

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 7/17/2021

Inspection Period: 7/11/2021 thru 7/17/2021



**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:	71.0 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.)	1.2			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.9			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.64			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.5			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.8			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	10.3			
<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 7/26-7/29				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.5', wkly					
Spill volume	0	per FPP	AVG (kcfs)	53.0	Avg %	35.4	
Spill pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

## Fisheries Related Operations

### **Smolt Monitoring Operations:**

High temperature sampling protocols went into effect on 7/8/21 due to water temperatures exceeding 70°F. Smolt Monitoring Facility is currently conducting condition sampling on Monday and Thursday each week until daily average water temperatures drop below 69.5°F.

### **Adult Ladder Operations:**

North and South fish ladders are operating within criteria. Entered shad mode on 6/3/21.

### **Project Operations:**

Current outages: MU7, MU8, MU9-12 (Line 3 BPA MOD work) MU12, MU13, MU16. Summer Spill started on June 16.  
Tailwater Average Weekly TDG: 114.7

### **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. Spillbay #3 failed on 6/5/21 at 0503, the motor for spill gate #3 will need to be replaced.

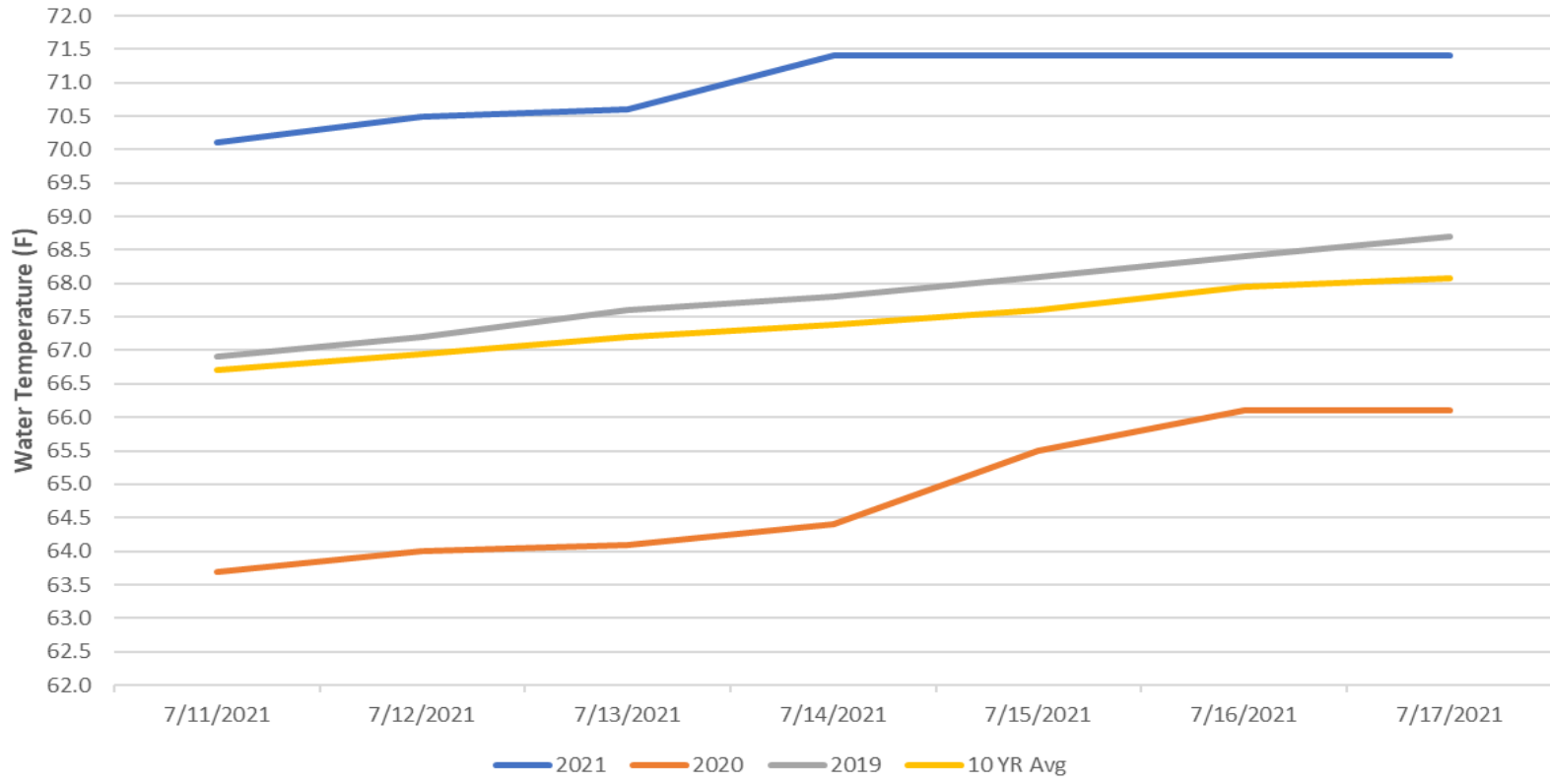
### **Bird Data:**

Few cormorants seen in PHFB . Foraging gull numbers low, increasing numbers seen nonforaging in SWFB. Pelican numbers increasing on Preacher's Island, with a lot of foraging behavior seen in spillway. Slight decrease of number of Grebes in PHFB. (see 'Bird Count' tab for details). USDA Hazing started on 04/16/21.  
1 of 125 avian lines down, will need to be replaced  
Pelicans on Preacher's Island: averaged 135 per day

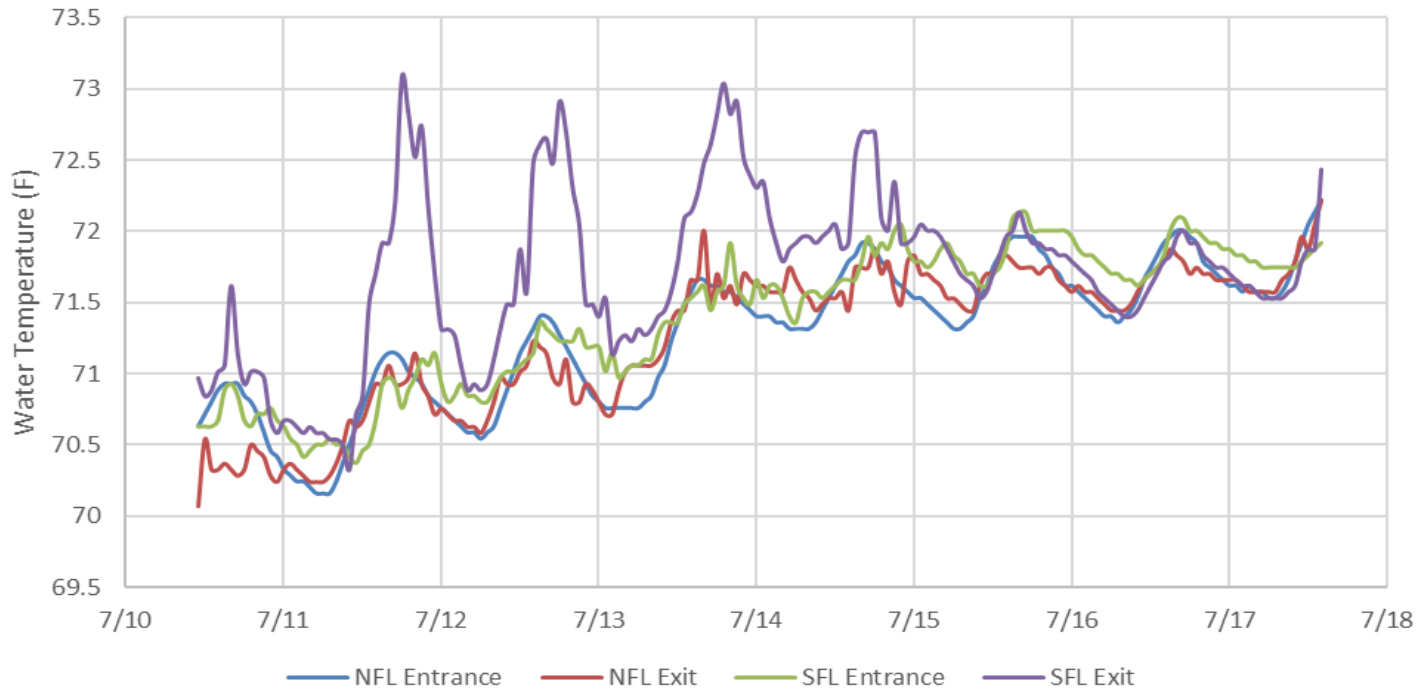
### **Research:**

PSMFC Juvenile lamprey genetic work continues.

