

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 4/3/2021

Inspection Period: 3/28/2021 thru 4/3/2021



**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: 14				Temperature: 45.5 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.)	1.6				
<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.)	1.6				
Entrance weir SE1	1	depth (≥ 8')	AVG (Ft.)	8.8				
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.83				
N. Entrance PH(Bay 19)differential	1	1.0' - 2.0'	AVG (Ft.)	1.9				
Entrance weir NE1	1	depth (≥ 8')	AVG (Ft.)	9.2				
Entrance weir NE2	1	depth (≥ 8')	AVG (Ft.)	9.3				
<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 3/22-3/25					
Turbine trashrack drawdown	0	<1.5', wkly						
Vert barrier screen drawdown	0	<1.5', wkly						
Spill volume	0	per FPP	Avg (kcfs)	OOS	Avg %	OOS		
Spill pattern	0	per FPP						
Turbine Unit Priority	0	per FPP						
Turbine 1% Efficiency	0	per FPP						

## Fisheries Related Operations

### **Smolt Monitoring Operations:**

Smolt Monitoring Facility concluded early morning sampling and resumed sampling every other day for condition monitoring. 68 juvenile lamprey were collected during early morning sampling efforts (8 sampling days).

### **Adult Ladder Operations:**

JD South Adult Fishway RTS February 25.

JD North Adult Fishway RTS January 15.

### **Project Operations:**

Current outages: MU5-8 (Line 2 BPA MOD work), MU7, MU12, MU16

Tailwater Average Weekly TDG: 103.3

### **Maintenance:**

JD North Fishway's pump 4 has been pulled for maintenance (RTS to be determined). Spillbay #10 will be operated manually until further notice.

Calibration - All gauges within the 0.3' criteria.

### **Bird Data:**

Steady number of cormorants mainly loafing in SW2 or on towers in PHFB. Low gull numbers. Pelican numbers are starting to increase on Preacher's Island. (see 'Bird Count' tab for details).

