

United States Army Corps of Engineers

John Day Dam Smolt and Juvenile Lamprey Condition Monitoring

Weekly Report, #24-3

Report Period: 4/13 – 4/19, 2024

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SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2023
A. River Flow	173.1	233.2	189.2	159.8	137.6
B. Powerhouse 1	102.7	137.2	112.3	114.9	85.1
C. Spill (kcfs)	69.2	78.2	72.4	43.4	51.3
% of River Flow	33.5	40.0	38.6	26.4	37.2%
D. Water Temp *	49.9	51.8	50.8	48.7	48.3
E. % Saturation *	104.2	108.8	106.2	104.7	106.5

* In sampling facility and from TMT website.

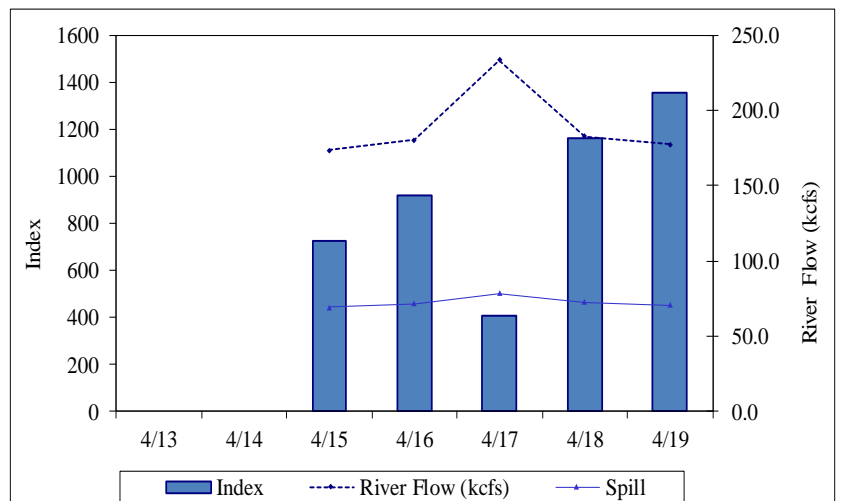
% SAMPLE COMPOSITION			This Week	Last Week
YEARLING CHINOOK	82.9%	94.5%		
SUBYEARLING CHINOOK	0.0%	0.0%		
CHINOOK FRY	0.0%	0.0%		
UNCLIPPED STEELHEAD	3.3%	3.1%		
CLIPPED STEELHEAD	9.7%	0.0%		
COHO	3.9%	2.5%		
COHO FRY	0.0%	0.0%		
SOCKEYE	0.2%	0.0%		

YEARLING CHINOOK							SUBYEARLING CHINOOK					COHO				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
4/13																
4/14																
4/15	30.0%	112	2.7	0.0	376	629	0	0.0	0.0	0	0	6	0.0	0.0	16	27
4/16	18.5%	89	1.1	0.0	494	823	0	0.0	0.0	0	0	8	0.0	0.0	32	53
4/17	48.1%	112	2.7	0.0	230	361	0	0.0	0.0	0	0	3	0.0	0.0	6	9
4/18	19.7%	108	0.0	0.0	545	909	0	0.0	0.0	0	0	5	0.0	0.0	26	43
4/19	17.8%	109	1.8	0.0	610	1,019	0	0.0	0.0	0	0	3	0.0	0.0	20	33
Weekly		530	1.7	0.0	2,255	3,742	0	0.0	0.0	0	0	25	0.0	0.0	100	166
Season to date		1,400	1.4	0.0	4,177	6,276	0	0.0	0.0	0	0	39	0.0	0.0	132	208

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
4/13																					
4/14																					
4/15	30.0%	3	0.0	0.0	8	13	8	25.0	0.0	30	50	1	0.0	0.0	4	7	1	0.0	0.0	4	7
4/16	18.5%	1	0.0	0.0	4	7	4	25.0	0.0	22	37	0	0.0	0.0	0	0	0	0.0	0.0	0	0
4/17	48.1%	1	0.0	0.0	2	3	10	10.0	0.0	22	35	0	0.0	0.0	0	0	0	0.0	0.0	0	0
4/18	19.7%	10	1.0	0.0	47	78	14	0.0	0.0	79	132	0	0.0	0.0	0	0	0	0.0	0.0	0	0
4/19	17.8%	6	1.0	0.0	35	58	26	3.8	0.0	145	242	0	0.0	0.0	0	0	0	0.0	0.0	0	0
Weekly		21	9.5	0.0	96	160	62	8.1	0.0	298	495	1	0.0	0.0	4	7	1	0.0	0.0	4	7
Season to date		51	11.8	0.0	156	231	62	8.1	0.0	298	495	1	0.0	0.0	4	7	1	0.0	0.0	4	7

