

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/17/2020

Inspection Period: 10/11/2020 thru 10/17/2020



**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.  
Additional and frequent monitoring, of the PLC displays in SMF Fisheries Office, as necessary.

<b>John Day Dam</b>	Inspection OOC	Criteria Limit	Total Number of Inspections: 14				Temperature:	63.8 F
						Secchi:	6.0 Ft.	

### NORTH FISHWAY

Exit differential	0	≤ 0.5'							
Exit Control weirs	0	High setting	High setting is normal						
Count station differential	0	≤ 0.3'							
Entrance differential	0	1.0' - 2.0'	AVG (Ft.)	1.5					

### SOUTH FISHWAY

Exit differential	0	≤ 0.5'							
Exit Control weirs	0	Mid setting	Mid setting is normal						
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 (Ft.)	1.3					
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.1					
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.59					
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.5					
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.0					
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.2					

### JUVENILE PASSAGE

Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6					
Submersible traveling screens	0	visual inspect	Last Visual Inspection 9/14 - 9/17		Next Visual Inspection 10/19 - 10/22				
Turbine trashrack drawdown	0	<1.5', wkly							
Vert barrier screen drawdown	0	<1.5', wkly							
Spill volume	0	per FPP	Avg (kcfs)	1.6	Avg %	1.8			
Spill pattern	0	per FPP							
Turbine Unit Priority	0	per FPP							
Turbine 1% Efficiency	0	per FPP							

## Fisheries Related Operations

### **Smolt Monitoring Operations:**

Currently in bypass as sampling ended 15 September.

### **Adult Ladder Operations:**

JD South Adult Fishway is operating within criteria.

JD North Adult Fishway is operating within criteria.

### **Project Operations:**

Current outages: MU1, MU2, MU3, MU4, MU6, MU7, MU9, MU12. MU9 is scheduled to return 10/29/2020

Tailwater Average Weekly TDG-100.1

### **Maintenance:**

SMF SCADA update completed 17 March 2020. JD Electricians are working on SCADA programming and controls. Slowed by COVID-19 availability

JD North Fishway's pump 4 has been pulled for maintenance. - JD Maintenance continue repairs of AWS fish pump 4. RTS has yet TBD.

Calibration - All gauges within the 0.3' criteria. However NE-1, NE-2, Bay 19 tw, and Bay 19 ch sensors OOC - Running in manual mode (0 out of criteria inspections). These OOC are believed to be related to the unfinished SCADA upgrades (lack of comms)

### **Bird Data:**

Few foraging gulls this week, decreasing number of foraging pelicans (see 'Bird Count' tab for details).