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

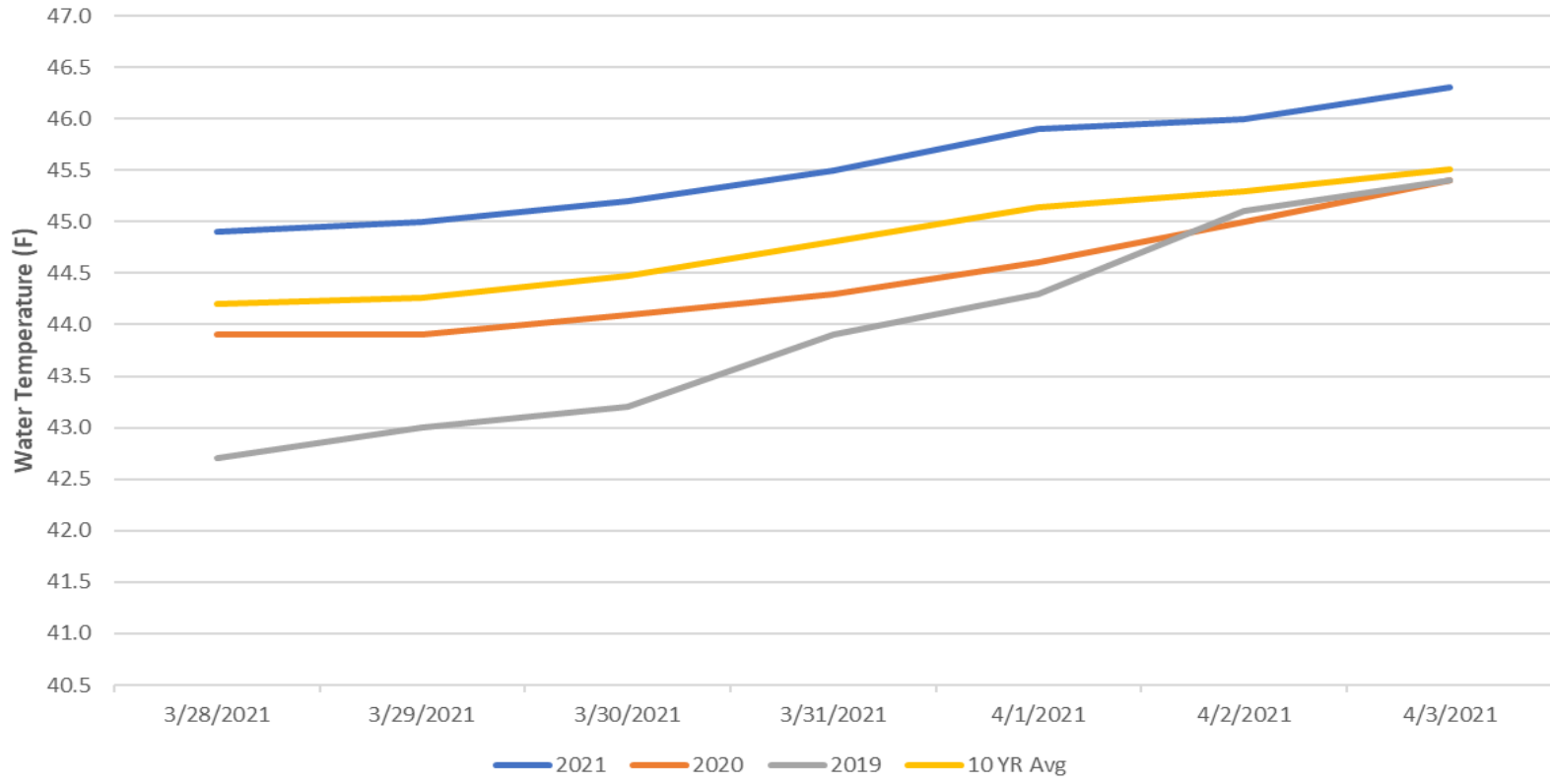
Pelicans on Preacher's Island: averaged 3 per day

### **Research:**

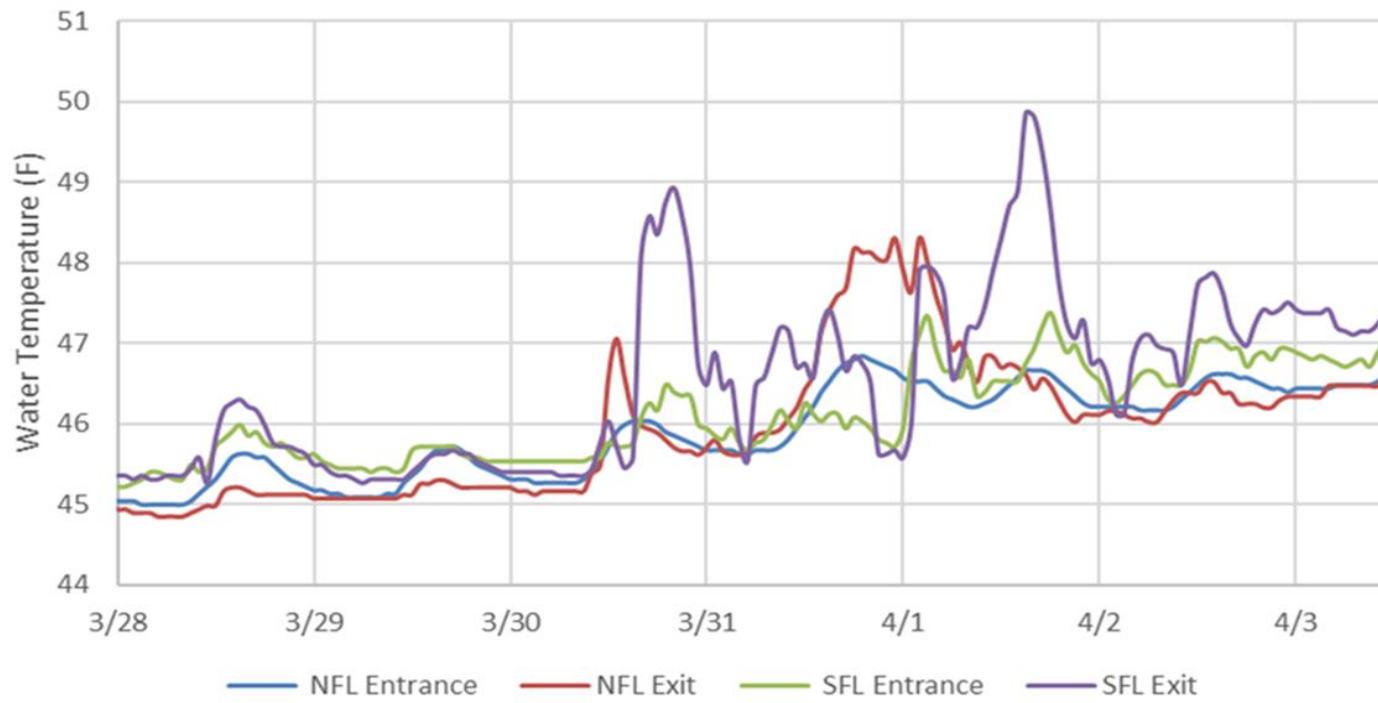
PSMFC Juvenile lamprey genetic work continues

