

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 4/17/2021

Inspection Period: 4/11/2021 thru 4/17/2021



**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: 48.7 F	Secchi: 5.2 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.)	9.2			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.57			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.7			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	8.9			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.1			
<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 4/26-4/29				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.5', wkly					
Spill volume	0	per FPP	AVG (kcfs)	64.1	Avg %	49.0	
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. 55 juvenile lamprey were collected during early morning sampling efforts (7 sampling days).

### **Adult Ladder Operations:**

Log boom at the south fish ladder exit removed following a east wind event. The boom will need to be repaired and the estimated time is 2-3 weeks. A temporary log boom will be installed while the other boom is being repaired.

### **Project Operations:**

Current outages: MU5-8 (Line 2 BPA MOD work), MU12, MU16. Spring spill started on April 10 with TSW's installed.  
Tailwater Average Weekly TDG: 114.1

### **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:**

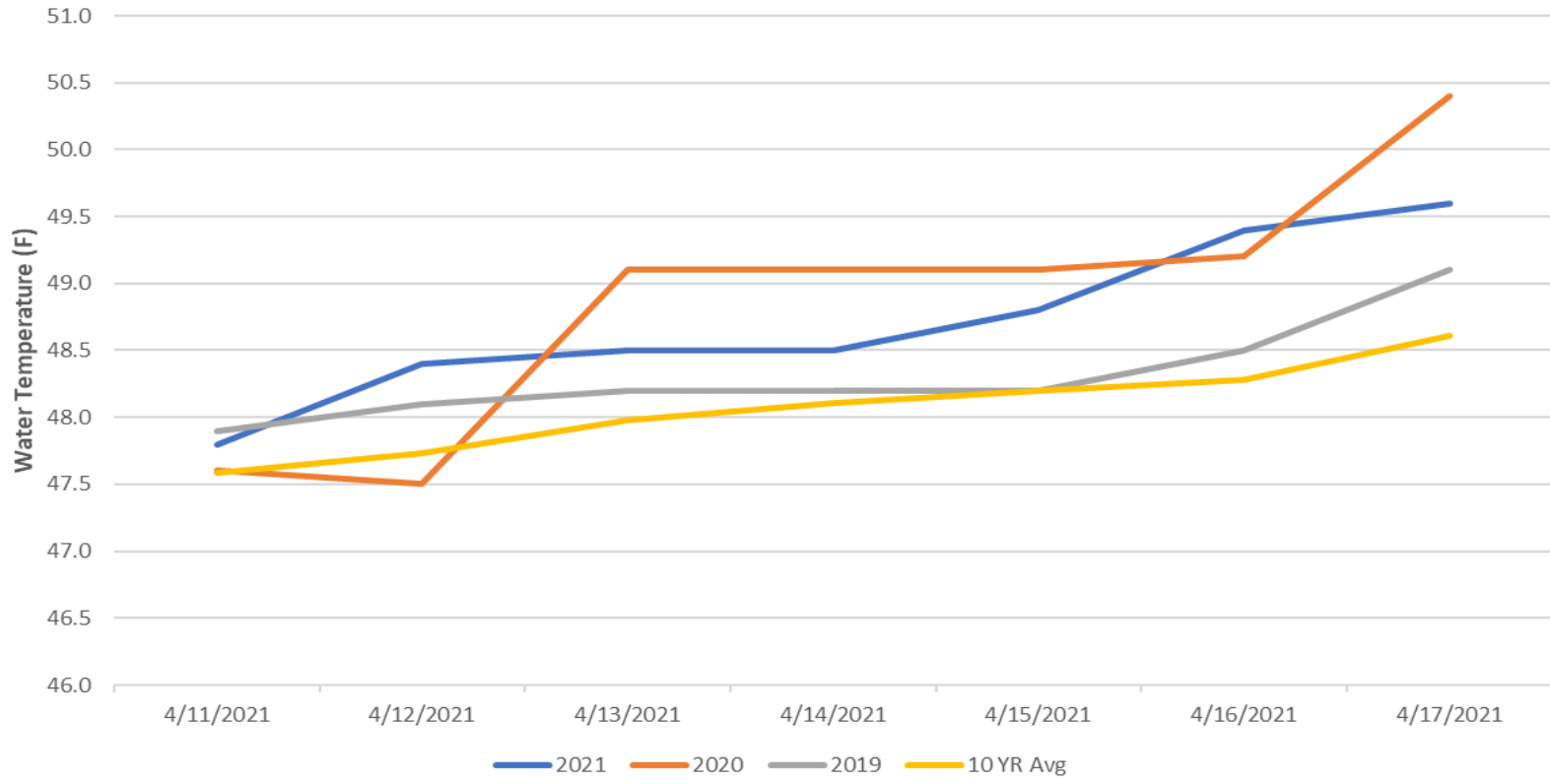
Steady number of cormorants mainly loafing in SW2 or on towers in PHFB. Low gull numbers. Pelican numbers are starting to increase on Preacher's Island. (see 'Bird Count' tab for details).

