

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 11/27/2021

Inspection Period: 11/21/2021 thru 11/27/2021



**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.

John Day Dam	Inspection OOC	Criteria Limit	Total Number of Inspections: 12			Temperature:	50.8 F
						Secchi:	6.0 Ft.
<b>NORTH FISHWAY</b>							
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			
<b>SOUTH FISHWAY</b>							
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.)	8.6			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.45			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.3			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.2			
<b>JUVENILE PASSAGE</b>							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	Next Visual Inspection 11/22-11/25				
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 %	1.2	
Spill pattern	0	per FPP					
Turbine Unit Priority	12	per FPP	MU1-4 OOS due to BPA Line 1 outage, ETR 12/13/21				
Turbine 1% Efficiency	0	per FPP					

## Fisheries Related Operations

### **Smolt Monitoring Operations:**

The Smolt Monitoring Program concluded the 2021 sampling season on 9/15.

### **Adult Ladder Operations:**

North and South fish ladders are operating within criteria.

### **Project Operations:**

Current outages: MU1-4 (BPA Line 1 outage), MU2, MU7, MU8, MU12, MU13. Adult attraction flow for the North fish ladder is provided through spill bay #2 open one stop (1.6kcfs) during daylight hours through November 30th.

### **Maintenance:**

JD North Fishway's pump 4 has been pulled for maintenance (RTS to be determined).

### **Calibration:**

All gauges within the 0.3' criteria.

### **Bird Data:**

Steady number of cormorants mainly roosting on rocks in SW2 and SW3. Gull numbers decreasing with modest numbers resting on the wing wall in the SWFB and foraging in the tailrace mainly PH1 and PH3. A couple pelicans seen occasionally resting on Preacher's Island. Decrease in number of grebes in PHFB. (see 'Bird Count' tab for details).

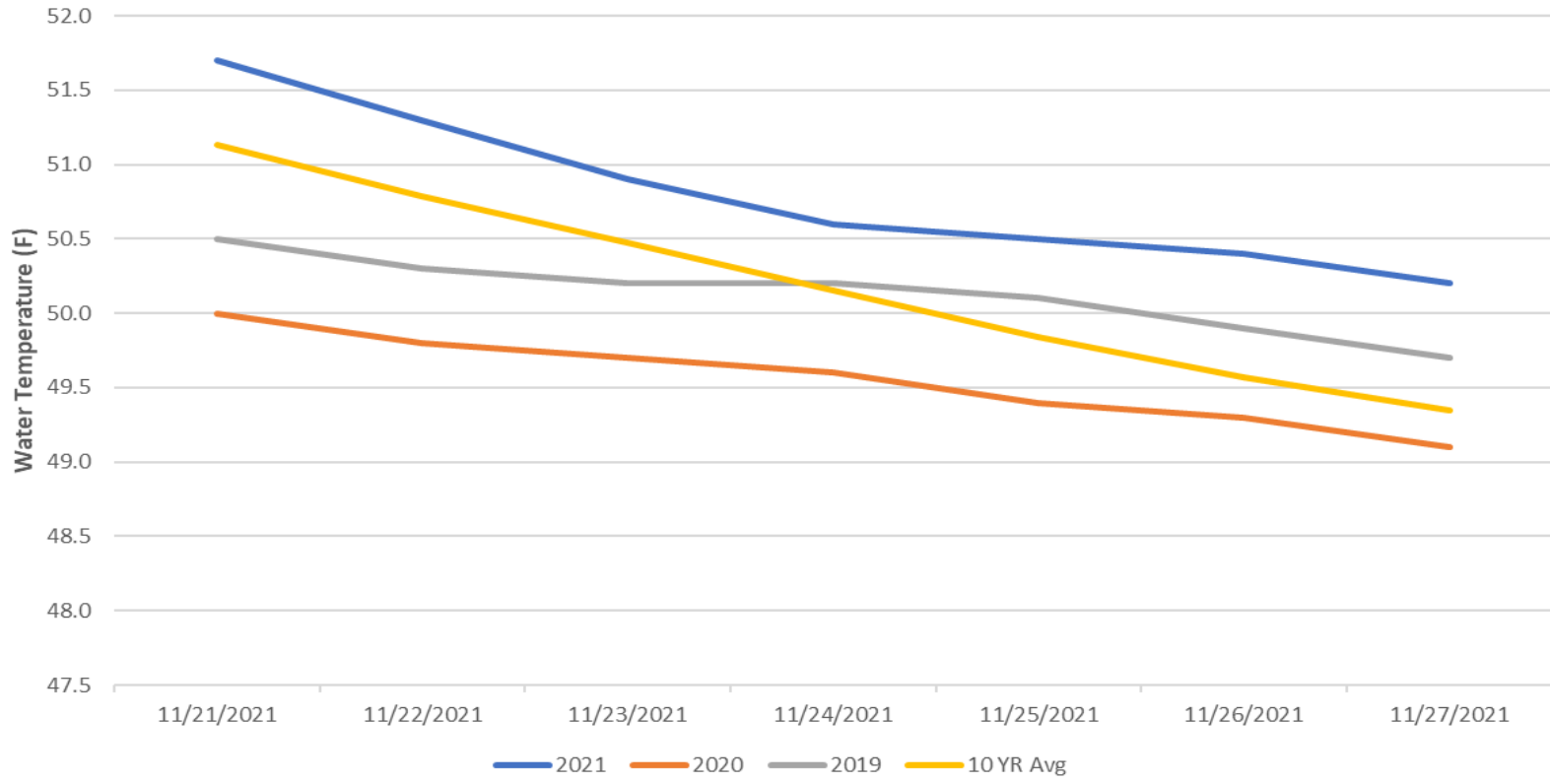
8 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 0 per day

