

Pacific States Marine Fisheries Commission

John Day Dam Condition Monitoring Weekly Report, #22-9

Report Period: 5/28 – 6/3, 2022

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SECTION 1. River Flow and Sampling Results

	Mean				
	Min	Max	Current	Last Week	2021
A. River Flow	319.4	351.3	333.7	268.3	221.8
B. Powerhouse 1	87.0	119.0	104.3	102.7	68.9
C. Powerhouse 2	0.0	0.0	0.0	0.0	0.0
D. Spill (kcfs)	220.2	231.1	228.1	164.0	151.6
% of River Flow	65.7	72.4	68.4	61.1	68.2
E. Water Temp *	55.5	56.1	55.9	55.7	59.3
F. % Saturation *	111.4	122.1	114.9	116.4	105.1

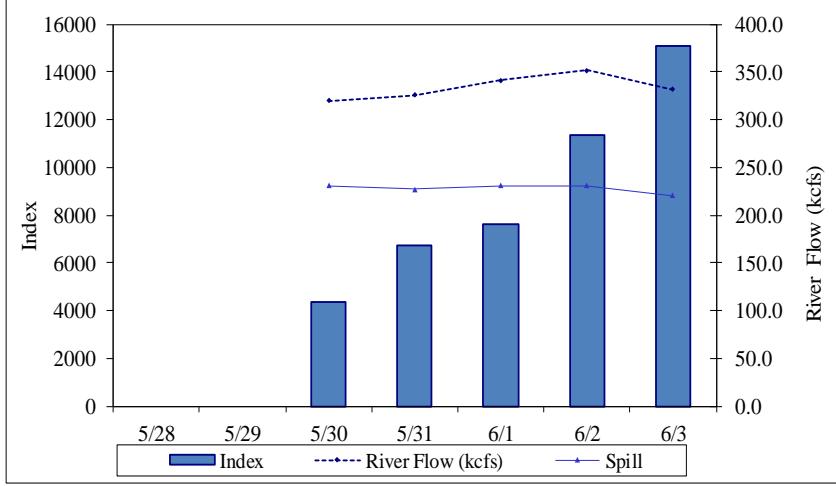
* TDG data from USGS forebay sensor, water temp from lab and USGS sensor.

% SAMPLE COMPOSITION	This Week	Last Week
YEARLING CHINOOK	27.3%	46.8%
SUBYEARLING CHINOOK	18.2%	0.6%
CHINOOK FRY	0.0%	0.1%
UNCLIPPED STEELHEAD	6.3%	3.9%
CLIPPED STEELHEAD	6.9%	7.3%
COHO	3.3%	5.4%
COHO FRY	0.0%	0.0%
SOCKEYE	38.0%	35.8%

YEARLING CHINOOK						SUBYEARLING CHINOOK						COHO					
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	
5/28																	
5/29																	
5/30	3.7%	40	2.5	0.0	1,075	1,075	10	0.0	0.0	275	275	3	0.0	0.0	75	75	
5/31	9.6%	52	1.9	0.0	520	1,738	21	0.0	0.0	240	802	8	12.5	0.0	80	267	
6/1	7.9%	60	3.3	0.0	825	2,582	34	0.0	0.0	385	1,205	11	0.0	0.0	140	438	
6/2	5.0%	58	0.0	0.0	1,160	3,409	38	0.0	0.0	760	2,233	3	0.0	0.0	60	176	
6/3	3.8%	43	4.7	0.0	1,100	3,302	66	1.5	0.0	1,800	5,403	6	0.0	0.0	175	525	
Weekly		253	2.4	0.0	4,680	12,106	169	0.6	0.0	3,460	9,919	31	3.2	0.0	530	1,482	
Season to date		4,394	2.3	0.1	43,559	105,944	194	0.5	0.0	3,690	10,398	387	2.1	0.0	4,575	11,172	

UNCLIPPED						STEELHEAD						CLIPPED						SOCKEYE					
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index		
5/28																							
5/29																							
5/30	3.7%	2	0.0	0.0	50	50	1	0.0	0.0	50	50	104	2.9	0.0	2,850	2,850							
5/31	9.6%	12	1.0	0.0	120	401	8	0.0	0.0	80	267	92	5.4	0.0	965	3,225							
6/1	7.9%	21	1.0	0.0	270	845	30	16.7	0.0	360	1,127	36	5.6	0.0	450	1,408							
6/2	5.0%	15	0.0	0.0	300	882	21	4.8	0.0	420	1,234	58	3.4	0.0	1,160	3,409							
6/3	3.8%	8	0.0	0.0	200	600	4	0.0	0.0	125	375	63	3.2	0.0	1,625	4,878							
Weekly		58	3.4	0.0	940	2,778	64	9.4	0.0	1,035	3,054	353	4.0	0.0	7,050	15,770							
Season to date		250	2.0	0.0	3,226	8,632	991	6.4	0.2	10,448	25,775	1,010	2.9	0.2	21,956	55,281							

