FISHWAY STATUS REPORT

Date: 6/18/2016

Inspection Period: 6/12/2016 thru 6/18/2016

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: 64 F
	Out of Criteria	Limit	Secchi: 5.6 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	Mid setting since 6/15 necessary to reduce sockeye fall back through CS.
Count station differential	0	≤ 0.3'	
Weir crest depth (DS gauge)	0	1.3' ± 0.1'	Changed to SHAD passage criterion of 1.3' on 6/01 PM
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	1.3' ± 0.1'	Changed to SHAD passage criterion of 1.3' on 6/01 AM
South entrance differential	0	1.0' - 2.0'	AVG 1.5
Entrance weir SE1	0	depth (≥ 8')	AVG 8.5
Collection channel velocity	0	1.5 - 4 fps	AVG 3.30
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.5
Entrance weir NE1	0	depth (≥ 8')	AVG 8.2
Entrance weir NE2	0	depth (≥ 8')	AVG 8.2
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	STS camera inspection: VBS MU 16 found with torn mesh on 6/14/16; MU oos until repaired.
Turbine trashrack drawdown	0	<1.5', wkly	Monthly raking per FPP requirements during the week of 5/23, moderate debris loads
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: 37 MAX: 53 MIN: 28

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.

12 Navlock, 3 Spillway, 3 Tower-to-Tower (# 12 broke on 6/15/16) lines are missing out of 125 grid's total; no funding is available to reinstall for 2016 season.

UFR for \$ 250K is pending. No increase in gull predation due to the missing lines/large gaps in the tailrace Avian Array so far.

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 continues since 4/29/16.

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:

MU 14 dewatering: scroll case on 6/13-1 SMB & draft tube on 6/14-7 small sturgeon and 12 cats; all released in excellent condition.

MU 16 VBS found with torn mesh during camera inspection on 6/14/16. MU waiting for bulkheads to dewater and will be OOS until repaired.

JD North Fishway 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's NPM (pikeminnow) removal from JD PH tailrace continues since 5/10/16. 797 fish removed by 6/12/16.

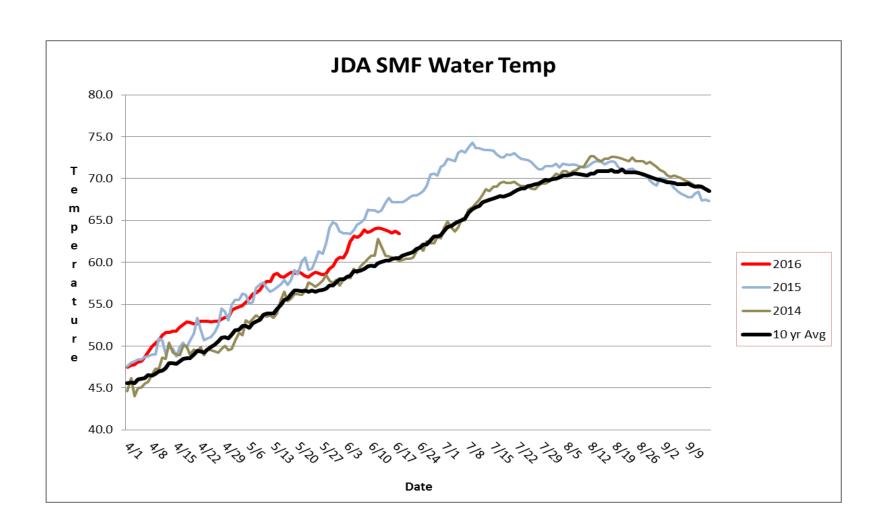
JD Fisheries coordinating with NW Tribes for adult lamprey trapping and other lamprey research.

Adult Fish Counting by Normandeau Associates continues since 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 Every authentially initiapproved ICK, 1393959157



A Collection Channel Velocity

Date	18-Jun-16
By:	peet

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:15	75	2.40
2 - 4	2:12	132	3.16
4 - 6	3:07	187	3.27
6 - 8	4:01	241	3.33
8 - 10	4:52	292	3.53
10 - 12	5:40	340	3.75
12 - 14	6:35	395	3.27
14 - 16	7:23	443	3.75
16 - 18	8:18	498	3.27
			3.30

