FISHWAY STATUS REPORT

Date:	6/30/2018		
Inspection Period:	6/24/2018	thru	6/30/2018

JOHN DAY DAM

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 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: 65 F
	Out of Criteria	Limit		Secchi: 5.4 Ft.
NORTH FISHWAY			In service with all 6 AWS pumps total available	2.
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	1.3' ± 0.1'	1.3' for shad passage since 5/24	
Entrance differential	0	1.0' - 2.0'	AVG 1.5	
SOUTH FISHWAY	0		In service with two AWS turbines and two FOC	Gs.
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'	1.3' for shad passage since 5/24	
South entrance differential	0	1.0' - 2.0'	AVG 1.4	
Entrance weir SE1	0	depth (≥ 8')	AVG 8.4	
Collection channel velocity	0	1.5 - 4 fps	AVG 2.53	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.7	
Entrance weir NE1	0	depth (≥ 8')	AVG 10.3	
Entrance weir NE2	0	depth (≥ 8')	AVG 10.3	
JUVENILE PASSAGE	0		In service since 2/28.	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect	June STS inspection completed 6/18. One bac	STS at MU1 replaced with working spare.
Turbine trashrack drawdown	0	<1.5', wkly	Monthly trashracks raking completed on 6/27	. Very little debris was raked of the trashracks.
Vert barrier screen drawdown	0	<1.5', wkly		
Spill volume	0	per FPP	Summer spill operations started on 6/16 per F	OP.
Spill pattern	0	per FPP	Two TSWs, bays 18 & 19 open since 4/10/18 A	M
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		-

SMOLT MONITORING FACILITY

Operation:

SMF is in every other day/24 hrs sampling mode. The Switch Gate is moved between sampling and bypass every day, AM.

Maintenance:

SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway. Awaiting for \$ 170 K UFR to complete in FY18. **Research**: None

Birds :

White pelicans continue increasing on the island downstream of BRZ and inside of the BRZ. See Avian Numbers tab for details.

All 125 avian lines in place without any deficiencies. USDA boat hazing commenced on 4/16 and will continue 7 days a week thru 7/31.

Operations:

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. 6 out of 6 AWS pumps available again since 4/18/18.

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 ?) 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.

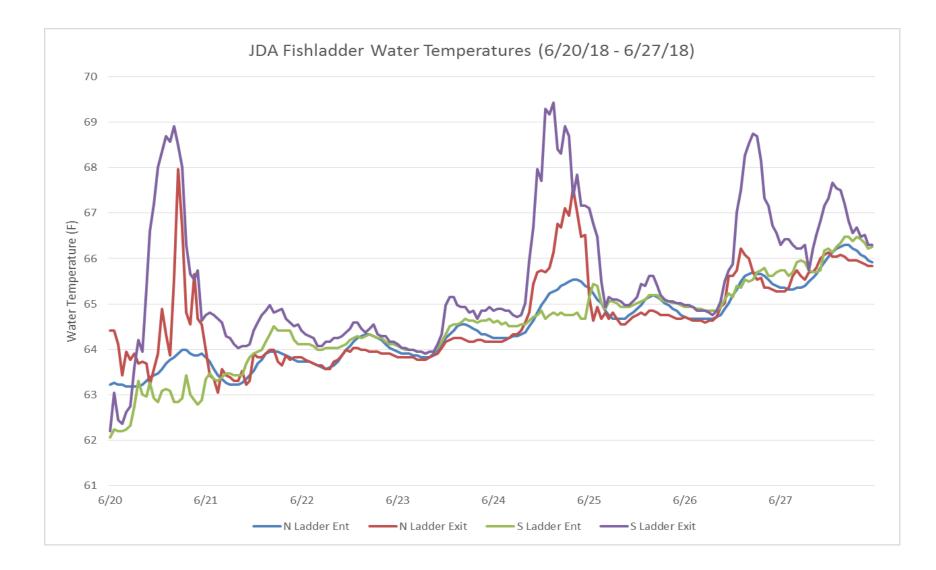
JD North LPS was started up on 6/20 AM. It is monitored by JD Fisheries with CRITFC retaining all unmarked adult lamprey for the tribal replanting programs.

Catches were great over the weekend with first day, 6/21 at 30, and then the high of 86 fish caught on Saturday 6/23.

WDFW NPM angling from JD PH Tailrace deck continues since 5/1. Catches increased significantly in the past two weeks with 542 NPM caught thru 6/17.

Uof I crew continues monitoring the RT Adult Lamprey passage at both JD Adult Fishways.