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
5/28						
5/29						
5/30	3.7%	160	2.5	0.0	4,375	4,375
5/31	9.6%	193	4.1	0.0	2,005	6,701
6/1	7.9%	192	5.2	0.0	2,430	7,606
6/2	5.0%	193	1.6	0.0	3,860	11,343
6/3	3.8%	190	2.6	0.0	5,025	15,084
Weekly		928	3.2	0.0	17,695	45,109
Season to date		7,226	2.9	0.1	87,454	217,202



Notes: Condition percentages are calculated from sample numbers.
Subyearling chinook and coho include fry.

End Date	Pacific Lamprey			Ammocoetes			Western Brook Ammocoetes		
	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll
5/28	0	0.0	0	0	0.0	0	0	0	0
5/29	0	0.0	0	0	0.0	0	0	0	0
5/30	1	0.0	25	0	0.0	0	0	0	0
5/31	0	0.0	0	0	0.0	0	0	0	0
6/1	0	0.0	0	0	0.0	0	0	0	0
6/2	0	0.0	0	0	0.0	0	0	0	0
6/3	5	0.0	125	0	0.0	0	0	0	0
Weekly	6	0.0	150	0	0.0	0	0	0	0
Season to date	57	1.8	816	3	0.0	77	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 #	253	434	169	6	58	36	64	68	31	50	353	331
DESCALING	3-19%	4.3%	5.1%	1.8%	3.4%	8.3%	10.9%	4.4%	6.5%	4.0%	4.2%	4.8%
	>20%		1.2%	0.6%							2.5%	0.9%
Pred. Desc.	Pred. Desc.	2.4%	1.8%		3.4%	2.8%	9.4%	5.9%	3.2%		1.4%	1.5%
INJURY	BODY	0.4%	1.4%	0.6%			3.1%	1.5%	6.5%		0.3%	0.6%
	EYE	0.4%	0.9%	0.6%				1.5%				0.3%
	HEAD		0.2%								2.0%	0.9%
	OPERC.		0.5%	0.6%		2.8%		4.4%			0.8%	1.2%
	FIN	2.4%	1.2%	1.2%	3.4%	2.8%					0.3%	
	POPEYE										0.6%	
OTHER CONDITIONS	PINK FIN											
	Fin Discolor.											
	FIN HEM.		0.2%									
DISEASE	Columnaris											
	FUNGUS		0.2%			1.7%		1.6%				0.3%
	BKD										0.3%	0.3%
	PARASITES				3.4%	2.8%						
	DEFORMITY	0.5%	0.6%		2.8%		10.3%		2.0%			
	EYE HEM.	0.8%	0.9%		2.9%		2.9%		2.0%		0.3%	0.6%
PREDATION	BIRD	2.8%	4.4%		5.2%	8.3%	9.4%	7.4%	6.5%	2.0%	0.6%	2.4%
	FISH	2.0%	1.8%	0.6%	1.7%	5.6%	3.1%	1.5%		2.0%	2.3%	0.9%
	LAMPREY											
	OTHER											

end dates 6/3 5/27

MP- Macrophthalmia	End Date	SAMPLE #	INJURY					DISEASE and OTHER CONDITIONS					PREDATION	
			BODY	EYE	HEAD	FIN	POPEYE	FIN HEM	Columnaris	FUNGUS	DEFORMITY	EYE HEM.	BIRD	FISH
This Week	6/3	6												
	5/27	18												
AP - Ammocoetes		SAMPLE #	5.6%					11.1%					22.2%	
			6/3	0										
			5/27	2										
			50.0%											

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	2	6	0	1	0	0	4

	Dace - Longnose	Dace - Speckled	Chinook Jack	Kokanee	Lamprey Adult	Northern Pikeminnow	Peamouth	Perch Yellow
This Week	0	0	0	0	0	0	0	23
Season to Date	0	0	0	0	0	0	0	269

	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	8	5	0	0	0	0

	Trout Bull	Trout Cutthroat	Trout Rainbow	Walleye	Whitefish Mountain	Siberian Prawn	Chum Salmon	Goldfish
This Week	0	0	0	1	0	6	0	0
Season to Date	0	0	0	15	0	61	0	1

SECTION 4. Facility Operations

Condition Monitoring at John Day Dam is scheduled to sample Monday through Friday until mid-June. Samples will be taken from the Juvenile Bypass System between approximately 0700 and 1300 hrs. Collection, Index, and River flow estimates and averages are for the sample period only. The Condition Exams will target approximately 100 of the predominant species of out-migrant, currently Sockeye (38% composition) and Yearling spring Chinook (27% composition). Debris at the separator bars and in the sample holding tank was low and consisted of sticks, plastic, and pieces of terrestrial vegetation.