TW 161.3 #1 RPM 59 #2 RPM 60 JDA Bird Counts: <u>6/12/16</u> to <u>6/18/16</u>

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

Data 7	one	0	Gulls			Corr	norant			Casp	ian ter	n	,	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)	Total
12-Jun PH	IFB	12 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	11	0	0	43
12-Jun SV	VFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jun PH	11	12 5	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	21
12-Jun PH		0 3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	5
12-Jun PH		1 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12-Jun SV	V1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jun SV		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jun SV		0 0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Avg/Surve		22		0	C)	()	. ()	()	į.	5	()		.2)	75
13-Jun PH		0 0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	12	8	0	0	25
13-Jun SV	VFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jun PH		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jun PH	12	5 7	0	0	0	0	0	0	0	0	0	0	15	5	0	0	0	0	0	0	32
13-Jun PH	_	0 2	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	7
13-Jun SV		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jun SV		0 0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
13-Jun SV		0 0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	4
Avg/Surve		7		3	C)	()	()	()	1	.6	()		.0	(0	70
14-Jun PH		0 0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	9	17	0	0	32
14-Jun SV		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jun PH		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jun PH		4 16	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	0	27
14-Jun PH		0 0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	3
14-Jun SV		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jun SV		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jun SV		0 6	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	11
Avg/Surve		13		3	C))		0		8)		.3	1	0	73
15-Jun PH		0 0	10	5	0	0	0	0	0	0	0	0	2	1	0	0	22	7	0	0	47
15-Jun SV		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jun PH		0 3	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	7
15-Jun PH		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jun PH		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jun SV		4 0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	19
15-Jun SV		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jun SV		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Surve	ey	4		8	C)	()	()		0	1	.1	()	1	.5		0	73

JDA Bird Counts: <u>6/12/16</u> to <u>6/18/16</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		G	Gulls			Corr	norant			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)	Total
16-Jun	PHFB	0	0	1	3	0	0	0	0	0	0	0	0	2	3	0	0	9	10	0	0	28
16-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jun	SW1	9	4	0	0	0	0	0	0	0	0	0	0	20	2	0	0	0	0	0	0	35
16-Jun	SW2	4	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	6
16-Jun	SW3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Avg/Su			9		2	()	()	(0	(0	1	6	(0	1	.0	(0	72
17-Jun	PHFB	0	0	6	1	0	0	0	0	0	0	0	0	5	1	0	0	11	12	0	0	36
17-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jun	SW1	0	5	0	0	0	0	0	0	0	0	0	0	18	14	0	0	0	0	0	0	37
17-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jun		0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
Avg/Su			3		4	()	()	(0	(0	2	1	(0	1	.2	(0	77
18-Jun		0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	8	9	0	0	28
18-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jun		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
18-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jun	-	5	6	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	20
18-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	ırvey		6		0	()	()	(0		0	1	1		0	9	9		0	50

Totals	(Gulls	Cori	morant	Casp	ian tern	White	e Pelican	G	Total	
Totals	F	NF	F	NF	F	NF	F	NF	F	NF	TOLAI
Weekly Total	123	37	0	0	0	0	173	0	157	0	490
Avg/Survey	9	3	0	0	0	0	12	0	11	0	35



John Day Weekly Averages

	Temp:
Sun	64
Mon	64
Tue	64
Wed	64
Thur	64
Fri	64
Sat	64

	Secchi:
	6.0
	6.0
	6.0
	6.0
	5.0
	5.0
	5.0
ľ	

Fallbacks
32
28
36
53

AVG: 64

AVG: 5.6

AVG 37 MAX 53 MIN 28

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.3	8.3	1.5	8.1	1.5	4.6	1.5
Sun	8.2	8.2	1.3	8.2	1.5	4.6	1.5
Mon	8.0	8.0	1.5	8.1	1.5	4.5	1.8
Mon	8.0	8.0	1.4	8.3	1.5	4.5	1.7
Tues	8.1	8.0	1.4	9.7	1.6	4.5	1.7
Tues	8.1	8.0	1.5	8.0	1.6	4.5	1.5
Wed	8.1	8.2	1.5	9.2	1.5	4.6	1.4
Wed	8.6	8.5	1.5	8.2	1.5	4.6	1.4
Thur	8.4	8.6	1.5	9.0	1.4	4.6	1.5
Thur	8.3	8.2	1.5	8.5	1.5	4.6	1.5
Fri	8.3	8.3	1.4	8.0	1.6	4.6	1.6
Fri	8.2	8.4	1.4	9.1	1.5	4.6	1.4
Sat	8.1	8.3	1.4	8.4	1.5	4.6	1.3
Sat	8.3	8.3	1.5	8.0	1.6	4.5	1.2
AVG:	8.2	8.2	1.5	8.5	1.5	4.6	1.5