JDA Collection Channel Velocity

Date	29-Jun-18
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:09	69	2.61
2 - 4	2:16	136	2.69
4 - 6	3:32	212	2.37
6 - 8	4:51	291	2.28
8 - 10	6:15	375	2.14
10 - 12	7:24	444	2.61
12 - 14	8:35	515	2.54
14 - 16	9:44	584	2.61
16 - 18	10:46	646	2.90
			2.53

Bay 19 TW: 161.7 turbine 2-3=68rpm

FPP Criteria 1.5–4.0 feet per second (2 fps optimum)



	Temp:	Secch	i:	Fallbacks
Sun	64	5.0		
Mon	65	5.0		240
Tue	65	5.5		
Wed	66	5.5		337
Thur	66	5.5		
Fri	66	5.5		474
Sat	66	5.5		
AVG:	65	AVG: 5.4	AVG/Sample	350
			MAX	474
			MIN	240

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.5	9.5	1.3	8.0	1.5	4.5	1.7
Sun	11.4	11.4	1.3	8.0	1.4	4.6	1.5
Mon	9.5	9.5	1.4	8.0	1.6	4.6	1.7
Mon	11.2	11.2	1.4	8.1	1.4	4.6	1.6
Tues	10.7	10.7	1.4	8.2	1.5	4.6	1.7
Tues	11.0	11.0	1.4	8.1	1.5	4.6	1.7
Wed	10.7	10.5	1.6	7.7	1.7	4.4	1.7
Wed	10.1	10.1	1.3	8.7	1.5	4.7	1.6
Thur	10.1	10.1	1.3	8.8	1.5	4.7	1.8
Thur	10.1	10.1	1.4	8.6	1.5	4.5	1.7
Fri	9.7	9.7	1.5	8.5	1.5	4.5	1.8
Fri	10.5	10.5	1.4	8.8	1.4	4.5	1.4
Sat	9.0	9.0	1.6	8.5	1.4	4.6	1.8
Sat	10.5	10.5	1.4	9.0	1.3	4.6	1.6
AVG:	10.3	10.3	1.4	8.4	1.5	4.6	1.7

JDA Bird Counts: <u>6/24/18</u> to <u>6/30/18</u>

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

Date	Zone		Gulls Cormorant					:		Caspia	an tern			White	e Pelica	an		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)	
24-Jun	PHFB	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	20	0	0	45
24-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	5	4	0	0	0	0	0	0	9
24-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	24	24	0	0	0	0	0	0	48
24-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	38	7	0	0	0	0	0	0	45
24-Jun		0	0	0	0	0	0	0	0	0	0	0	0	23	2	0	0	0	0	0	0	25
Avg/Su	-		1	(0	(0	(0		0	(0	6	4	(0		2	()	172
25-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	27	0	0	55
25-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jun		0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
25-Jun		0	0	0	0	0	0	0	0	0	0	0	0	8	31	0	0	0	0	0	0	39
25-Jun		0	3	0	0	0	0	0	0	0	0	0	0	41	7	0	0	0	0	0	0	51
25-Jun		0	0	0	0	0	0	0	0	0	0	0	0	41	0	0	0	0	0	0	0	41
25-Jun		0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9
Avg/Su			2)	_))		0)	-	1		0		8)	200
26-Jun		0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	27	27	0	0	58
26-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Jun		0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	10
26-Jun		0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	6 100
26-Jun		6	6	0	0	0	0	0	0	0	0	0	0	44	44	0	0	0	0	0	0	100
26-Jun 26-Jun		0 7	0 7	0	0	0	0 0	0	0	0	0	0	0	35 61	35 61	0	0	0	0	0 0	0	70
Avg/Su		L	.3	0	0	0		0		0	0	0	0		50	0		-	0			136 380
27-Jun	-	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	22	19	0	0	56
27-Jun 27-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
27-Jun 27-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jun 27-Jun		2	1	0	0	0	0	0	0	0	0	0	0	19	10	0	0	0	0	0	0	22
27-Jun 27-Jun		0	0	0	0	0	0	0	0	0	0	0	0	40	10	0	0	0	0	0	0	Δ1
27-Jun 27-Jun	-	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	1
27-Jun		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
27-Jun		0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9
Avg/Su		-	2	-	8	(⁽	0	, J)		0	ı ~ ()		1	-	0	-	1	۱ ٽ ۱)	140

JDA Bird Counts: <u>6/24/18</u> <u>to</u> <u>6/30/18</u>

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

Date	Zone		Ģ	iulls			Cori	morant	:		Caspia	an tern			White	e Pelica	an		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)	
28-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	21	0	0	43
28-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jun	PH2	4	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	9	0	0	0	20
28-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	18
28-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9
28-Jun		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	22
Avg/Su	urvey	3	8	(0	(0 0				0	(0	3	3	(0	5	51	(0	112
29-Jun	PHFB	8	0	13	3	0	0	0	0	0	0	0	0	0	0	5	4	22	19	0	0	74
29-Jun	SWFB	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
29-Jun	PH1	0	1	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	11
29-Jun	PH2	2	0	0	0	0	0	0	0	0	0	0	0	27	17	0	0	0	0	0	0	46
29-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	32
29-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9
29-Jun		0	1	0	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	37
Avg/Su	urvey	9)	8	8	()	(0		0	(0	66 5				2	21	(0	215
30-Jun	PHFB	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	22	20	0	0	47
30-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Jun	PH1	7	7	0	0	0	0	0	0	0	0	0	0	15	8	0	0	0	0	0	0	37
30-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	15	5	0	0	0	0	0	0	20
30-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	0	29
30-Jun	H	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Jun	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	13
30-Jun		0	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0	0	0	37
Avg/Su	irvey	8	3	2	2	()	(D		0	(0	5	5		7	2	1	(0	183

Totals	Ċ	Gulls	Cor	morant	Caspia	in tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	72	35	0	0	0	0	895	22	378	0	1402
Avg/Survey	5	3	0	0	0	0	64	2	27	0	100