular operation since 1 April as required by FPP.

JD North fishway has been meeting all FPP criteria since 1/5/16.

JD South Fishway in service with two out of three AWS turbines; FOGs 18 & 19 continue closed due to insufficient AWS.

MU Gatewell Drawdowns: Twice a week or more frequently as necessary.

Maintenance:

JD North Fishway AWS Pump# 4 install complete on 5/12/16! Pump # 5 OOS due to gearbox's oil leak; it will be repaired soon

JD South Fishway AWS turbine 1 OOS long term due to failed pump's lower bearing. Received \$100K UFR for AWS pumps' repair on 5/18.

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

Research:

Washington F&W dam angling crew commenced NPM (pikeminnow) removal from JD PH tailrace on 5/10/16. 122 fish removed by 5/15.

JD Fisheries coordinating with NW Tribes for adult lamprey trapping and other lamprey research.

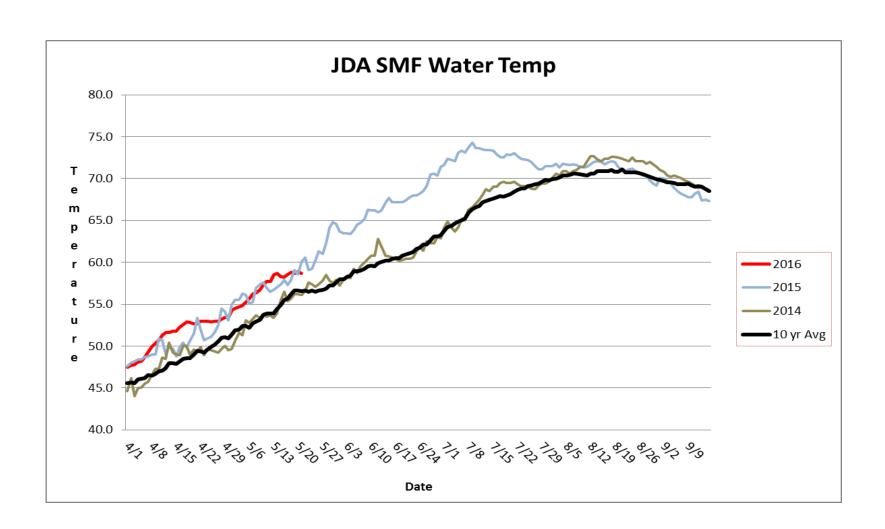
Adult Fish Counting by Normandeau Associates commenced on 1 April 2016.

Adult PIT antennas PDT developing designs for the next winter outage's installation.

Kevin Moynahan

OPM John Day/Willow Creek Project

MOYNAHAN, K Exercity authoritists, vital Approved P. I.C.K., 1393959157



JDA Collection Channel Velocity

Date	21-May-16
By:	pr

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:18	78	2.31
2 - 4	2:03	123	4.00
4 - 6	3:03	183	3.00
6 - 8	4:00	240	3.16
8 - 10	4:52	292	3.46
10 - 12	5:35	335	4.19
12 - 14	6:39	399	2.81
14 - 16	7:35	455	3.21
16 - 18	8:17	497	4.29
			3.38

NE TW 161.7 #2 RPM 60 #3 RPM 62

	JDA Bird Counts: 5	/15/	'16	to	5/	/21/	16
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F(1): Forage AM survey F(2): Forage PM Survey NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Data	Zone	0	Gulls			Corr	norant			Casp	ian ter	n		White	e Pelica	ın		G	rebe		Total
Date	Zone	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)	Total
15-May	PHFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2	15	22	46
15-May	SWFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-May	PH1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-May		2 2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
15-May	PH3	2 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
15-May	SW1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-May		6 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Avg/Su		10		1	C)	()	((0		0	()	Į.	5	1	.9	67
16-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6	41	22	73
16-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-May		0 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
16-May		3 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
16-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-May		14 18	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	37
Avg/Su		24		0	C)	()	()	()		3	()	. !	5	3	2	126
17-May		0 0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	13	0	16	10	43
17-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-May		0 0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17-May		8 0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
17-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-May		16 10	0	19	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	46
Avg/Su		17	1	L4	1	L	()	()	()		1	()		7	1	.3	104
18-May		0 0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	5	20	20	54
18-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-May		1 0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18-May		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-May		5 15	5	10	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	36
18-May		0 17	0	10	0	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	37
Avg/Su	ırvey	19	1	L4	3	3	()	()	(0		3	()		7	2	.0	129

JDA Bird Counts: <u>5/15/16</u> to <u>5/21/16</u>

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

Date	Zone		(Gulls			Corr	morant			Casp	ian ter	n	,	White	e Pelica	n		G	rebe		Total
Date	Zone	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)	iotai
19-May	PHFB	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	7	10	30	30	81
19-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-May	PH1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-May	SW2	0	5	7	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
19-May	SW3	0	7	0	10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	18
Avg/Su	ırvey		7	1	6	()	()	(0	()	()		1	9	9	3	0	122
20-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	30	31	72
20-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May	SW1	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
20-May	SW2	2	1	10	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
20-May		0	4	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Avg/Su	ırvey		4	1	.5	()	()	(0	()	()	(0	(6	3	1	109
21-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	9	33	30	86
21-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May	PH1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
21-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
21-May	SW2	0	5	5	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
21-May		0	4	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Avg/Su	ırvey		5	1	2	1	L	1	L	(0	()	1	L		1	1	.2	3	2	122

Totals	(Gulls	Cori	morant	Casp	ian tern	White	e Pelican	G	Total	
Totals	F	NF	F	NF	F	NF	F	NF	F	NF	TOtal
Weekly Total	169	140	8	1	0	0	13	2	96	350	779
Avg/Survey	12	10	1	0	0	0	1	0	7	25	56



John Day Weekly Averages

	Temp:
Sun	59
Mon	58
Tue	58
Wed	58
Thur	59
Fri	59
Sat	59
	_

Secchi:
5.0
5.5
5.5
5.5
5.5
5.5
5.0
-

5.4

AVG:

Fallbacks
31
37
29
42
-

AVG: 59

AVG	35
MAX	42
MIN	29

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.8	8.8	1.5	10.0	1.5	4.6	1.2
Sun	8.3	8.3	1.5	10.0	1.4	4.6	1.7
Mon	9.0	9.0	1.3	10.2	1.5	4.5	1.6
Mon	8.4	8.4	1.3	10.8	1.6	4.6	1.6
Tues	8.8	8.8	1.6	9.5	1.5	4.6	1.6
Tues	8.7	8.6	1.4	9.8	1.5	4.6	1.8
Wed	8.6	8.4	1.4	9.9	1.6	4.6	1.7
Wed	8.8	8.8	1.5	9.8	1.4	4.6	1.5
Thur	8.5	8.7	1.4	9.8	1.4	4.6	1.7
Thur	8.3	8.4	1.4	9.2	1.5	4.6	1.4
Fri	8.8	9.0	1.3	10.0	1.5	4.6	1.4
Fri	8.2	8.2	1.5	9.5	1.6	4.6	1.5
Sat	8.1	8.0	1.4	8.9	1.6	4.6	1.5
Sat	8.3	8.4	1.3	9.9	1.5	4.5	1.4
AVG:	8.5	8.6	1.4	9.8	1.5	4.6	1.5