### **Research:**

None

### 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)
11/22/2021	Unit 4	2.48	0,68,68	159.9
11/22/2021	Unit 12	2.58	0,68,68	159.9
11/26/2021	Unit 4	2.09	0,68,68	159.6
11/26/2021	Unit 12	2.58	0,68,68	159.6
11/27/2021	Unit 4	2.45	0,68,68	160.0
11/27/2021	Unit 12	2.54	0,68,68	160.0

Average Weekly Velocity (ft/sec)	2.45
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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	9.6	9.5	1.3	8.8	1.4	4.6	1.6	1.6	1.1	1
Sunday	10.2	10.1	1.1	9.4	1.3	4.7	1.4	1.6	1.0	1
Monday	9.7	9.6	1.4	8.8	1.6	4.5	1.6	1.6	1.2	1
Monday	9.1	9.0	1.4	8.3	1.7	4.6	1.7	1.6	1.2	1
Tuesday	9.1	9.0	1.5	8.2	1.4	4.5	1.7	1.6	1.2	1
Tuesday	9.7	9.6	1.3	8.8	1.4	4.8	1.5	1.6	1.1	1
Wednesday	9.1	9.1	1.4	8.2	1.6	4.7	1.5	1.6	1.1	1
Wednesday	9.1	9.1	1.3	8.4	1.5	4.6	1.5	1.6	1.6	1
Thursday										
Thursday										
Friday	8.4	8.3	1.5	8.0	1.5	4.5	1.9	1.6	1.3	1
Friday	8.8	8.8	1.3	8.4	1.5	4.6	1.7	1.6	1.3	1
Saturday	9.3	9.2	1.3	8.7	1.4	4.7	1.6	1.6	1.2	1
Saturday	9.2	9.2	1.3	8.7	1.5	4.6	1.6	1.6	1.2	1
<b>AVG:</b>	<b>9.3</b>	<b>9.2</b>	<b>1.3</b>	<b>8.6</b>	<b>1.5</b>	<b>4.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.2</b>	<b>1.0</b>

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	51.7	6.0	N/A	0
Monday	51.3	6.0	N/A	0
Tuesday	50.9	6.0	N/A	0
Wednesday	50.6	6.0	N/A	0
Thursday	50.5		N/A	
Friday	50.4	6.0	N/A	0
Saturday	50.2	6.0	N/A	1
<b>AVG</b>	<b>50.8</b>	<b>6.0</b>	<b>N/A</b>	<b>0</b>

John Day Dam  
Avian Zones



**JDA Bird Counts: 11/21/21 to 11/27/21**

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)	
21-Nov	PHFB	0	0	0	212	1	0	4	0	0	0	0	0	0	0	0	0	4	0	0	0	221
21-Nov	SWFB	0	0	121	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	209
21-Nov	PH1	28	38	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
21-Nov	PH2	13	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
21-Nov	PH3	6	7	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
21-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Nov	SW2	0	0	0	0	0	0	49	63	0	0	0	0	0	0	0	0	0	0	0	0	112
21-Nov	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>51</b>		<b>232</b>		<b>4</b>		<b>58</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>2</b>		<b>0</b>		<b>346</b>
22-Nov	PHFB	0	0	107	192	0	0	6	5	0	0	0	0	0	0	0	0	3	3	0	0	316
22-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Nov	PH1	0	62	37	15	0	3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	125
22-Nov	PH2	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
22-Nov	PH3	0	14	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
22-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Nov	SW2	0	0	0	0	0	0	24	40	0	0	0	0	0	0	0	0	0	0	0	0	64
22-Nov	SW3	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	14
<b>Avg/Survey</b>		<b>41</b>		<b>194</b>		<b>2</b>		<b>49</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>3</b>		<b>0</b>		<b>288</b>
23-Nov	PHFB	0	0	158	187	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	350
23-Nov	SWFB	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	23
23-Nov	PH1	10	43	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
23-Nov	PH2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
23-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Nov	SW2	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	15
23-Nov	SW3	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	23
<b>Avg/Survey</b>		<b>31</b>		<b>173</b>		<b>2</b>		<b>31</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>3</b>		<b>0</b>		<b>238</b>
24-Nov	PHFB	0	0	201	37	0	0	4	0	0	0	0	0	0	0	0	0	5	0	0	0	247
24-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Nov	PH1	14	121	0	0	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	145
24-Nov	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Nov	SW2	0	0	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0	0	0	0	44
24-Nov	SW3	0	0	0	14	0	0	21	2	0	0	0	0	0	0	0	0	0	0	0	0	37
<b>Avg/Survey</b>		<b>68</b>		<b>126</b>		<b>5</b>		<b>36</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>3</b>		<b>0</b>		<b>237</b>