1 of 125 avian lines down, will need to be replaced  
Pelicans on Preacher's Island: averaged 4 per day

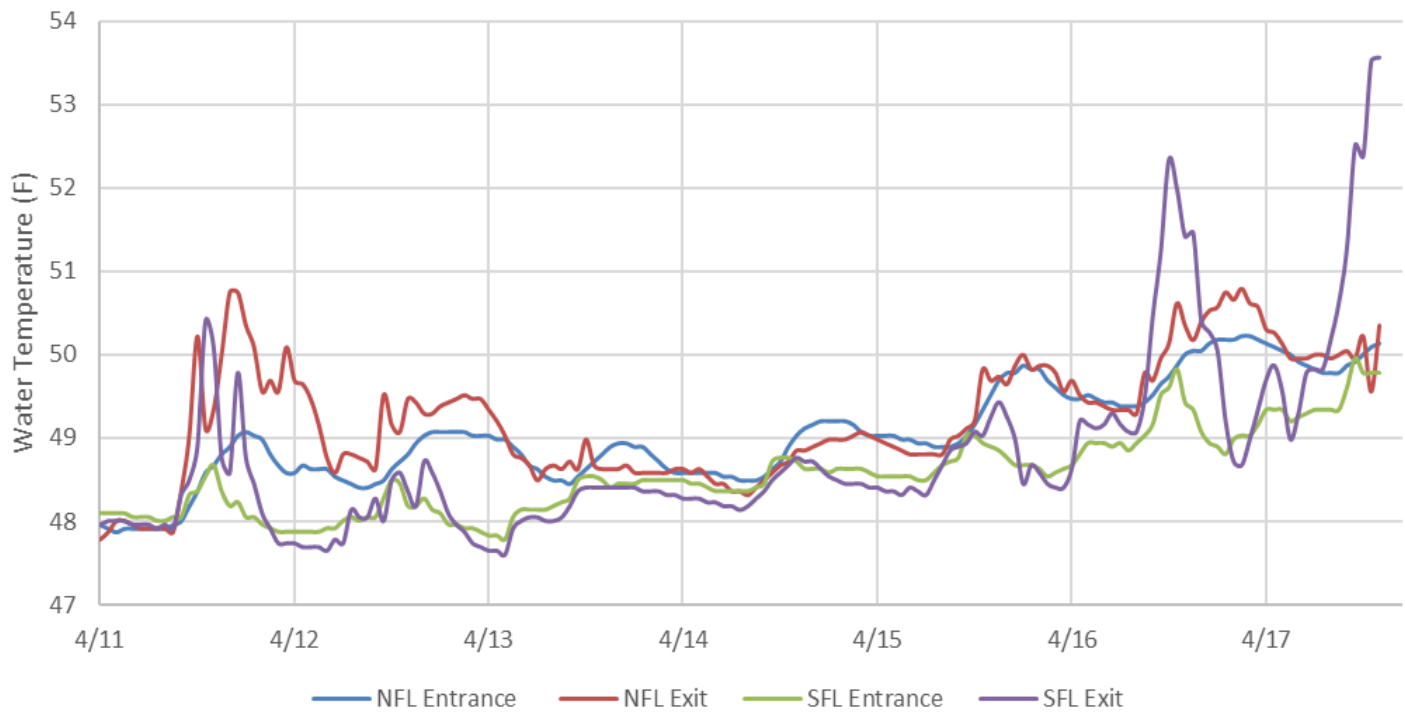
### **Research:**

PSMFC Juvenile lamprey genetic work continues

John Day Dam Water Temperatures (F)



Water Temperature of JDA Fish Ladders (4/11 - 4/17)



# 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)
4/11/2021	Unit 4	2.54	68,0,68	159.3
4/11/2021	Unit 12	2.70	68,0,68	159.3
4/14/2021	Unit 4	2.53	0,68,68	159.5
4/14/2021	Unit 12	2.41	0,68,68	159.5
4/17/2021	Unit 4	2.56	0,68,68	159.7
4/17/2021	Unit 12	2.66	0,68,68	159.7