### John Day Dam Water Temperatures (F)



Water Temperature of JDA Fish Ladders (7/11 - 7/17)



# 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)
7/12/2021	Unit 4	2.59	0,68,68	160.7
7/12/2021	Unit 12	2.59	0,68,68	160.7
7/16/2021	Unit 4	2.62	0,68,68	160.5
7/16/2021	Unit 12	2.64	0,68,68	160.5
7/17/2021	Unit 4	2.71	0,68,68	160.6
7/17/2021	Unit 12	2.70	0,68,68	160.6

Average Weekly Velocity (ft/sec)	2.64
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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	8.4	8.9	1.2	9.1	1.5	4.7	1.8	45.2	34.7	16
Sunday	9.3	9.8	1.1	9.9	1.5	4.5	1.6	45.0	35.3	16
Monday	9.6	10.2	1.4	10.0	1.6	4.7	1.3	49.0	35.0	17
Monday	9.9	10.4	1.1	10.6	1.5	4.6	1.5	60.2	34.3	18
Tuesday	9.7	10.2	1.1	10.2	1.4	4.6	1.5	49.0	34.0	17
Tuesday	10.7	11.2	1.2	10.9	1.4	4.5	1.6	70.0	34.0	18
Wednesday	9.6	10.1	1.2	8.9	1.6	4.6	1.4	53.0	35.0	18
Wednesday	11.5	12.0	1.2	10.6	1.4	4.7	1.3	67.0	35.0	18
Thursday	9.9	10.4	1.0	9.8	1.7	4.7	1.1	44.1	43.9	15
Thursday	10.9	11.4	1.2	10.3	1.6	4.6	1.0	65.0	35.0	18
Friday	9.7	10.2	1.2	9.3	1.5	4.5	1.7	46.9	35.0	17
Friday	9.3	9.8	1.3	9.1	1.6	4.6	1.7	46.9	34.9	17
Saturday	9.4	9.9	1.2	9.6	1.6	4.6	1.8	40.1	34.2	14
Saturday	9.8	10.3	1.2	10.0	1.6	4.7	2.0	60.1	34.6	18
<b>AVG:</b>	<b>9.8</b>	<b>10.3</b>	<b>1.2</b>	<b>9.9</b>	<b>1.5</b>	<b>4.6</b>	<b>1.5</b>	<b>53.0</b>	<b>35.4</b>	<b>16.9</b>

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	70.1	6.0	N/A	154
Monday	70.5	6.0	26	75
Tuesday	70.6	6.0	N/A	
Wednesday	71.4	6.0	N/A	
Thursday	71.4	6.0	24	113
Friday	71.4	6.0	N/A	163
Saturday	71.4	6.0	N/A	171
<b>AVG</b>	<b>71.0</b>	<b>6.0</b>	<b>25</b>	<b>135</b>

John Day Dam  
Avian Zones



**JDA Bird Counts: 7/11/21 to 7/17/21**

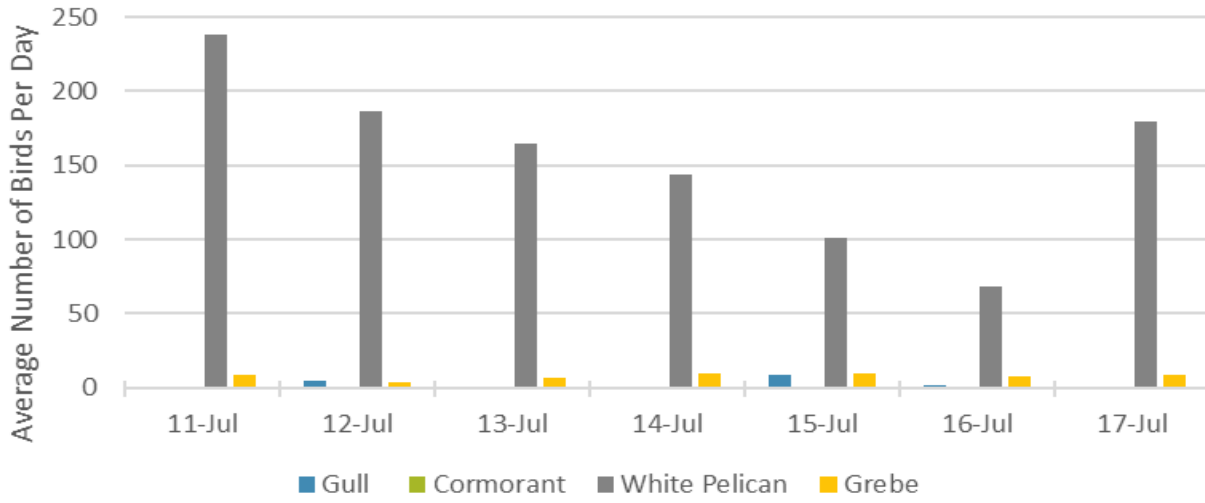
F(1): Forage AM survey F(2): Forage PM Survey NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