1 of 125 avian lines down, will need to be replaced

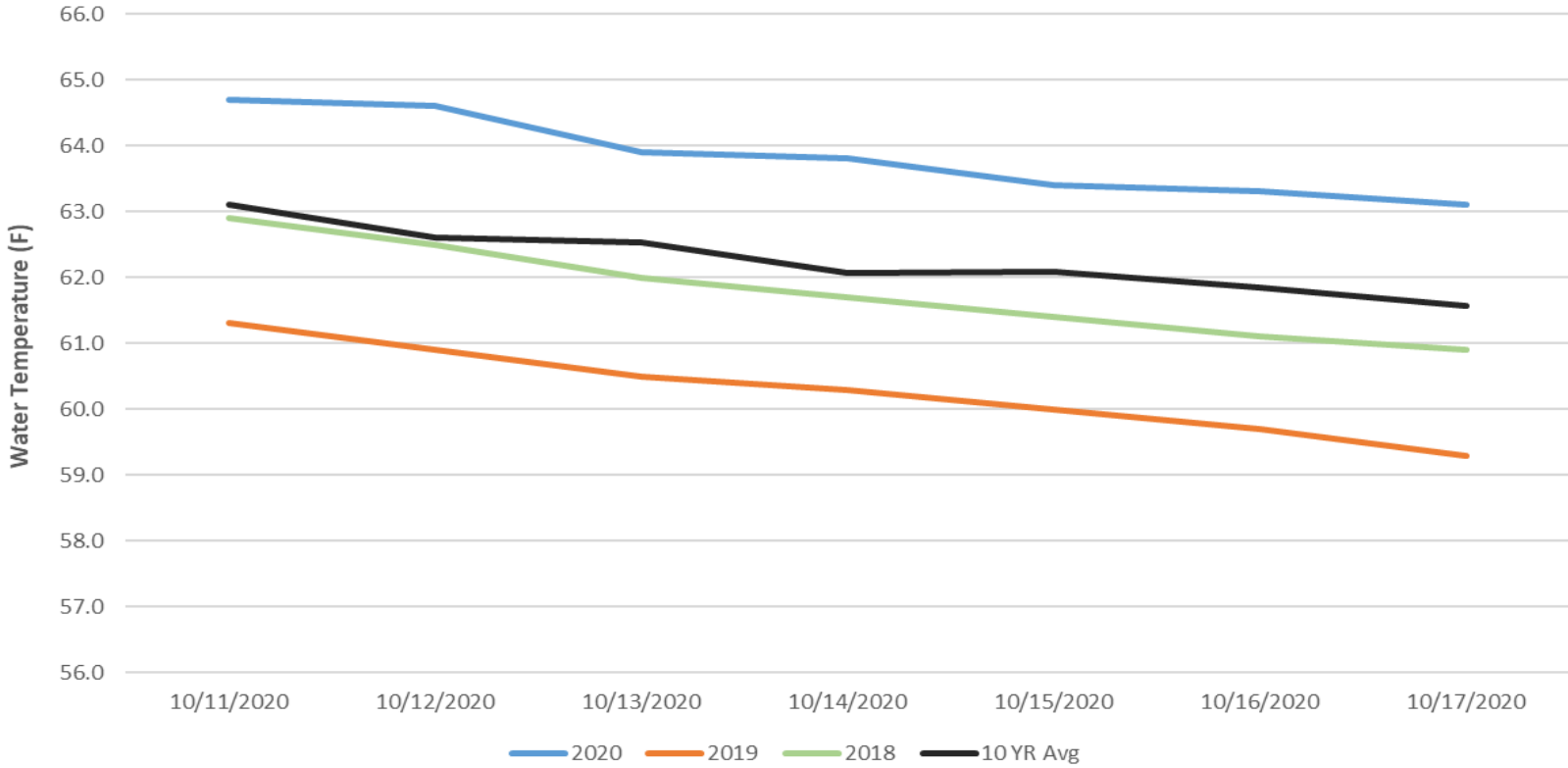
Pelicans on Preacher's Island: averaged 0 per day (see Pelicans tab)

### **Research:**

CRITFC genetics study at SMF

Approved by: Brett Call, OPM

### John Day Dam Water Temperatures (F)



# JDA Collection Channel Velocity

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

Date	Measurement Location	Speed (ft/sec)	SFL Turbine RPMs (1,2,3)	Bay 19 TW (ft)
10/12/2020	Unit 4	2.36	0,68,68	159.5
10/12/2020	Unit 12	2.48	0,68,68	159.5
10/16/2020	Unit 4	2.62	0,68,68	160.1
10/16/2020	Unit 12	2.71	0,68,68	160.1
10/17/2020	Unit 4	2.58	0,68,68	160.1
10/17/2020	Unit 12	2.78	0,68,68	160.1

Average Weekly Velocity (ft/sec)	2.59
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## JOHN DAY WEEKLY AVERAGES