Approved by: Brett Call, OPM

John Day Dam Water Temperatures (F)



Water Temperature of JDA Fish Ladders (3/28 - 4/3)



# 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)
3/28/2021	Unit 4	2.90	68,0,68	160.5
3/28/2021	Unit 12	3.04	68,0,68	160.5
4/1/2021	Unit 4	2.66	68,0,68	160.1
4/1/2021	Unit 12	2.75	68,0,68	160.1
4/3/2021	Unit 4	2.74	68,0,68	160.5
4/3/2021	Unit 12	2.90	68,0,68	160.5

Average Weekly Velocity (ft/sec)	2.83
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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	10.4	10.2	1.5	9.2	1.5	4.7	1.8	OOS	OOS	OOS
Sunday	10.1	9.9	1.5	9.0	1.6	4.6	1.9	OOS	OOS	OOS
Monday	10.1	9.9	1.5	8.8	1.6	4.6	1.8	OOS	OOS	OOS
Monday	9.7	9.5	1.5	8.4	1.5	4.5	1.9	OOS	OOS	OOS
Tuesday	9.9	9.8	1.7	8.2	1.6	4.6	1.9	OOS	OOS	OOS
Tuesday	10.0	9.8	1.7	8.5	1.6	4.7	1.8	OOS	OOS	OOS
Wednesday	8.2	8.5	1.9	8.4	1.4	4.5	1.9	OOS	OOS	OOS
Wednesday	8.5	8.5	1.7	8.5	1.5	4.5	1.9	OOS	OOS	OOS
Thursday	8.5	8.8	1.7	8.7	1.6	4.5	1.7	OOS	OOS	OOS
Thursday	8.4	8.7	1.9	8.5	1.6	4.7	1.9	OOS	OOS	OOS
Friday	7.4	7.7	2.0	7.9	1.7	4.6	2.4	OOS	OOS	OOS
Friday	9.0	9.2	1.5	9.5	1.5	4.6	2.0	OOS	OOS	OOS
Saturday	9.8	10.0	1.3	10.0	1.6	4.6	1.6	OOS	OOS	OOS
Saturday	9.3	9.5	1.4	9.7	1.6	4.5	2.0	OOS	OOS	OOS
<b>AVG:</b>	<b>9.2</b>	<b>9.3</b>	<b>1.6</b>	<b>8.8</b>	<b>1.6</b>	<b>4.6</b>	<b>1.9</b>	<b>OOS</b>	<b>OOS</b>	<b>OOS</b>

