

# United States Army Corps of Engineers

## John Day Dam Smolt and Juvenile Lamprey Condition Monitoring

### Weekly Report, #24-5

Report Period: 4/27 – 5/3, 2024

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## SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2023
A. River Flow	149.2	170.8	156.1	172.7	286.5
B. Powerhouse	88.0	101.6	92.5	102.9	93.6
C. Spill (kcfs)	59.6	67.7	62.2	68.5	191.6
% of River Flow	39.6	40.1	39.9	39.6	67.9%
D. Water Temp (Daily Avg.)	52.7	53.2	52.9	52.2	53.8
E. % Saturation	106.6	106.6	108.0	112.4	119.9

Note: Data is for the sample period only (0700 - 1300 hrs).

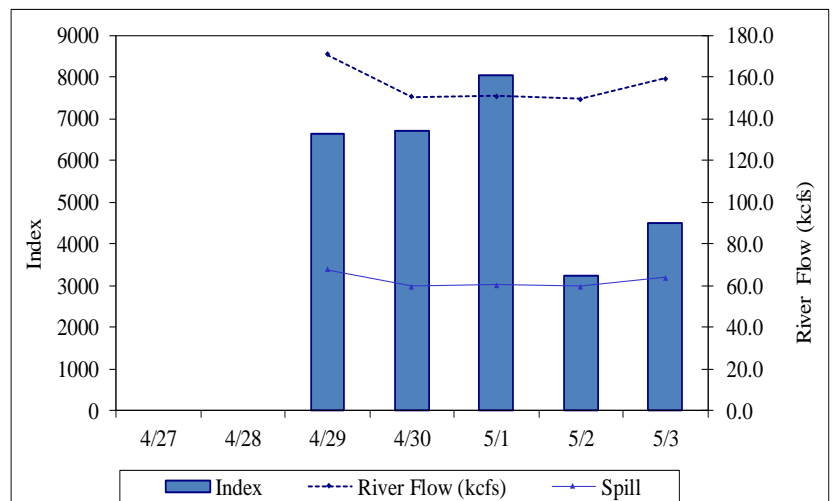
% SAMPLE COMPOSITION			This Week	Last Week
YEARLING CHINOOK	62.6%	75.5%		
SUBYEARLING CHINOOK	0.1%	0.0%		
CHINOOK FRY	0.0%	0.0%		
UNCLIPPED STEELHEAD	1.7%	1.7%		
CLIPPED STEELHEAD	25.0%	19.0%		
COHO	10.5%	3.7%		
COHO FRY	0.0%	0.0%		
SOCKEYE	0.0%	0.0%		

YEARLING CHINOOK							SUBYEARLING CHINOOK					COHO				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
4/27																
4/28																
4/29	3.6%	99	2.0	0.0	2,730	4,549	0	0.0	0.0	0	0	17	0.0	0.0	490	817
4/30	3.5%	100	3.0	0.0	2,800	4,674	0	0.0	0.0	0	0	8	0.0	0.0	225	376
5/1	3.2%	100	3.0	0.0	3,175	5,313	0	0.0	0.0	0	0	11	0.0	0.0	350	586
5/2	9.2%	108	1.9	0.0	1,200	2,013	1	0.0	0.0	10	17	18	0.0	0.0	180	302
5/3	7.9%	111	2.7	0.0	1,420	2,384	0	0.0	0.0	0	0	33	0.0	0.0	410	688
Weekly		518	2.5	0.0	11,325	18,933	1	0.0	0.0	10	17	87	0.0	0.0	1,655	2,768
Season to date		2,442	2.1	0.0	20,770	33,979	1	0.0	0.0	10	17	152	0.7	0.0	2,053	3,418

End Date	Sample Rate	UNCLIPPED					STEELHEAD					CLIPPED					SOCKEYE				
		# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
4/27																					
4/28																					
4/29	3.6%	1	0.0	0.0	20	33	27	0.0	0.0	750	1,250	0	0.0	0.0	0	0	0	0.0	0.0	0	0
4/30	3.5%	6	1.0	0.0	200	334	28	7.1	0.0	800	1,335	0	0.0	0.0	0	0	0	0.0	0.0	0	0
5/1	3.2%	4	0.0	0.0	150	251	38	2.6	0.0	1,125	1,883	0	0.0	0.0	0	0	0	0.0	0.0	0	0
5/2	9.2%	2	0.0	0.0	20	34	49	8.2	0.0	520	872	0	0.0	0.0	0	0	0	0.0	0.0	0	0
5/3	7.9%	1	0.0	0.0	10	17	65	12.3	0.0	830	1,394	0	0.0	0.0	0	0	0	0.0	0.0	0	0
Weekly		14	7.1	0.0	400	669	207	7.2	0.0	4,025	6,734	0	0.0	0.0	0	0	0	0.0	0.0	0	0
Season to date		77	10.4	0.0	726	1,182	401	7.5	0.0	5,515	9,214	1	0.0	0.0	4	7	1	0.0	0.0	4	7

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
4/27						
4/28						
4/29	3.6%	144	1.4	0.0	3,990	6,649
4/30	3.5%	142	4.2	0.0	4,025	6,719
5/1	3.2%	153	2.6	0.0	4,800	8,032
5/2	9.2%	178	3.4	0.0	1,930	3,237
5/3	7.9%	210	5.2	0.0	2,670	4,483
Weekly		827	3.5	0.0	17,415	29,120
Season to date		3,074	2.9	0.0	29,078	47,817

Notes: Condition percentages are calculated using sample numbers.  
Subyearling Chinook and Coho include fry. All river flow, powerhouse, spill and index estimates are for the sample period only.



