

FISHWAY STATUS REPORT

Date: 5/26/2013
Inspection Period: 5/19 thru 5/25/2013

JOHN DAY DAM



**US Army Corps
of Engineers**
Portland District

JD/WC Project-Fisheries
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All JD Fishways are inspected twice per day during walk throughs; frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspections	Criteria	Total Number of Inspections: 14	Temperature: 57.4 F
	Out of Criteria	Limit		Secchi: 3.4 Ft.
NORTH FISHWAY			In regular service with three AWS pumps since 4/3/13. Six operational since 5/20/13	
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	0	1.0' ± 0.1'	Shad passage criterion of 1.3' commenced on 5/22	
Entrance differential	0	1.0' - 2.0'	AVG 1.5	
SOUTH FISHWAY			In regular service with all three AWS turbines since 2/12/13	
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	0	1.0' ± 0.1'	Shad passage criterion of 1.3' commenced on 5/22	
South entrance differential	0	1.0' - 2.0'	AVG 1.5	
Entrance weir SE1	0	depth (≥ 8')	AVG 9.8	
Collection channel velocity	0	1.5 - 4 fps	ft/sec 3.51	
Bay 1 differential	1	1.0' - 2.0'	AVG 1.9	2.1' on 5/24; this location is inside JDS collection channel
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.4	
Entrance weir NE1	0	depth (≥ 8')	AVG 9.0	
Entrance weir NE2	0	depth (≥ 8')	AVG 9.0	
JUVENILE PASSAGE			JBS/SMF continues in regular service, in sampling mode	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect	STSs camera inspection complete 5/22, 1 minor mesh damage found and repaired	
Turbine trashrack drawdown	0	<1.5', wkly	Next MU intake trashracks raking is scheduled for the week of 5/26.	
Vert barrier screen drawdown	0	<1.5', wkly		
Spill volume	0	per FPP	Spill for fish passage started on 4/10; alternating 30/ 40 % levels same as 2012	
Spill pattern	0	per FPP		
Turbine Unit Priority	0	per FPP	MU Priority with two TSWs 4/10 through 8/31	
Turbine 1% Efficiency	0	per FPP		

SMOLT MONITORING FACILITY

Operation: SMF in regular sampling mode since 3/31/13. Manned 24/7 thru 9/15 by COE personnel. PSMFC biologists performing daily sampling. PDS screen rake continues in regular service without any issues.

Debris: Light with mostly small beaver-generated sticks and tumbleweeds.

Maintenance: No issues. All winter maintenance/PM activities successfully completed by 4/1/13.

SMF CCTV replacement is in planning stage ; the original system installed in 1998 is barely usable and its components have been failing frequently.

Research: None. No fish collections are planned for 2013.

Fallbacks: AVG: 19 MAX: 23 MIN: 15

OTHER ISSUES:

JOHN DAY

Birds: See Avian tabs.

123 avian lines are properly installed. Two lines are currently missing; spillway/TSW line broke on 4/12/13. JD Management preparing a plan for the missing lines' replacement before 2014 passage season.

Daily, 8 hrs gull hazing shifts by USDA boat crew started at JD tailrace on 4/17; ongoing and effective so far.

Overall, the JD gull abundance / predation is minimal and under control.

JD hazing boat was loaned to TD on 5/15 and 5/17 due to higher gull abundance there; it was in repair shop on 5/16. An immediate jump in gull numbers / predation at JD was noted during those three days without hazing.

Operations:

JD North Fishway in regular service with three AWS pumps operational since 4/2. Six pumps operational since 5/20; JDN is meeting the optimal entrance/FPP criteria of 1.5'. One adult chinook trapped between CS picketed leads reported on 5/22; JD Fisheries immediately closed/ eliminated netting gaps and verified proper fit of picketed leads. Attempting to net the trapped fish with dip nets.

JD South Fishway in regular service with all three AWS turbines; it is meeting the optimal entrances' criteria of 1.5' .

All JD Spillway bays are in regular service per FPP pattern requirement.

New construction:

The last of six JD North AWS pumps, # 5 was completed and returned to regular service on 5/20. All six pumps are currently operational.

Maintenance:

Failed STS gear box leaked oil into gatewell MU 4a; oil sheen was detected by JD Fisheries, Rankin and reported to CR immediately on 5/24.

MU 4 was stopped, JD Structural replaced the faulty STS with spare later the same day. Kudos to Mr. Rankin for doing good inspection work !

35 juvenile lamprey morts were found inside of four Conditioning Coolers (Transformers) strainers during PMs on 5/23. There are total of 8 such coolers at JD with intakes in the STS gatewells; these are different from MU coolers with intakes in the scroll cases. JD Fisheries is working with Maintenance to create improved monitoring and FEM reporting of all JD Powerhouse coolers, which could be trapping juvenile lamprey this time of year.