**JDA Bird Counts: 11/25/21 to 11/27/21**

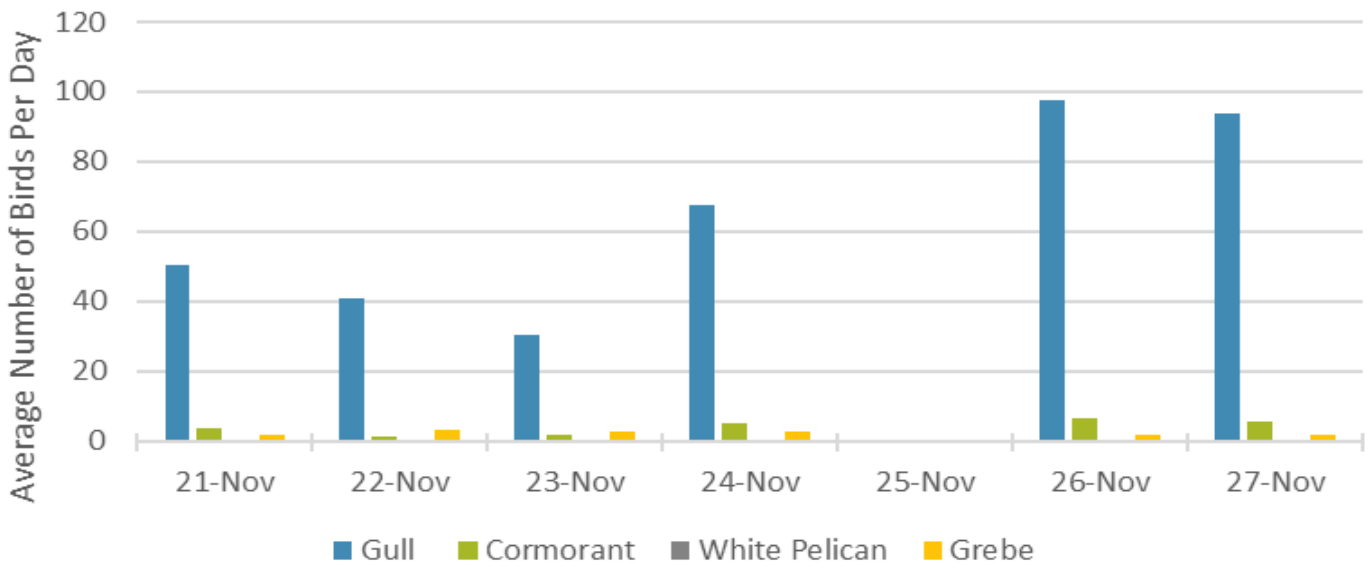
F(1): Forage AM survey   F(2): Forage PM Survey   NF(1): Non-Forage AM Survey   NF(2): Non-Forage PM Survey

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)	
25-Nov	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Nov	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Nov	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Nov	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Nov	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>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
26-Nov	PHFB	0	0	222	251	0	0	14	9	0	0	0	0	0	0	0	0	2	2	0	0	500
26-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Nov	PH1	43	88	0	0	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141
26-Nov	PH2	20	17	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
26-Nov	PH3	5	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
26-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Nov	SW2	0	0	0	0	0	0	35	46	0	0	0	0	0	0	0	0	0	0	0	0	81
26-Nov	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>98</b>	<b>237</b>	<b>7</b>	<b>52</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>395</b>
27-Nov	PHFB	0	0	191	277	0	0	0	14	0	0	0	0	0	0	0	2	2	0	0	0	486
27-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Nov	PH1	42	98	14	10	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	173
27-Nov	PH2	16	18	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
27-Nov	PH3	11	3	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
27-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Nov	SW2	0	0	0	0	0	0	27	22	0	0	0	0	0	0	0	0	0	0	0	0	49
27-Nov	SW3	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19
<b>Avg/Survey</b>		<b>94</b>	<b>275</b>	<b>6</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>418</b>

Totals	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF					
<b>Weekly Total</b>	<b>762</b>	<b>2471</b>	<b>48</b>	<b>531</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>1920</b>						
<b>Avg/Survey</b>	<b>54</b>	<b>177</b>	<b>3</b>	<b>38</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>274</b>						



### Foraging Piscivorous Birds



### Non-Foraging Piscivorous Birds

