

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 12/11/2021

Inspection Period: 12/5/2021 thru 12/11/2021



**US Army Corps  
of Engineers**  
Portland District

JD/WC Project-Fisheries  
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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: 10			Temperature: 48.9 F	Secchi: 4.1 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.)	N/A			
<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.)	8.4			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.54			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.2			
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.)	4.7			
Submersible traveling screens	0	visual inspect	Next Visual Inspection				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.5', wkly					
Spill volume	0	per FPP	Avg (kcfs)	31.1	Avg %	18.8	
Spill pattern	0	per FPP					
Turbine Unit Priority	7	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. Smolt Monitoring Facility was dewatered on 12/1.

### **Adult Ladder Operations:**

South fish ladder is operating within criteria. North fish ladder was dewatered on 12/6.

### **Project Operations:**

Current outages: MU1-4 (BPA Line 1 outage), MU2, MU5, MU7, MU8, MU12, MU13.

### **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:**

Decreasing number of cormorants mainly roosting on rocks in SW2 and SW3 or towers in PHFB. Gull numbers decreasing with modest numbers resting in the water in PHFB or 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).

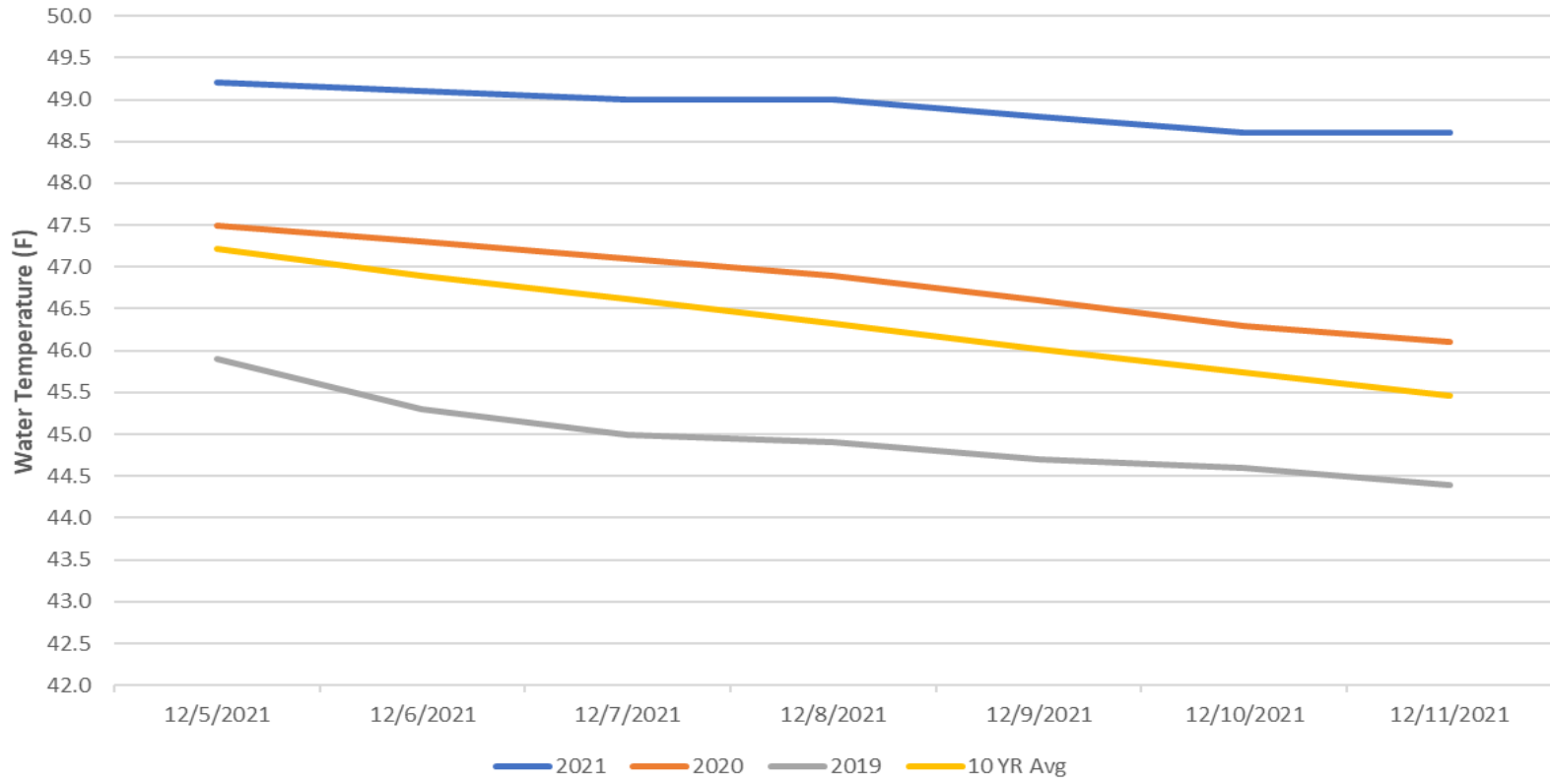
8 of 125 avian lines down, will need to be replaced

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)
12/10/2021	Unit 4	2.48	0,68,68	160.0
12/10/2021	Unit 12	2.60	0,68,68	160.0
12/11/2021	Unit 4	2.45	0,68,68	159.7
12/11/2021	Unit 12	2.65	0,68,68	159.7