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)	
11-Jul	PHFB	0	0	5	36	0	1	1	0	0	0	0	0	3	0	0	0	8	10	0	0	0	0	0	0	64
11-Jul	SWFB	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11-Jul	PH1	1	0	0	0	0	0	0	0	0	0	0	0	10	12	0	0	0	0	0	0	0	0	0	0	23
11-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	34	37	0	0	0	0	0	0	0	0	0	0	71
11-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	117	63	0	0	0	0	0	0	0	0	0	0	180
11-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	23	7	0	0	0	0	0	0	0	0	0	0	30
11-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	56	22	0	0	0	0	0	0	0	0	0	0	78
11-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	61	31	0	0	0	0	0	0	0	0	0	0	92
<b>Avg/Survey</b>		<b>1</b>		<b>22</b>		<b>1</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>238</b>		<b>0</b>		<b>9</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>270</b>
12-Jul	PHFB	10	0	0	3	1	0	0	2	0	0	0	0	5	0	0	0	1	7	0	0	0	0	0	0	29
12-Jul	SWFB	0	0	19	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	21
12-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	13	7	0	0	0	0	0	0	0	0	0	0	20
12-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	37	20	0	0	0	0	0	0	0	0	0	0	57
12-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	63	43	0	0	0	0	0	0	0	0	0	0	106
12-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	6
12-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	53	6	17	0	0	0	0	0	0	0	0	0	76
12-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	93	25	13	0	0	0	0	0	0	0	0	0	131
<b>Avg/Survey</b>		<b>5</b>		<b>11</b>		<b>1</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>187</b>		<b>15</b>		<b>4</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>223</b>
13-Jul	PHFB	0	0	5	4	2	0	0	0	0	0	0	0	8	2	0	0	8	5	0	0	0	0	0	0	34
13-Jul	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
13-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	32	7	0	0	0	0	0	0	0	0	0	0	39
13-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	43	22	0	0	0	0	0	0	0	0	0	0	65
13-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	57	19	0	0	0	0	0	0	0	0	0	0	76
13-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	21
13-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	23	3	0	0	0	0	0	0	0	0	0	0	26
13-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	54	39	0	0	0	0	0	0	0	0	0	0	93
<b>Avg/Survey</b>		<b>0</b>		<b>5</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>165</b>		<b>0</b>		<b>7</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>177</b>
14-Jul	PHFB	0	0	56	0	0	0	0	0	0	0	0	0	3	0	0	0	9	10	0	0	0	0	0	0	78
14-Jul	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
14-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	18	7	0	0	0	0	0	0	0	0	0	0	25
14-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	24	3	0	0	0	0	0	0	0	0	0	0	27
14-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	38	11	0	0	0	0	0	0	0	0	0	0	49
14-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	52
14-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	61	10	0	0	0	0	0	0	0	0	0	0	71
14-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	43	17	0	0	0	0	0	0	0	0	0	0	60
<b>Avg/Survey</b>		<b>0</b>		<b>28</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>144</b>		<b>0</b>		<b>10</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>181</b>

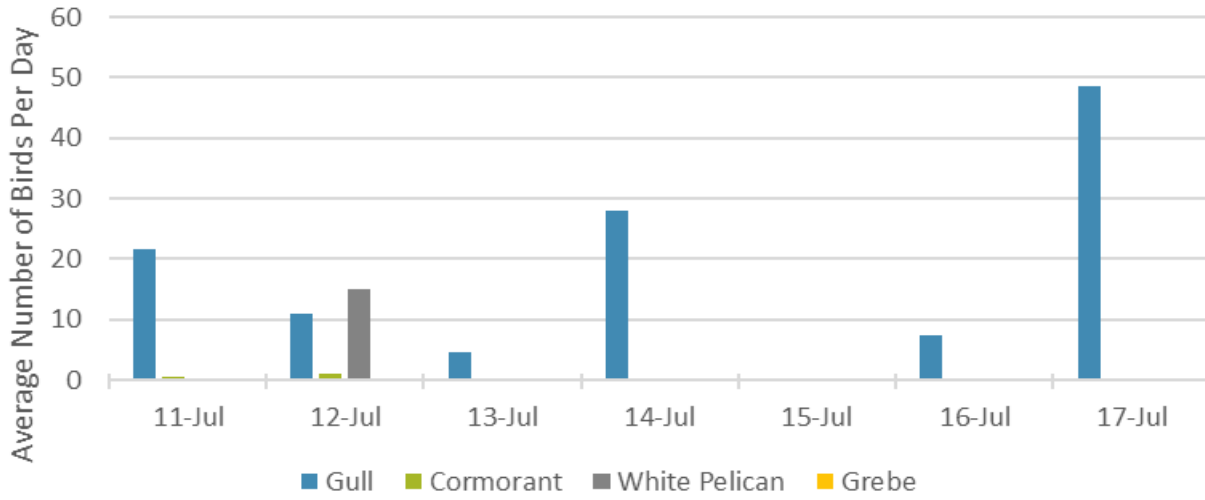




### Foraging Piscivorous Birds



### Non-Foraging Piscivorous Birds





American White Pelicans in the tailrace of John Day Dam