Gatewell draw down: Measurements made on 5/20 and 5/23. All units were within established limits.

Calibration: 5/25/2013 All JD Fishways' PLCs/ water level sensors were within 0.3' margin of error.

Research:

WDFW dam angling crew commenced NPM removal from JD PH tailrace on 5/1. Fishing has been slow ; 46 fish caught to date. Will continue through the end of August.

Fish counting at both JD Fishways ongoing as required by FPP.

JD South Counting Station' automated lamprey trap in-water installation complete on 2/12; the trap's hoist will be installed outside of fishway in June.

JD North prototype Lamprey Passage System's (LPS) installation was successfully completed by University of Idaho crews by 3/12/13.

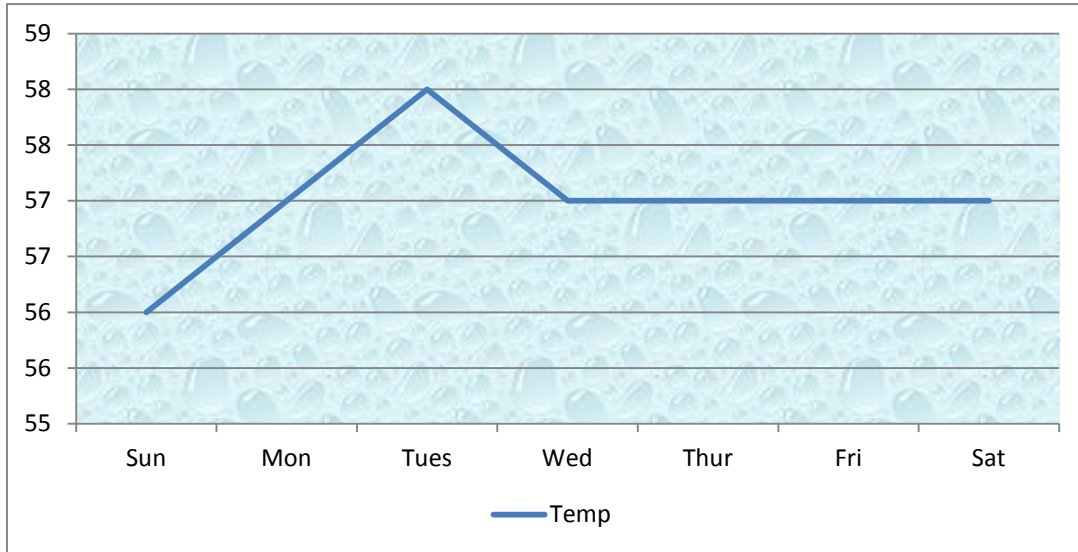
Adult Salmonids Radio telemetry equipment/antennas' set up completed at both JD fishways, by University of Idaho crew by early May; detecting

adult spring chinook which were tagged at Bonneville Dam.