	Pacific Lamprey						Western Brook		
	Macrophthalmia			Ammocoetes			Ammocoetes		
End Date	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll
4/27									
4/28									
4/29	0	0.0	0	0	0.0	0	0	0	0
4/30	0	0.0	0	0	0.0	0	0	0	0
5/1	0	0.0	0	0	0.0	0	0	0	0
5/2	0	0.0	0	0	0.0	0	0	0	0
5/3	0	0.0	0	0	0.0	0	0	0	0
Weekly	0	0.0	0	0	0.0	0	0	0	0
Season to date	3	0.0	8	0	0.0	0	0	0	0

## **SECTION 2. Smolt and Lamprey Condition Monitoring Summary**

		Yearling Chinook		Subyearling Chinook		Unclipped Steelhead		Clipped Steelhead		Coho		Sockeye	
		This Week	Last Week	This Week	Last Week	This Week	Last Week	This Week	Last Week	This Week	Last Week	This Week	Last Week
SAMPLE #		518	524	1	0	14	12	207	132	87	26	0	0
DESCALING	3-19%	3.1%	2.9%			8.3%		1.9%	1.5%	1.1%	3.8%		
	>20%	0.4%	0.4%					0.5%					
	Pred. Desc.	2.1%	3.1%			7.1%	8.3%	6.8%	7.6%		3.8%		
INJURY	BODY	0.2%	0.8%					0.5%					
	EYE	0.6%	0.2%					1.0%					
	HEAD		0.4%						0.8%				
	OPERC.		0.8%			8.3%		1.0%	0.8%				
	FIN	1.4%	1.1%			8.3%		1.0%					
	POPEYE	0.2%						0.5%					
OTHER CONDITIONS	PINK FIN												
	Fin Discolor. FIN HEM.		1.0%										
DISEASE	Columnaris												
	FUNGUS	0.6%	2.1%					1.9%	1.5%		3.8%		
	BKD	1.4%	0.2%										
	PARASITES	0.4%	0.4%						0.8%		3.8%		
	DEFORMITY	0.8%	0.2%					0.5%	0.8%				
	EYE HEM.	0.4%	0.4%			7.1%		1.0%					
PREDATION	BIRD	1.2%	1.3%			7.1%	8.3%	5.8%	6.1%				
	FISH	1.9%	2.3%				8.3%	1.9%	3.0%		3.8%		
	LAMPREY												
	OTHER												
end dates		5/3	4/26										

			INJURY					DISEASE and OTHER CONDITIONS				PREDATION		
MP- Macrophthalmia	End Date	SAMPLE #	BODY	EYE	HEAD	FIN	POPEYE	FIN HEM	Columnaris	FUNGUS	DEFORMITY	EYE HEM.	BIRD	FISH
This Week	5/3	0												
Last Week	4/26	0												
AP - Ammocoetes		SAMPLE #												
This Week	5/3	0												
Last Week	4/26	0												

### **SECTION 3. Incidental Summary**

	Bass - Largemouth	Bass - Smallmouth	Bluegill and Pumpkinseed	Bullhead	Carp	Catfish- Channel	Chiselmouth	Crappie species
This Week	0	0	0	0	0	0	0	0
Season to Date	0	1	5	0	0	0	0	1

	Dace - Longnose	Dace - Speckled	Chinook Jack	Kokanee	Lamprey Adult	Northern Pikeminnow	Peamouth	Perch Yellow
This Week	0	0	0	0	0	0	0	1
Season to Date	0	0	0	0	0	0	0	38

	Redside Shiner	Sand Roller	Sculpin species	Stickleback 3 spine	Sucker species	Shad Adult	Shad Juvenile	Sturgeon White
This Week	0	0	0	0	0	0	0	0
Season to Date	0	0	3	0	0	0	0	0

	Trout Bull	Trout Cutthroat	Trout Rainbow	Walleye	Whitefish Mountain	Siberian Prawn	Chum Salmon	Banded Killifish
This Week	0	0	0	2	0	3	0	0
Season to Date	0	0	0	15	0	73	0	1

### **SECTION 4. Facility Operations**

Condition Monitoring at John Day Dam is scheduled to sample Monday through Friday until 15 June. Samples will be taken from the Juvenile Bypass System between 0700 and 1300 hrs. and the Condition Exams will target approximately 100 of the predominant species of out-migrant. All river flow, powerhouse, spill, and index estimates are based on the sample period only. Debris at the separator bars was moderate for the week and consisted of sticks, plastic, and pieces of terrestrial vegetation.

### **SECTION 5. Research**

No Pacific Lamprey macrophthalmia or ammocoetes were sampled at the Smolt Facility during this report period.

## SECTION 6. Pictures



Hatchery origin Yearling Spring Chinook smolt (*Oncorhynchus tshawytscha*), approximately 135 mm fork length, showing an atypical growth on the ventral surface, sampled at the John Day Dam Smolt Facility on 24 April, 2024.



Yearling Spring Chinook smolt (*Oncorhynchus tshawytscha*), approximately 145 mm fork length, showing a distended abdomen and vent, typical external symptoms of Bacterial Kidney Disease (*Renibacterium salmoniarum*), sampled at the John Day Dam Smolt Facility on 1 May, 2024.