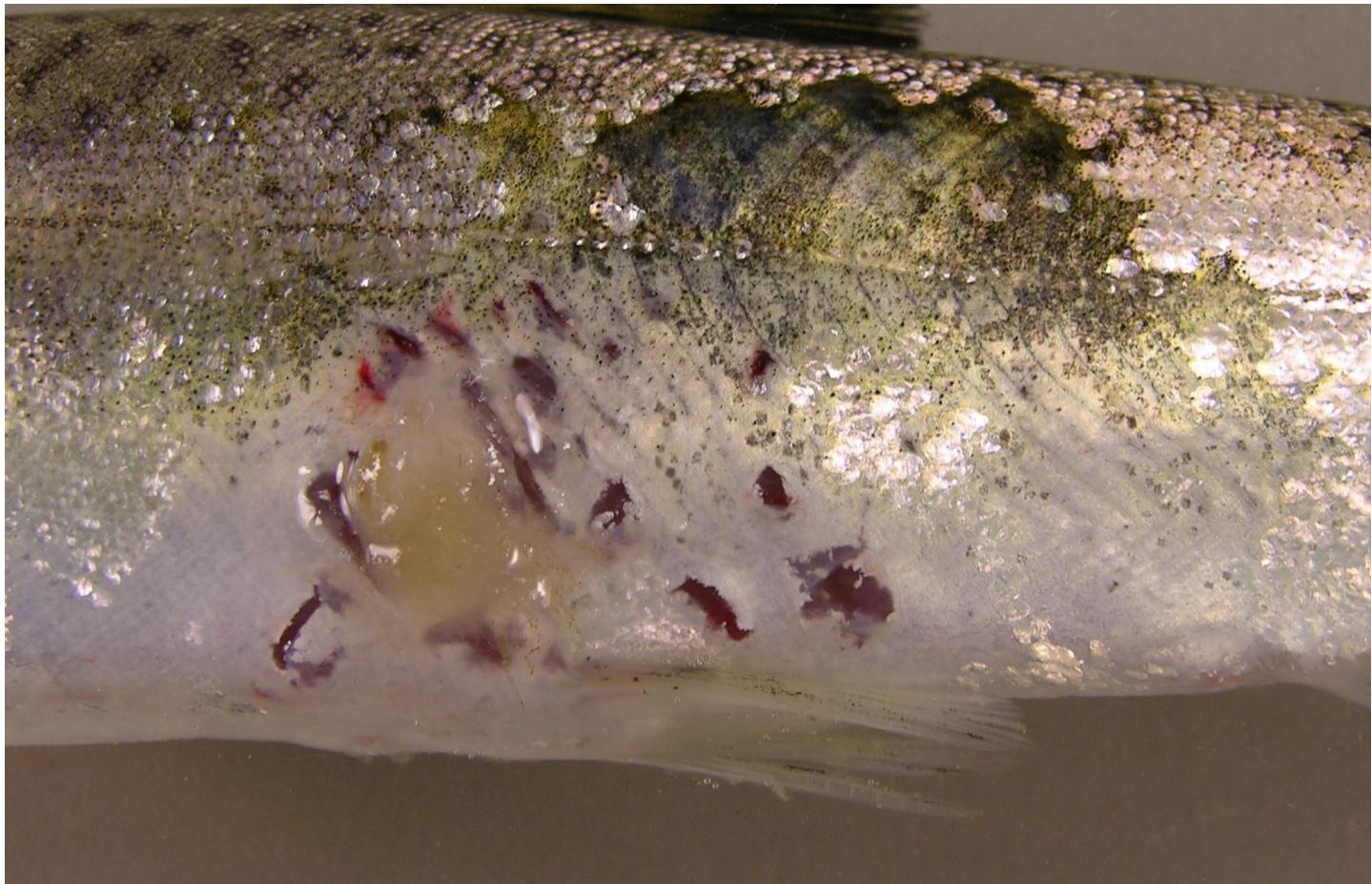
SECTION 5. Research

Genetic fin clip samples were taken from 6 Pacific Lamprey macrophthalmia for the Columbia River Inter-Tribal Fish Commission during this report period.

SECTION 6. Pictures



Yearling spring Chinook (*Oncorhynchus tshawytscha*) smolt, approximately 170 mm fork length, showing predation marks caused by a fish, sampled on 31 March, 2022 at the John Day Dam Smolt Facility.



Detail of injury from specimen above showing detail of fish predator mouth shape, tooth puncture marks, and fungus.