Glen A. Smith PE
OPM John Day/Willow Creek Project

Date: _____

River Temperature



Day	Temp
Sun	56
Mon	57
Tues	58
Wed	57
Thur	57
Fri	57
Sat	57

JDA COLLECTION CHANNEL VELOCITY

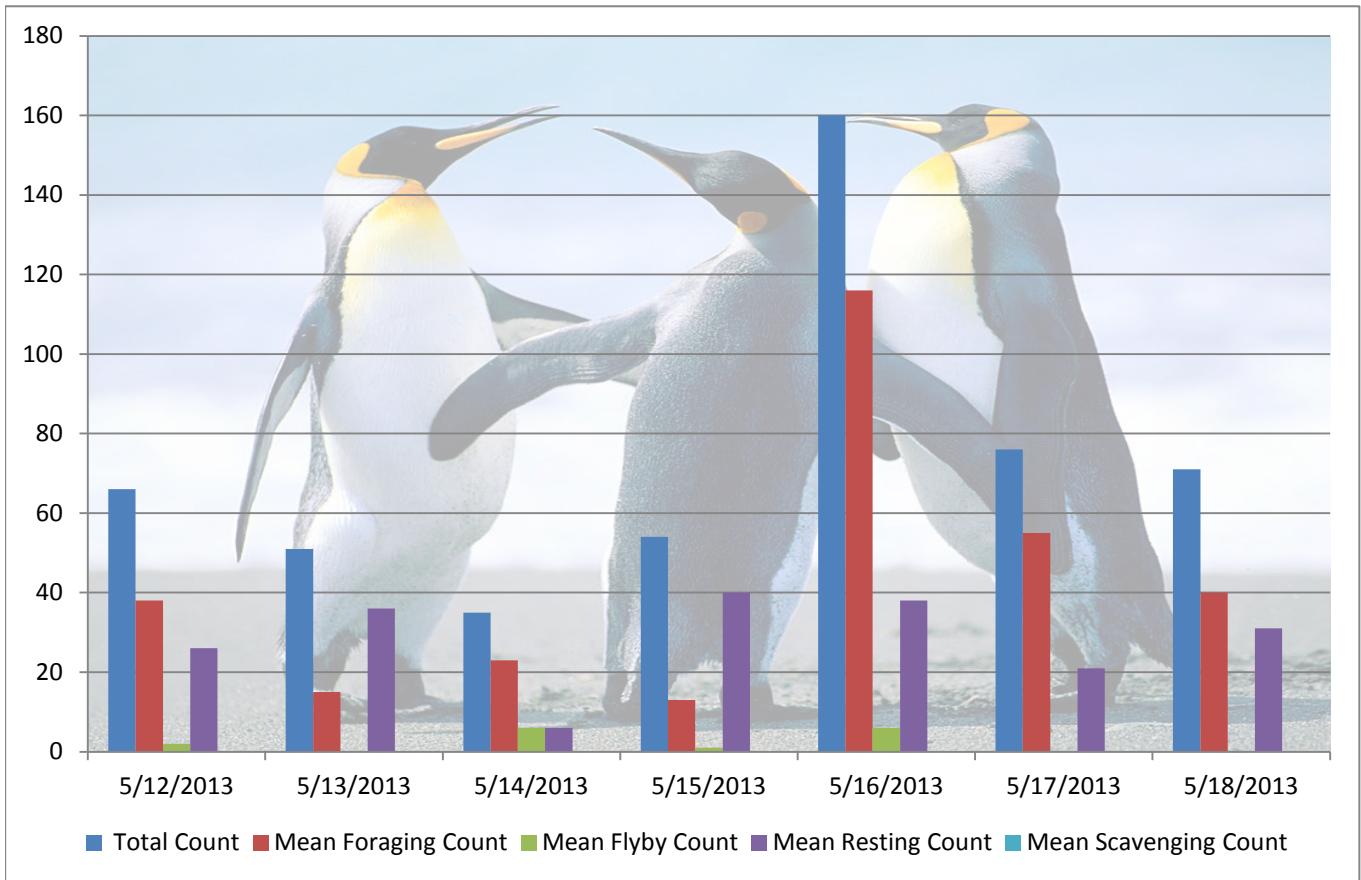
Date 26-May-13

By: pete

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:01:26	86	2.09
2 - 4	0:02:11	131	4.00
4 - 6	0:03:06	186	3.27
6 - 8	0:04:05	245	3.05
8 - 10	0:05:01	301	3.21
10 - 12	0:05:56	356	3.27
12 - 14	0:06:51	411	3.27
14 - 16	0:07:46	466	3.27
16 - 18	0:08:24	504	4.74

3.51

Bird Count by Activity



Date	Total Count	Mean Foraging Count	Mean Flyby Count	Mean Resting Count	Mean Scavenging Count
5/12/2013	66	38	2	26	0
5/13/2013	51	15		36	
5/14/2013	35	23	6	6	
5/15/2013	54	13	1	40	
5/16/2013	160	116	6	38	
5/17/2013	76	55		21	
5/18/2013	71	40		31	

John Day Dam
Avian Zones 2013



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John Day:

	Temp:	Secchi:	Fallbacks
Sun	56.0	3.5	17
Mon	57.0	3.5	16
Tues	57.0	3.0	16
Wed	58.0	3.5	22
Thur	58.0	3.5	15
Fri	58.0	3.5	23
Sat	58.0	3.5	23
AVG:	57.4	AVG: 3.4	AVG 19
			MAX 23
			MIN 15

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	9.4	9.4	1.8	10.1	1.4	4.6	1.8	1.5
Sun	9.5	9.4	1.5	9.3	1.6	4.6	2.0	1.5
Mon	8.4	8.6	1.5	9.9	1.6	4.5	2.0	1.5
Mon	8.6	8.3	1.7	10.0	1.5	4.1	2.0	1.4
Tues	9.0	8.9	1.2	9.6	1.5	4.7	1.9	1.5
Tues	8.5	8.4	1.4	9.2	1.1	4.6	1.8	1.5
Wed	9.4	9.6	1.4	10.2	1.4	4.5	1.8	1.3
Wed	9.6	9.8	1.5	9.7	1.5	4.5	1.8	1.5
Thur	9.7	9.9	1.5	9.9	1.4	4.6	1.8	1.4
Thur	9.0	9.2	1.2	9.4	1.5	4.5	1.9	1.2
Fri	8.6	8.4	1.4	9.8	1.5	4.7	2.1	1.4
Fri	8.4	8.2	1.5	9.8	1.5	4.5	2.0	1.5
Sat	9.3	9.2	1.3	10.1	1.4	4.7	1.8	1.4
Sat	8.3	8.2	1.4	9.9	1.7	4.6	2.0	1.5
AVG:	9.0	9.0	1.5	9.8	1.5	4.6	1.9	1.4