

United States Army Corps of Engineers

John Day Dam Smolt and Juvenile Lamprey Condition Monitoring

Weekly Report, #24-21

Report Period: 8/17 – 8/23, 2024

Prepared By: Gregory Kovalchuk



SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2023
A. River Flow	117.1	121.6	119.4	107.3	112.1
B. Powerhouse	94.8	99.6	97.2	84.9	89.5
C. Spill (kcfs)	21.1	21.1	21.1	20.9	21.1
% of River Flow	17.4	18.0	17.7	19.7	18.8%
D. Water Temp *	70.4	70.8	70.6	71.3	72.2
E. % Saturation *	101.4	0.0	101.7	104.9	110.3

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

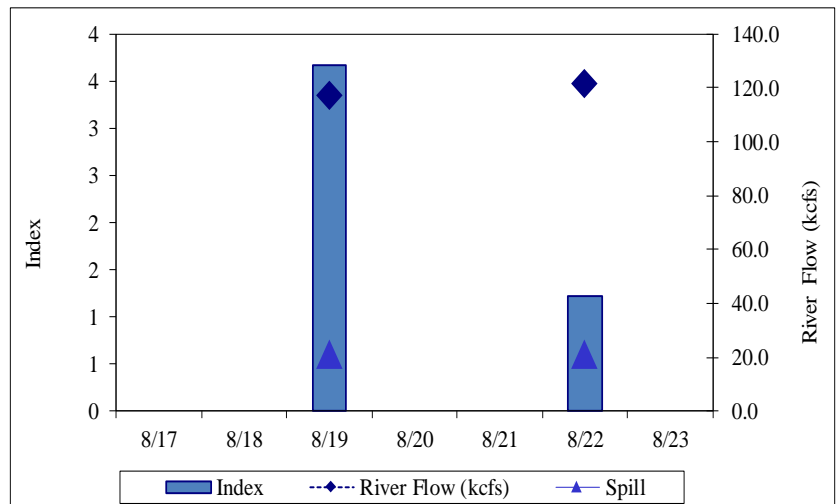
% SAMPLE COMPOSITION			This Week	Last Week
YEARLING CHINOOK	0.0%	0.0%		
SUBYEARLING CHINOOK	100.0%	90.0%		
CHINOOK FRY	0.0%	0.0%		
UNCLIPPED STEELHEAD	0.0%	0.0%		
CLIPPED STEELHEAD	0.0%	0.0%		
COHO	0.0%	0.0%		
COHO FRY	0.0%	0.0%		
SOCKEYE	0.0%	10.0%		

YEARLING CHINOOK							SUBYEARLING CHINOOK					COHO				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
8/17	100.0%															
8/18																
8/19		0	0.0	0.0	0	0	3	33.3	0.0	3	4	0	0.0	0.0	0	0
8/20																
8/21	100.0%															
8/22		0	0.0	0.0	0	0	1	0.0	0.0	1	1	0	0.0	0.0	0	0
8/23																
Weekly		0	0.0	0.0	0	0	4	25.0	0.0	4	5	0	0.0	0.0	0	0
Season to date		4,127	2.3	0.0	56,351	93,291	3,693	2.9	0.0	81,615	129,478	579	4.3	0.0	9,545	15,903

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
8/17	100.0%																				
8/18																					
8/19		0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0
8/20																					
8/21	100.0%																				
8/22		0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0
8/23																					
Weekly		0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0
Season to date		286	5.2	0.0	4,323	7,164	911	7.4	0.0	16,018	26,729	622	3.9	0.0	8,077	13,379					

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
8/17	100.0%					
8/18						
8/19		3	33.3	0.0	3	4
8/20						
8/21	100.0%					
8/22		1	0.0	0.0	1	1
8/23						
Weekly		4	25.0	0.0	4	5
Season to date		10,218	3.2	0.0	175,929	285,945