	NE1 (Ft)	NE2 (Ft)	S.Ent (Ft)	SE1 (Ft)	N.Ent (Ft)	JBS Diff (Ft)	Bay19 (Ft)	Spill Vol. (kcfs)	Spill %	# Spillbays
Sunday	9.2	9.4	1.0	10.4	1.5	4.6	1.3	1.6	1.8	1
Sunday	9.2	9.4	1.0	10.4	1.6	4.6	1.4	1.6	1.8	1
Monday	8.7	8.9	1.0	10.1	1.6	4.6	1.6	1.6	2.4	1
Monday	8.6	8.9	1.0	10.2	1.5	4.6	1.6	1.6	2.5	1
Tuesday	8.6	8.9	1.5	9.9	1.6	4.6	1.3	1.6	2.0	1
Tuesday	8.6	8.9	1.5	9.8	1.5	4.5	1.5	1.6	2.0	1
Wednesday	8.9	8.9	1.2	9.7	1.6	4.6	1.5	1.6	1.9	1
Wednesday	8.7	8.9	1.4	8.2	1.6	4.5	1.8	1.6	1.7	1
Thursday	9.3	9.3	1.3	8.0	1.5	4.5	1.5	1.6	1.8	1
Thursday	9.1	9.4	1.4	8.0	1.5	4.6	1.5	1.6	1.5	1
Friday	9.3	9.5	1.3	8.0	1.4	4.7	1.4	1.6	1.6	1
Friday	9.6	9.9	1.4	8.0	1.4	4.5	1.5	1.6	1.3	1
Saturday	9.3	9.5	1.3	8.1	1.6	4.7	1.6	1.6	1.7	1
Saturday	9.2	9.5	1.4	8.0	1.5	4.5	1.4	1.6	1.6	1
<b>AVG:</b>	<b>9.0</b>	<b>9.2</b>	<b>1.3</b>	<b>9.1</b>	<b>1.5</b>	<b>4.6</b>	<b>1.5</b>	<b>1.6</b>	<b>1.8</b>	<b>1.0</b>

	Temp (F)	Secchi (Ft)	Fallbacks	Pelicans on Island
Sunday	64.7	6.0	N/A	0
Monday	64.6	6.0	N/A	1
Tuesday	63.9	6.0	N/A	1
Wednesday	63.8	6.0	N/A	1
Thursday	63.4	6.0	N/A	0
Friday	63.3	6.0	N/A	0
Saturday	63.1	6.0	N/A	0
<b>AVG</b>	<b>63.8</b>	<b>6.0</b>	<b>N/A</b>	<b>0</b>

John Day Dam  
Avian Zones



**JDA Bird Counts: 10/11/20 to 10/17/20**

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				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)	
11-Oct	PHFB	0	0	0	0	0	4	21	2	0	0	0	0	0	0	0	0	142	151	0	0	320
11-Oct	SWFB	0	0	300	334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	634
11-Oct	PH1	0	0	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
11-Oct	PH2	2	1	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
11-Oct	PH3	0	0	0	0	0	0	13	11	0	0	0	0	0	0	1	0	0	0	0	0	25
11-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Oct	SW2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11-Oct	SW3	0	0	1	0	1	0	11	31	0	0	0	0	0	0	0	0	0	0	0	0	44
<b>Avg/Survey</b>		<b>3</b>		<b>318</b>		<b>10</b>		<b>45</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>1</b>		<b>147</b>		<b>0</b>		<b>1043</b>
12-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142	153	295
12-Oct	SWFB	0	0	351	427	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	778
12-Oct	PH1	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
12-Oct	PH2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
12-Oct	PH3	0	0	0	0	0	0	15	11	0	0	0	0	0	0	0	0	0	0	0	0	26
12-Oct	SW1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12-Oct	SW2	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9
12-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Avg/Survey</b>		<b>2</b>		<b>389</b>		<b>4</b>		<b>18</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>148</b>		<b>1119</b>
13-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142	81	0	0	223
13-Oct	SWFB	0	0	225	312	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	537
13-Oct	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Oct	PH2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
13-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Oct	SW2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
13-Oct	SW3	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22
<b>Avg/Survey</b>		<b>2</b>		<b>269</b>		<b>0</b>		<b>12</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>112</b>		<b>0</b>		<b>787</b>
14-Oct	PHFB	0	0	11	0	0	0	7	0	0	0	0	0	0	0	0	0	140	127	0	0	285
14-Oct	SWFB	0	0	576	312	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	888
14-Oct	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Oct	SW1	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
14-Oct	SW2	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	21
14-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Avg/Survey</b>		<b>11</b>		<b>450</b>		<b>0</b>		<b>14</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>134</b>		<b>0</b>		<b>1215</b>