Average Weekly Velocity (ft/sec)	2.57
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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	8.2	8.4	1.5	8.6	1.4	4.6	1.9	42.1	32.1	15
Sunday	8.6	8.8	1.1	9.1	1.7	4.5	1.7	85.0	62.3	19
Monday	9.5	9.7	1.3	9.7	1.5	4.5	1.7			
Monday	8.7	8.9	1.3	9.1	1.7	4.6	1.8	80.1	60.4	19
Tuesday	9.1	9.3	1.2	9.4	1.4	4.6	1.5	41.8	32.5	19
Tuesday	8.7	8.9	1.2	9.3	1.6	4.4	1.8	78.1	59.3	19
Wednesday	9.0	9.2	1.3	9.4	1.4	4.6	1.7	41.0	31.0	19
Wednesday	8.8	8.9	1.4	9.1	1.5	4.6	1.5	73.0	57.8	19
Thursday	9.0	9.2	1.4	9.3	1.5	4.6	1.6	42.3	32.0	16
Thursday	8.9	9.1	1.2	9.3	1.6	4.6	1.6	80.1	60.7	19
Friday	8.5	8.7	1.1	8.9	1.6	4.6	1.8	73.0	58.4	19
Friday	9.5	9.6	1.1	9.0	1.5	4.6	1.8	73.0	58.4	19
Saturday	9.0	9.2	1.3	9.6	1.4	4.6	1.7	43.2	31.7	16
Saturday	8.9	9.1	1.1	9.4	1.5	4.6	1.6	80.2	60.0	19
<b>AVG:</b>	<b>8.9</b>	<b>9.1</b>	<b>1.3</b>	<b>9.2</b>	<b>1.5</b>	<b>4.6</b>	<b>1.7</b>	<b>64.1</b>	<b>49.0</b>	<b>18.2</b>

	Temp (F)	Secchi (Ft)	Fallbacks	Pelicans on Island
Sunday	47.8	5.0	4	5
Monday	48.4	6.0	N/A	3
Tuesday	48.5	5.5	4	3
Wednesday	48.5	5.0	N/A	3
Thursday	48.8	5.0	4	9
Friday	49.4	5.0	N/A	9
Saturday	49.6	5.0	3	6

<b>AVG</b>	<b>48.7</b>	<b>5.2</b>	<b>4</b>	<b>5</b>
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John Day Dam  
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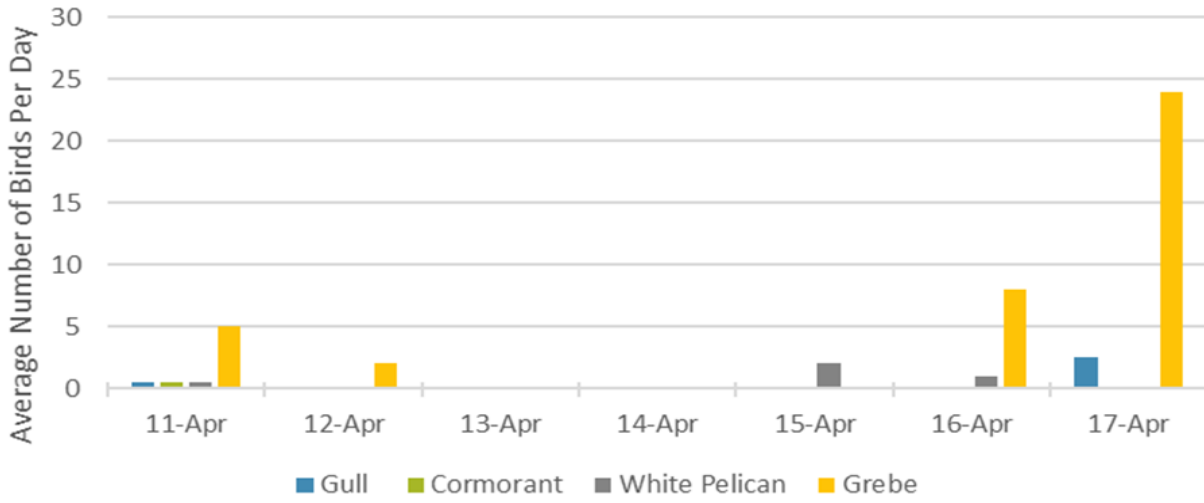








### Foraging Piscivorous Birds



### Non-Foraging Piscivorous Birds