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
8/17	0	0.0	0	0	0.0	0	0	0	0
8/18									
8/19									
8/20									
8/21	0	0.0	0	0	0.0	0	0	0	0
8/22									
8/23									
Weekly	0	0.0	0	0	0.0	0	0	0	0
Season to date	8	0.0	70	4	0.0	6	0	0	0

SECTION 2. Smolt and Lamprey Condition Monitoring Summary

		Yearling Chinook		Subyearling Chinook		Unclipped Steelhead		Clipped Steelhead		Coho		Sockeye		Total All Species Combined	Percent All Species Combined
		This Week	Last Week	This Week	Last Week	This Week	Last Week	This Week	Last Week	This Week	Last Week	This Week	Last Week	This Week	This Week
SAMPLE #		0	0	4	9	0	0	0	0	0	0	0	1	4	100%
DESCALING	3-19%													0	0.0%
	>20%													0	0.0%
	Pred. Desc.			25.0%	11.1%							100.0%		1	25.0%
INJURY	BODY													0	0.0%
	EYE													0	0.0%
	HEAD													0	0.0%
	OPERC.													0	0.0%
	FIN			25.0%										1	25.0%
	POPEYE													0	0.0%
OTHER CONDITION	PINK FIN													0	0.0%
	Fin Discolor													0	0.0%
	FIN HEM													0	0.0%
DISEASE	Columnaris													0	0.0%
	FUNGUS													0	0.0%
	BKD													0	0.0%
	PARASITES													0	0.0%
	DEFORMITY													0	0.0%
	EYE HEM													0	0.0%
PREDATION	BIRD													0	0.0%
	FISH			25.0%	11.1%							100.0%		1	25.0%
	LAMPREY													0	0.0%
	OTHER													0	0.0%
end dates		8/23	8/16												

			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	8/23	0												
Last Week	8/16	0												
AP - Ammocoetes		SAMPLE #												
This Week	8/23	0												
Last Week	8/16	0												

SECTION 3. Incidental Summary

	Bass - Largemouth	Bass - Smallmouth	Bluegill and Pumpkinseed	Bullhead	Carp	Catfish- Channel	Chiselmouth	Crappie species
This Week	0	3	0	0	1	0	0	0
Season to Date	0	19	8	0	1	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	1	2	0	120

	Redside Shiner	Sand Roller	Sculpin species	Stickleback 3 spine	Sucker species	Shad Adult	Shad Juvenile	Sturgeon White
This Week	0	0	0	0	0	3	39,674	0
Season to Date	0	0	29	1	1	8	133,178	0

	Trout Bull	Trout Cutthroat	Trout Rainbow	Walleye	Whitefish Mountain	Siberian Prawn	Chum Salmon	Banded Killifish
This Week	0	0	0	7	0	0	0	0
Season to Date	0	0	0	60	0	95	0	1

SECTION 4. Facility Operations

Condition Monitoring at John Day Dam is currently sampling Mondays and Thursdays since daily average river water temperatures have reached 70 degrees F in the John Day Dam forebay. Sampling will return to Mondays, Wednesdays, and Fridays once daily average river water temperatures fall to 69.5 degrees F. Samples will be taken from the Juvenile Bypass System between 0700 and 1300 hrs. and the Condition Exams will target approximately 100 out-migrants. All river flow, powerhouse, spill, and index estimates are based on the sample period only. Debris at the separator bars was low for the week and consisted of adult American shad, bryozoans, freshwater sponges, a few small sticks, and aquatic vegetation.

SECTION 5. Research

No Pacific Lamprey macrophthalmia or ammocoetes were sampled this week.

SECTION 6. Pictures



Juvenile Yellow Perch (*Perca flavescens*), approximately 40 mm fork length, similar to a specimen sampled at the John Day Dam Smolt Facility on 19 August, 2024.



Hatchery origin Yearling Spring Chinook smolt (*Oncorhynchus tshawytscha*), approximately 170 mm fork length, showing several leeches on dorsal, caudal, and anal fins, sampled at the John Day Dam Smolt Facility during April, 2017.