	Temp (F)	Secchi (Ft)	Fallbacks	Pelicans on Island
Sunday	44.9	6.0	10	1
Monday	45.0	6.0	N/A	0
Tuesday	45.2	6.0	8	0
Wednesday	45.5	6.0	N/A	7
Thursday	45.9	6.0	12	7
Friday	46.0	6.0	N/A	5
Saturday	46.3	6.0	4	0
<b>AVG</b>	<b>45.5</b>	<b>6.0</b>	<b>9</b>	<b>3</b>

John Day Dam  
Avian Zones



**JDA Bird Counts: 3/28/21 to 4/3/21**

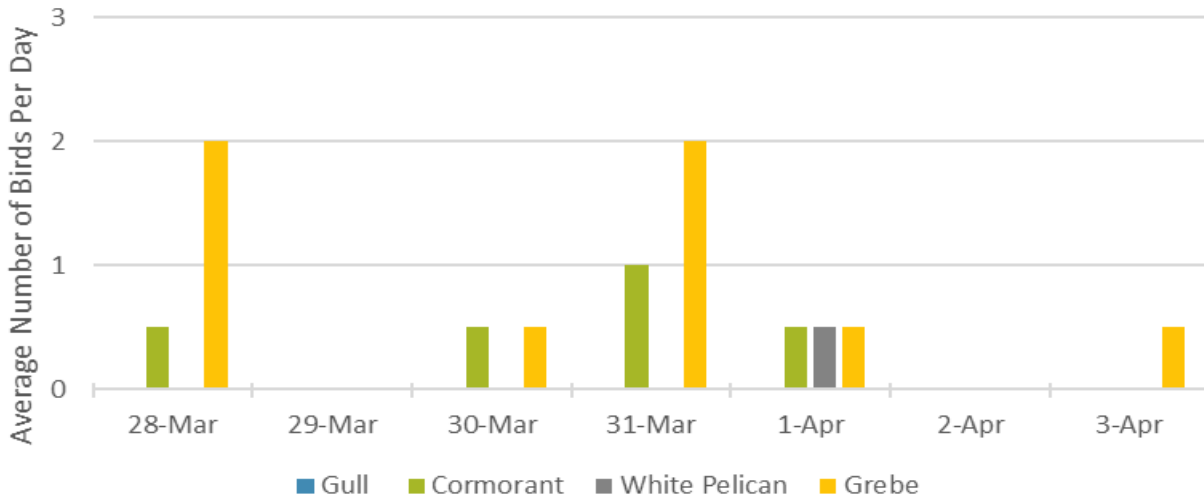
F(1): Forage AM survey F(2): Forage PM Survey NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Bald Eagle				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)	F(1)	F(2)	NF(1)	NF(2)	
28-Mar	PHFB	0	0	0	0	1	0	16	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	21
28-Mar	SWFB	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
28-Mar	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Mar	SW2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
28-Mar	SW3	0	0	0	0	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>		0		2		1		9		0		0		0		0		2		0		0		0		13
29-Mar	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	SW2	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
29-Mar	SW3	0	0	0	0	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>		0		0		0		2		0		0		0		0		0		0		0		0		2
30-Mar	PHFB	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
30-Mar	SWFB	0	0	4	2	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	8
30-Mar	PH1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
30-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Mar	SW2	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
30-Mar	SW3	0	0	0	0	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>		0		3		1		21		0		0		0		0		1		0		0		0		25
31-Mar	PHFB	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	20
31-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Mar	PH1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
31-Mar	PH2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
31-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Mar	SW2	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
31-Mar	SW3	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
<b>Avg/Survey</b>		0		2		1		17		0		0		0		0		2		0		0		0		22





### Foraging Piscivorous Birds



### Non-Foraging Piscivorous Birds

