

United States Army Corps of Engineers

John Day Dam Smolt and Juvenile Lamprey Condition Monitoring

Weekly Report, #24-8

Report Period: 5/18 – 5/24, 2024

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SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2023
A. River Flow	194.2	241.5	224.6	221.0	376.8
B. Powerhouse	115.8	143.5	133.9	131.9	166.2
C. Spill (kcfs)	77.2	96.5	89.3	87.6	209.3
% of River Flow	39.4	40.0	39.8	39.6	56.1%
D. Water Temp (Daily Avg.)	57.7	58.1	57.9	56.6	58.7
E. % Saturation	106.7	108.9	107.6	111.3	123.1

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

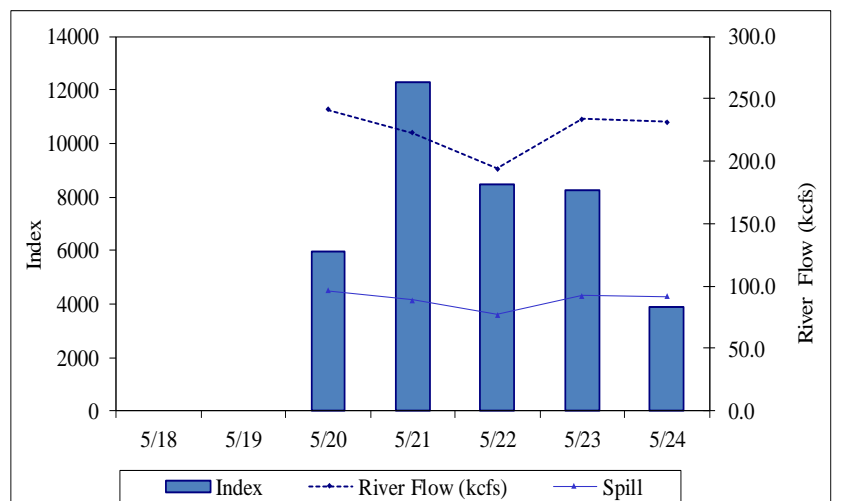
% SAMPLE COMPOSITION			This Week	Last Week
YEARLING CHINOOK	38.4%	64.5%		
SUBYEARLING CHINOOK	21.7%	3.6%		
CHINOOK FRY	0.0%	0.1%		
UNCLIPPED STEELHEAD	5.0%	5.1%		
CLIPPED STEELHEAD	10.8%	15.5%		
COHO	7.0%	9.2%		
COHO FRY	0.0%	0.0%		
SOCKEYE	17.2%	2.0%		

YEARLING CHINOOK							SUBYEARLING CHINOOK					COHO				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
5/18																
5/19																
5/20	6.3%	106	1.9	0.0	1,780	2,977	43	2.3	0.0	535	895	18	11.1	0.0	270	452
5/21	2.5%	93	0.0	0.0	3,450	5,781	38	5.3	0.0	2,010	3,368	16	6.3	0.0	810	1,357
5/22	4.3%	87	1.1	0.0	2,220	3,700	57	7.0	0.0	1,335	2,225	13	15.4	0.0	340	567
5/23	5.5%	82	6.1	0.0	1,330	2,203	62	3.2	0.0	1,245	2,062	13	7.7	0.0	215	356
5/24	12.7%	88	1.1	0.0	650	1,082	58	1.7	0.0	395	657	23	4.3	0.0	260	433
Weekly		456	2.0	0.0	9,430	15,743	258	3.9	0.0	5,520	9,208	83	8.4	0.0	1,895	3,164
Season to date		3,901	2.3	0.0	53,917	89,271	291	3.4	0.0	6,062	10,112	405	4.4	0.0	7,679	12,814

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
5/18																					
5/19																					
5/20	6.3%	11	0.0	0.0	215	360	18	11.1	0.0	360	602	27	11.1	0.0	405	677					
5/21	2.5%	6	0.0	0.0	280	469	10	10.0	0.0	360	603	17	11.8	0.0	420	704					
5/22	4.3%	3	33.3	0.0	60	100	24	16.7	0.0	510	850	35	2.9	0.0	625	1,042					
5/23	5.5%	18	0.0	0.0	445	737	36	8.3	0.0	595	986	62	0.0	0.0	1,145	1,897					
5/24	12.7%	22	2.0	0.0	180	300	40	2.5	0.0	345	574	63	3.2	0.0	490	815					
Weekly		60	5.0	0.0	1,180	1,965	128	8.6	0.0	2,170	3,615	204	3.9	0.0	3,085	5,135					
Season to date		203	5.9	0.0	3,480	5,767	829	6.9	0.0	15,124	25,245	223	3.6	0.0	3,394	5,650					