**JDA Bird Counts: 10/11/20 to 10/17/20**

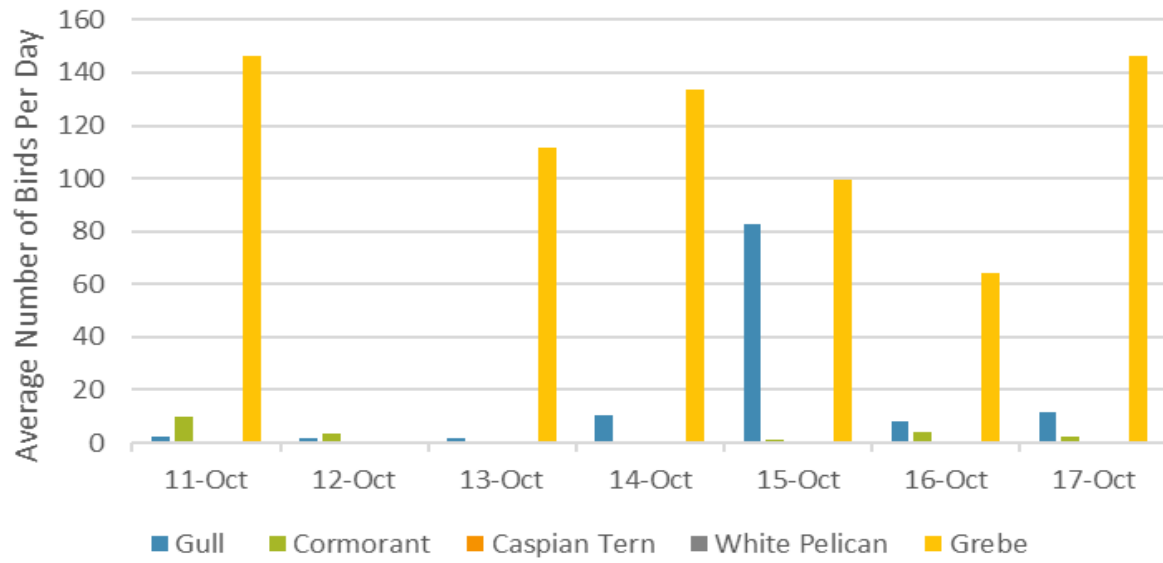
NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

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)	
15-Oct	PHFB	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	87	112	0	0	218
15-Oct	SWFB	0	0	283	198	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	481
15-Oct	PH1	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
15-Oct	PH2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
15-Oct	PH3	7	154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161
15-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Oct	SW2	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	16
15-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Avg/Survey</b>		<b>83</b>		<b>242</b>		<b>1</b>		<b>18</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>100</b>		<b>0</b>		<b>885</b>
16-Oct	PHFB	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	22	107	0	0	152
16-Oct	SWFB	0	0	307	337	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	644
16-Oct	PH1	0	0	3	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
16-Oct	PH2	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
16-Oct	PH3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
16-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Oct	SW2	3	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	30
16-Oct	SW3	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
<b>Avg/Survey</b>		<b>8</b>		<b>324</b>		<b>4</b>		<b>29</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>65</b>		<b>0</b>		<b>857</b>
17-Oct	PHFB	0	0	0	0	0	0	34	43	0	0	0	0	0	0	0	0	157	136	0	0	370
17-Oct	SWFB	0	0	367	253	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	620
17-Oct	PH1	1	18	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
17-Oct	PH2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
17-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Oct	SW2	0	0	0	0	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	5
17-Oct	SW3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>Avg/Survey</b>		<b>12</b>		<b>310</b>		<b>3</b>		<b>41</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>147</b>		<b>0</b>		<b>1022</b>

Totals	Gulls		Cormorant		Caspian tern		White Pelican		Grebe		Total
	F	NF	F	NF	F	NF	F	NF	F	NF	
<b>Weekly Total</b>	<b>238</b>	<b>4599</b>	<b>42</b>	<b>349</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1404</b>	<b>295</b>	<b>6928</b>
<b>Avg/Survey</b>	<b>17</b>	<b>329</b>	<b>3</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>21</b>	<b>495</b>



### Foraging Piscivorous Birds



### Non-Foraging Piscivorous Birds