Average Weekly Velocity (ft/sec)	2.54
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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
<b>Sunday</b>	9.5	9.5	1.3	8.9		4.7	1.7	29.8	18.2	7
<b>Monday</b>	9.4	9.3	1.4	8.7		4.9	1.9	30.0	18.3	7
<b>Tuesday</b>	9.0	9.0	1.4	8.0		4.9	1.5	35.1	21.0	9
<b>Wednesday</b>	9.7	9.6	1.1	8.7		4.6	1.1	17.7	11.1	9
<b>Thursday</b>	8.8	8.7	1.5	8.0		4.7	1.9	35.1	21.2	9
<b>Friday</b>	9.3	9.2	1.3	8.3		4.6	1.4	35.1	21.0	9
<b>Saturday</b>	9.0	8.9	1.3	8.0		4.8	1.4	35.1	21.1	9
<b>AVG:</b>	9.2	9.2	1.3	8.4	N/A	4.7	1.6	31.1	18.8	8.4

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
<b>Sunday</b>	49.2	6.0	N/A	0
<b>Monday</b>	49.1	6.0	N/A	0
<b>Tuesday</b>	49.0	6.0	N/A	0
<b>Wednesday</b>	49.0	3.0	N/A	0
<b>Thursday</b>	48.8	2.5	N/A	0
<b>Friday</b>	48.6	2.0	N/A	0
<b>Saturday</b>	48.6	3.0	N/A	0
<b>AVG</b>	48.9	4.1	N/A	0

John Day Dam  
Avian Zones



**JDA Bird Counts: 12/5/21 to 12/11/21**

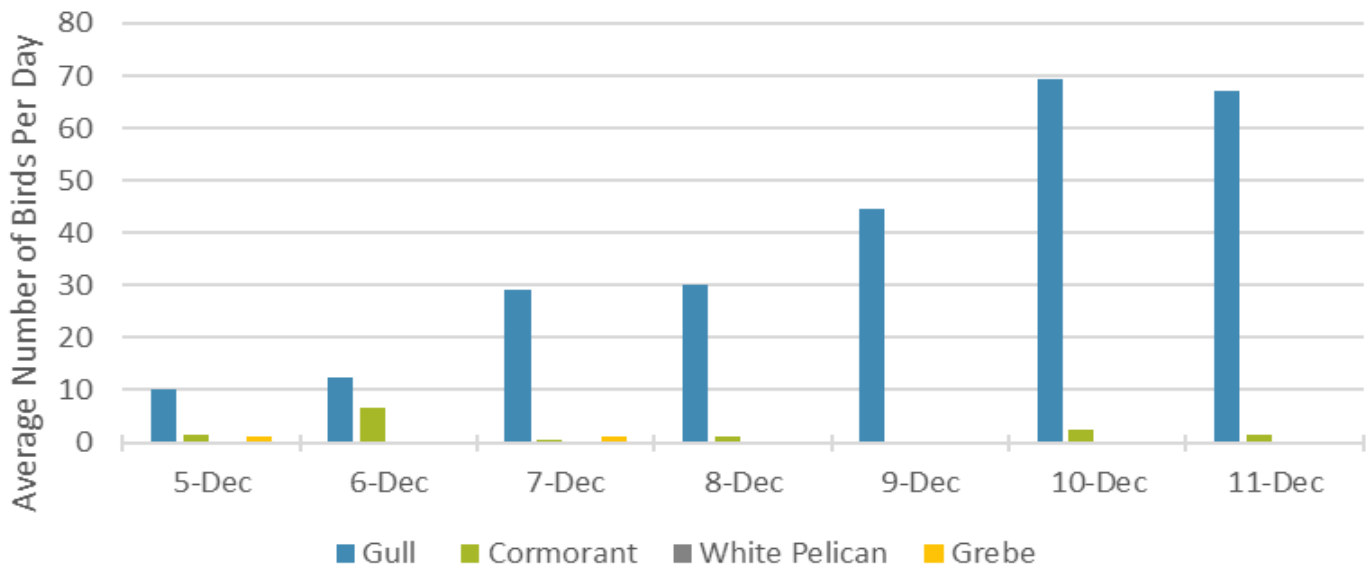
F(1): Forage AM survey F(2): Forage PM Survey NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

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)	
5-Dec	PHFB	0	0	124	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	126
5-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Dec	PH1	9	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
5-Dec	PH2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5-Dec	PH3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
5-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Dec	SW2	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5-Dec	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>10</b>		<b>62</b>		<b>2</b>		<b>3</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>1</b>		<b>0</b>		<b>77</b>
6-Dec	PHFB	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
6-Dec	SWFB	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
6-Dec	PH1	23	0	27	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
6-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Dec	SW3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
<b>Avg/Survey</b>		<b>13</b>		<b>18</b>		<b>7</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>37</b>
7-Dec	PHFB	0	0	97	0	0	0	18	0	0	0	0	0	0	0	0	0	2	0	0	0	117
7-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Dec	PH1	27	0	53	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81
7-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Dec	SW3	31	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	40
<b>Avg/Survey</b>		<b>29</b>		<b>75</b>		<b>1</b>		<b>14</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>1</b>		<b>0</b>		<b>119</b>
8-Dec	PHFB	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
8-Dec	SWFB	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
8-Dec	PH1	37	0	10	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
8-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Dec	SW1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8-Dec	SW2	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
8-Dec	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>30</b>		<b>42</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>73</b>





## Foraging Piscivorous Birds



## Non-Foraging Piscivorous Birds

