

United States Army Corps of Engineers

John Day Dam Smolt and Juvenile Lamprey Condition Monitoring

Weekly Report, #24-10

Report Period: 6/1 – 6/7, 2024

Prepared By: Gregory Kovalchuk



SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2023
A. River Flow	193.6	268.5	232.9	197.9	222.6
B. Powerhouse	115.4	160.1	138.9	118.1	52.2
C. Spill (kcfs)	77.0	107.5	92.7	78.4	169.0
% of River Flow	39.4	40.0	39.8	39.6	75.9%
D. Water Temp *	58.1	58.6	58.3	57.5	63.1
E. % Saturation *	110.2	110.2	110.7	107.0	117.3

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

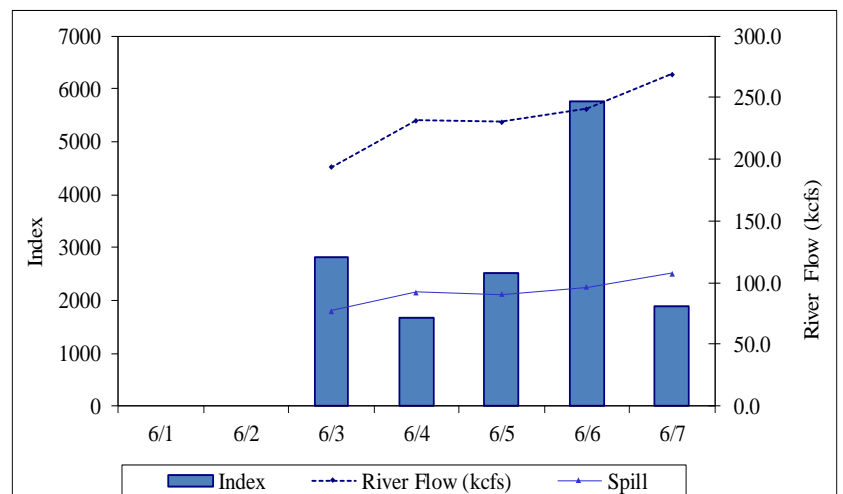
% SAMPLE COMPOSITION			This Week	Last Week
YEARLING CHINOOK	7.2%	14.4%		
SUBYEARLING CHINOOK	69.3%	41.1%		
CHINOOK FRY	0.0%	0.0%		
UNCLIPPED STEELHEAD	3.6%	4.5%		
CLIPPED STEELHEAD	2.6%	5.1%		
COHO	6.7%	10.3%		
COHO FRY	0.0%	0.0%		
SOCKEYE	10.6%	24.6%		

YEARLING CHINOOK							SUBYEARLING CHINOOK					COHO				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
6/1																
6/2																
6/3	10.0%	14	0.0	0.0	140	233	109	0.9	0.0	1,090	1,817	16	6.3	0.0	160	267
6/4	15.6%	11	0.0	0.0	84	140	102	2.9	0.0	698	1,164	15	6.7	0.0	55	92
6/5	9.0%	10	0.0	0.0	150	249	97	1.0	0.0	965	1,599	8	12.5	0.0	110	182
6/6	4.0%	8	0.0	0.0	200	334	99	4.0	0.0	2,550	4,262	7	0.0	0.0	150	251
6/7	11.4%	9	0.0	0.0	81	135	96	1.0	0.0	789	1,319	3	0.0	0.0	39	65
Weekly		52	0.0	0.0	655	1,092	503	2.0	0.0	6,092	10,162	49	6.1	0.0	514	857
Season to date		4,114	2.3	0.0	55,971	92,690	1,254	2.4	0.0	16,371	27,294	569	4.2	0.0	9,313	15,535

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
6/1																					
6/2																					
6/3	10.0%	5	0.0	0.0	50	83	5	0.0	0.0	50	83	19	5.3	0.0	190	317					
6/4	15.6%	7	1.0	0.0	38	63	5	0.0	0.0	24	40	16	0.0	0.0	98	163					
6/5	9.0%	3	0.0	0.0	45	75	3	0.0	0.0	30	50	16	0.0	0.0	225	373					
6/6	4.0%	6	16.7	0.0	100	167	4	25.0	0.0	80	134	12	8.3	0.0	360	602					
6/7	11.4%	5	0.0	0.0	59	99	2	0.0	0.0	50	84	14	0.0	0.0	113	189					
Weekly		26	7.7	0.0	292	487	19	5.3	0.0	234	390	77	2.6	0.0	986	1,644					
Season to date		279	5.4	0.0	4,163	6,906	905	7.3	0.0	15,903	26,543	575	3.7	0.0	7,124	11,866					