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
4/13						
4/14						
4/15	30.0%	130	3.8	0.0	434	726
4/16	18.5%	102	2.0	0.0	552	919
4/17	48.1%	126	3.2	0.0	260	408
4/18	19.7%	137	0.7	0.0	697	1,162
4/19	17.8%	144	2.8	0.0	810	1,354
Weekly		639	2.5	0.0	2,753	4,570
Season to date		1,553	2.0	0.0	4,767	7,217

Notes: Condition percentages are calculated from 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
4/13									
4/14									
4/15	0	0.0	0	0	0.0	0	0	0	0
4/16	0	0.0	0	0	0.0	0	0	0	0
4/17	1	0.0	4	0	0.0	0	0	0	0
4/18	0	0.0	0	0	0.0	0	0	0	0
4/19	0	0.0	0	0	0.0	0	0	0	0
Weekly	1	0.0	4	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 #		530	494	0	0	21	16	62	0	25	13	1	0
DESCALING	3-19%	2.5%	4.3%			4.8%	6.3%	8.1%			7.7%		
	>20%												
	Pred. Desc.	1.7%	1.0%			9.5%	25.0%	8.1%					
INJURY	BODY	0.9%	1.6%					1.6%					
	EYE		0.2%										
	HEAD					4.8%				7.7%			
	OPERC.							1.6%					
	FIN	0.4%	1.4%				6.3%						
	POPEYE	0.2%											
OTHER CONDITIONS	PINK FIN												
	Fin Discolor.												
	FIN HEM.	0.6%	0.2%										
DISEASE	Columnaris	0.2%											
	FUNGUS	1.5%	1.0%					3.2%					
	BKD												
	PARASITES	0.6%				9.5%				4.0%			
	DEFORMITY	0.2%											
	EYE HEM.	0.2%	0.2%										
PREDATION	BIRD	0.2%	0.6%			9.5%	31.3%	6.5%					
	FISH	2.3%	1.4%					3.2%			7.7%		
	LAMPREY		0.2%										
	OTHER												
end dates		4/19	4/12										

			INJURY					DISEASE and OTHER CONDITIONS					PREDATION	
MP- Macrophthalmia	End Date	SAMPLE #	BODY	EYE	HEAD	FIN	POPEYE	FIN HEM	Columnaris	FUNGUS	EFORMITE	YE HEM	BIRD	FISH
This Week	4/19	0												
Last Week	4/12	1												
AP - Ammocoetes		SAMPLE #												
This Week	4/19	0												
Last Week	4/12	0												

SECTION 3. Incidental Summary

	Bass - Largemouth	Bass - Smallmouth	Bluegill and Pumpkinseed	Bullhead	Carp	Catfish- Channel	Chiselmouth	Crappie species
This Week	0	0	2	0	0	0	0	0
Season to Date	0	0	4	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	14
Season to Date	0	0	0	0	0	0	0	32

	Redside Shiner	Sand Roller	Sculpin species	Stickleback 3 spine	Sucker species	Shad Adult	Shad Juvenile	Sturgeon White
This Week	0	0	2	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	20	0	0
Season to Date	0	0	0	11	0	63	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 to heavy for the week and consisted of sticks, plastic, and pieces of terrestrial vegetation.

SECTION 5. Research

Genetic fin clip samples were taken from 1 Pacific Lamprey macrophthalmia for the Columbia River Inter-Tribal Fish Commission during this report period.

SECTION 6. Pictures



Yearling Spring Chinook smolt (*Oncorhynchus tshawytscha*), approximately 145 mm fork length, showing the black spot symptoms of a parasitic trematode infection, sampled at the John Day Dam Smolt Facility on 18 April, 2024.



Hatchery origin Yearling Spring Chinook smolt (*Oncorhynchus tshawytscha*), approximately 160 mm fork length, showing a severe fungal infection on the caudal fin, sampled at the John Day Dam Smolt Facility on 18 April, 2024.