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
5/18						
5/19						
5/20	6.3%	223	4.5	0.0	3,565	5,962
5/21	2.5%	180	3.3	0.0	7,330	12,283
5/22	4.3%	219	5.9	0.0	5,090	8,483
5/23	5.5%	273	4.0	0.0	4,975	8,241
5/24	12.7%	294	2.7	0.0	2,320	3,861
Weekly		1,189	4.0	0.0	23,280	38,831
Season to date		5,852	3.3	0.0	89,656	148,859

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.



Western Brook

	Macrophthalmia			Ammocoetes			Ammocoetes		
End Date	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll
5/18									
5/19									
5/20	0	0.0	0	0	0.0	0	0	0	0
5/21	0	0.0	0	0	0.0	0	0	0	0
5/22	0	0.0	0	0	0.0	0	0	0	0
5/23	0	0.0	0	0	0.0	0	0	0	0
5/24	1	0.0	5	0	0.0	0	0	0	0
Weekly	1	0.0	5	0	0.0	0	0	0	0
Season to date	5	0.0	38	0	0.0	0	0	0	0

SECTION 2. Smolt and Lamprey Condition Monitoring Summary

		Yearling Chinook		Subyearling Chinook		Uncipped 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 #		456	504	258	28	60	40	128	121	83	72	204	16
DESCALING	3-19%	2.0%	2.2%	1.6%		3.3%	2.5%	3.1%	1.7%	1.2%	1.4%	5.4%	
	>20%		0.4%	0.4%								2.0%	
	Pred. Desc.	2.0%	2.4%	3.5%		5.0%		8.6%	7.4%	8.4%	6.9%	2.0%	
INJURY	BODY	1.1%	0.6%										
	EYE	0.4%	0.8%										
	HEAD	0.2%	0.2%						0.8%	1.2%			
	OPERC.		0.8%					0.8%		1.2%		1.5%	
	FIN	1.1%	1.0%			1.7%	2.5%	0.8%				3.4%	
	POPEYE	0.4%											
OTHER CONDITIONS	PINK FIN												
	Fin Discolor.												
	FIN HEM.	0.2%	0.4%	1.6%	3.6%							0.5%	
DISEASE	Columnaris												
	FUNGUS	0.9%	0.4%	0.8%		5.0%	2.5%	1.6%	1.7%	1.2%		0.5%	
	BKD	0.7%	1.2%						0.8%				
	PARASITES		0.2%	1.6%		3.3%	12.5%			1.2%	2.8%		
	DEFORMITY	0.7%	0.4%										
	EYE HEM.	1.1%	0.4%								1.4%	0.5%	
PREDATION	BIRD	0.4%	1.2%	0.8%		3.3%		7.0%	5.8%	2.4%	1.4%		
	FISH	1.8%	1.6%	3.1%		3.3%		2.3%	3.3%	7.2%	5.6%	2.5%	
	LAMPREY												
	OTHER							0.8%					
end dates		5/24	5/17										

			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	5/24	1						100.0%						
Last Week	5/17	0						100.0%						
AP - Ammocoetes		SAMPLE #												
This Week	5/24	0												
Last Week	5/17	0												

SECTION 3. Incidental Summary

	Bass - Largemouth	Bass - Smallmouth	Bluegill and Pumpkinseed	Bullhead	Carp	Catfish- Channel	Chiselmouth	Crappie species
This Week	0	2	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	15
Season to Date	0	0	0	0	1	0	0	87

	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	3	0	3	0	0
Season to Date	0	0	0	26	0	83	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 sticks, 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 opercular damage, descaling, and fin injury, sampled at the John Day Dam Smolt Facility on 24 May, 2024.



Left and right sides of an unclipped Subyearling Fall Chinook smolt (*Oncorhynchus tshawytscha*), approximately 105 mm fork length, showing paired mouth and teeth marks from attempted fish predation, sampled at the John Day Dam Smolt Facility on 22 May, 2024.