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
6/1						
6/2						
6/3	10.0%	168	1.8	0.0	1,680	2,801
6/4	15.6%	156	3.2	0.0	997	1,662
6/5	9.0%	137	1.5	0.0	1,525	2,528
6/6	4.0%	136	5.1	0.0	3,440	5,750
6/7	11.4%	129	0.8	0.0	1,131	1,890
Weekly		726	2.5	0.0	8,773	14,632
Season to date		7,696	3.2	0.0	108,845	180,834

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
6/1									
6/2									
6/3	0	0.0	0	0	0.0	0	0	0	0
6/4	0	0.0	0	0	0.0	0	0	0	0
6/5	0	0.0	0	0	0.0	0	0	0	0
6/6	0	0.0	0	0	0.0	0	0	0	0
6/7	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	7	0.0	68	0	0.0	0	0	0	0

SECTION 2. Smolt and Lamprey Condition Monitoring Summary

		Yearling		Subyearling		Unclipped		Clipped		Coho		Sockeye		Total All Species Combined	Percent All Species Combined
		Chinook		Chinook		Steelhead		Steelhead							
		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 #		52	160	503	460	26	50	19	57	49	115	77	275	726	100%
DESCALING	3-19%	5.8%	4.4%	1.6%	0.7%	3.8%		1.8%		2.0%	1.7%	3.9%	4.4%	16	2.2%
	>20%			0.2%								1.3%	1.1%	2	0.3%
	Pred. Desc.		1.9%	1.8%	2.2%	7.7%	2.0%	5.3%	14.0%	6.1%	2.6%	1.3%	2.9%	16	2.2%
INJURY	BODY		3.8%	0.4%	1.3%		2.0%	5.3%		0.9%		0.7%		2	0.3%
	EYE													0	0.0%
	HEAD				0.2%		2.0%							0	0.0%
	OPERC.		0.6%		0.2%		2.0%					4.0%		0	0.0%
	FIN		3.8%	0.4%	0.4%		4.0%			2.0%		2.6%	1.8%	5	0.7%
	POPEYE													0	0.0%
OTHER CONDITIONS	PINK FIN													0	0.0%
	Fin Discolor.													0	0.0%
	FIN HEM.	1.9%	0.6%	2.0%	0.4%							1.3%	0.7%	12	1.7%
DISEASE	Columnaris											0.4%		0	0.0%
	FUNGUS		1.3%	0.2%	0.2%		2.0%			2.0%		1.3%	1.1%	3	0.4%
	BKD	1.9%	0.6%	0.2%										2	0.3%
	PARASITES			1.0%	1.1%		6.0%			2.6%				5	0.7%
	DEFORMITY			0.2%								0.4%		1	0.1%
	EYE HEM.		0.6%							0.9%		0.7%		0	0.0%
PREDATION	BIRD	1.9%	0.6%		0.7%		4.0%		12.3%	0.9%		0.7%		1	0.1%
	FISH		3.1%	2.2%	2.4%	7.7%		5.3%	7.0%	6.1%	1.7%	2.6%	2.5%	19	2.6%
	LAMPREY			0.2%								0.7%		1	0.1%
	OTHER													0	0.0%
end dates		6/7	5/31												

end dates	6/7	5/31
-----------	-----	------

			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	6/7	0											
	Last Week	5/31	2											
AP - Ammocoetes		SAMPLE #												
	This Week	6/7	0											
	Last Week	5/31	0											

SECTION 3. Incidental Summary

	Bass - Largemouth	Bass - Smallmouth	Bluegill and Pumpkinseed	Bullhead	Carp	Catfish- Channel	Chiselmouth	Crappie species
This Week	0	0	1	0	0	0	0	0
Season to Date	0	4	7	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	8
Season to Date	0	0	0	0	1	0	0	114

	Redside Shiner	Sand Roller	Sculpin species	Stickleback 3 spine	Sucker species	Shad Adult	Shad Juvenile	Sturgeon White
This Week	0	0	0	0	1	0	0	0
Season to Date	0	0	3	0	1	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	2	0	0
Season to Date	0	0	0	28	0	88	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

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

SECTION 6. Pictures



Sucker species (Family *Catostomus*), possibly a Bridgelip Sucker (*Catostomus columbianus*), approximately 160 mm fork length, sampled at the John Day Dam Smolt Facility on 4 June, 2024.



Mouth detail from the fish pictured above.



Sub-adult Pumpkinseed Sunfish (*Lepomis gibbosus*), approximately 65 mm fork length, sampled at the John Day Dam Smolt Facility on 5 June, 2024.