

# United States Army Corps of Engineers

## John Day Dam Smolt and Juvenile Lamprey Condition Monitoring

### Weekly Report, #24-9

Report Period: 5/25 – 5/31, 2024

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## SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2023
A. River Flow	168.1	231.8	197.9	224.6	263.8
B. Powerhouse	100.5	138.5	118.1	133.9	57.0
C. Spill (kcfs)	66.0	92.0	78.4	89.3	205.5
% of River Flow	39.3	39.9	39.6	39.8	77.9%
D. Water Temp *	57.3	57.7	57.5	57.9	60.1
E. % Saturation *	106.2	107.2	107.0	107.6	115.4

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

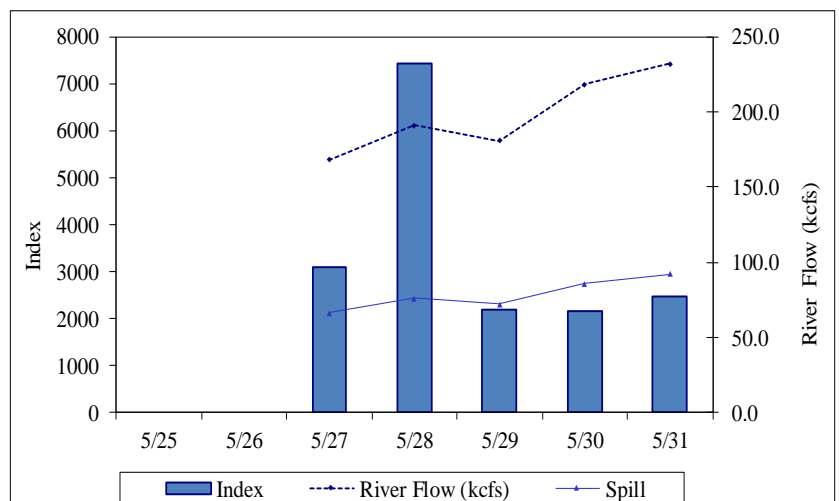
% SAMPLE COMPOSITION			This Week	Last Week
YEARLING CHINOOK	14.4%	38.4%		
SUBYEARLING CHINOOK	41.1%	21.7%		
CHINOOK FRY	0.0%	0.0%		
UNCLIPPED STEELHEAD	4.5%	5.0%		
CLIPPED STEELHEAD	5.1%	10.8%		
COHO	10.3%	7.0%		
COHO FRY	0.0%	0.0%		
SOCKEYE	24.6%	17.2%		

YEARLING CHINOOK							SUBYEARLING CHINOOK					COHO				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
5/25																
5/26																
5/27	14.3%	57	1.8	0.0	435	721	61	3.3	0.0	430	712	51	3.9	0.0	355	588
5/28	6.7%	35	0.0	2.9	430	718	108	0.9	0.0	1,440	2,403	30	0.0	0.0	500	835
5/29	17.8%	27	3.7	0.0	184	308	97	3.1	0.0	552	924	22	4.5	0.0	135	226
5/30	13.1%	29	0.0	0.0	220	364	92	1.1	0.0	775	1,284	4	0.0	0.0	50	83
5/31	10.0%	13	7.7	0.0	130	216	102	2.9	0.0	1,020	1,698	8	0.0	0.0	80	133
Weekly		161	1.9	0.6	1,399	2,327	460	2.2	0.0	4,217	7,020	115	2.6	0.0	1,120	1,864
Season to date		4,062	2.3	0.0	55,316	91,598	751	2.7	0.0	10,279	17,132	520	4.0	0.0	8,799	14,678

End Date	Sample Rate	UNCLIPPED STEELHEAD					CLIPPED STEELHEAD					SOCKEYE				
		# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
5/25																
5/26																
5/27	14.3%	15	0.0	0.0	100	166	19	15.8	0.0	145	240	66	6.1	0.0	410	679
5/28	6.7%	9	0.0	0.0	130	217	13	15.4	0.0	220	367	103	1.9	0.0	1,730	2,887
5/29	17.8%	15	1.0	0.0	81	136	15	6.7	0.0	105	176	58	5.2	0.0	259	433
5/30	13.1%	6	0.0	0.0	30	50	5	0.0	0.0	25	41	33	6.1	0.0	195	323
5/31	10.0%	5	0.0	0.0	50	83	5	40.0	0.0	50	83	15	0.0	0.0	150	250
Weekly		50	2.0	0.0	391	651	57	14.0	0.0	545	908	275	4.0	0.0	2,744	4,573
Season to date		253	5.1	0.0	3,871	6,419	886	7.3	0.0	15,669	26,153	498	3.8	0.0	6,138	10,223

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
5/25						
5/26						
5/27	14.3%	269	4.5	0.0	1,875	3,106
5/28	6.7%	298	1.7	0.3	4,450	7,427
5/29	17.8%	234	4.3	0.0	1,316	2,202
5/30	13.1%	169	1.8	0.0	1,295	2,145
5/31	10.0%	148	4.1	0.0	1,480	2,463
Weekly		1,118	3.2	0.1	10,416	17,343
Season to date		6,970	3.3	0.0	100,072	166,203

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
5/25									
5/26									
5/27	0	0.0	0	0	0.0	0	0	0	0
5/28	1	0.0	20	0	0.0	0	0	0	0
5/29	0	0.0	0	0	0.0	0	0	0	0
5/30	0	0.0	0	0	0.0	0	0	0	0
5/31	1	0.0	10	0	0.0	0	0	0	0
Weekly	2	0.0	30	0	0.0	0	0	0	0
Season to date	7	0.0	68	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 #		160	456	460	258	50	60	57	128	115	83	275	204
DESCALING	3-19%	4.4%	2.0%	0.7%	1.6%	3.3%		1.8%	3.1%	1.7%	1.2%	4.4%	5.4%
	>20%				0.4%							1.1%	2.0%
	Pred. Desc.	1.9%	2.0%	2.2%	3.5%	2.0%	5.0%	14.0%	8.6%	2.6%	8.4%	2.9%	2.0%
INJURY	BODY	3.8%	1.1%	1.3%		2.0%		5.3%		0.9%		0.7%	
	EYE		0.4%										
	HEAD		0.2%	0.2%		2.0%				1.2%			
	OPERC.		0.2%	0.2%		2.0%		0.8%		1.2%		4.0%	1.5%
	FIN	3.8%	1.1%	0.4%		4.0%	1.7%	0.8%				1.8%	3.4%
OTHER CONDITIONS	POPEYE		0.4%										
	PINK FIN												
DISEASE	Fin Discolor.												
	FIN HEM.	0.6%	0.2%	0.4%	1.6%							0.7%	0.5%
	Columnaris												
	FUNGUS	1.3%	0.9%	0.2%	0.8%	2.0%	5.0%		1.6%		1.2%	0.4%	
	BKD	0.6%	0.7%									1.1%	0.5%
PARASITES				1.1%	1.6%	6.0%	3.3%			2.6%	1.2%		
	DEFORMITY		0.7%									0.4%	
	EYE HEM.	0.6%	1.1%							0.9%		0.7%	0.5%
PREDATION	BIRD	0.6%	0.4%	0.7%	0.8%	4.0%	3.3%	12.3%	7.0%	0.9%	2.4%	0.7%	
	FISH	3.1%	1.8%	2.4%	3.1%		3.3%	7.0%	2.3%	1.7%	7.2%	2.5%	2.5%
	LAMPREY								0.8%			0.7%	
	OTHER												
end dates		5/31	5/24										

			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	5/31	2	50.0%										50.0%	
Last Week	5/24	1						100.0%						
AP - Ammocoetes		SAMPLE #												
This Week	5/31	0												
Last Week	5/24	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	4	6	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	19
Season to Date	0	0	0	0	1	0	0	106

	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	0	0	3	0	0
Season to Date	0	0	0	26	0	86	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 very low for the week and consisted of a few sticks, some plastic, and pieces of terrestrial vegetation.

### **SECTION 5. Research**

One genetic fin clip sample was collected from a Pacific Lamprey macrophthalmia for the Columbia River Inter-Tribal Fish Commission during this report period.

## SECTION 6. Pictures



Unclipped Sockeye smolt (*Oncorhynchus nerka*), approximately 105 mm fork length, showing fungal growth on the lower jaw and head, and some descaling, sampled at the John Day Dam Smolt Facility on 31 May, 2024.



Unclipped Subyearling Fall Chinook smolt (*Oncorhynchus tshawytscha*), approximately 105 mm fork length, showing a severe body injury and descaling from attempted avian predation, sampled at the John Day Dam Smolt Facility on 31 May, 2024.