

Pacific States Marine Fisheries Commission

John Day Dam Condition Monitoring Weekly Report, #23-9

Report Period: 5/27 – 6/2, 2023

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SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2022
A. River Flow	228.5	281.4	263.8	376.8	323.9
B. Powerhouse 1	51.3	70.2	57.0	166.2	98.1
C. Spill (kcfs)	174.9	219.4	205.5	209.3	224.4
% of River Flow	74.6	80.4	77.9	56.1	69.4
D. Water Temp *	59.7	60.8	60.1	58.7	55.8
E. % Saturation *	112.0	120.3	115.4	123.1	114.2

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

% SAMPLE COMPOSITION		This Week	Last Week
YEARLING CHINOOK	15.8%	49.8%	
SUBYEARLING CHINOOK	65.3%	9.5%	
CHINOOK FRY	0.5%	1.0%	
UNCLIPPED STEELHEAD	2.7%	9.4%	
CLIPPED STEELHEAD	2.8%	17.9%	
COHO	10.4%	5.9%	
COHO FRY	0.0%	0.0%	
SOCKEYE	2.6%	6.3%	

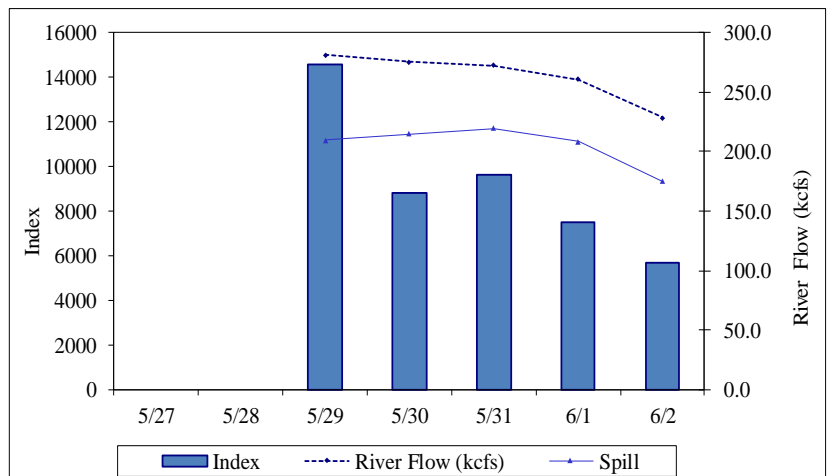
YEARLING CHINOOK							SUBYEARLING CHINOOK					COHO				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
5/27																
5/28																
5/29	5.0%	49	0.0	0.0	980	3,910	102	0.0	0.0	2,040	8,140	17	0.0	0.0	340	1,357
5/30	6.5%	18	0.0	0.0	290	1,349	78	0.0	0.0	1,220	5,673	12	0.0	0.0	150	698
5/31	10.0%	35	2.9	0.0	350	1,824	117	0.9	0.0	1,170	6,097	23	4.3	0.0	230	1,199
6/1	9.7%	10	0.0	0.0	130	658	105	2.9	0.0	1,090	5,516	14	21.4	0.0	130	658
6/2	10.9%	11	9.1	0.0	110	477	111	0.0	0.0	1,005	4,359	15	0.0	0.0	140	607
Weekly		123	1.6	0.0	1,860	8,218	513	0.8	0.0	6,525	29,785	81	4.9	0.0	990	4,518
Season to date		3,856	2.2	0.2	83,678	212,511	659	1.4	0.2	10,364	38,857	237	4.6	0.0	7,404	19,719

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
5/27																					
5/28																					
5/29	5.0%	7	1.0	0.0	140	559	7	0.0	0.0	140	559	1	0.0	0.0	20	80	1	0.0	0.0	20	80
5/30	6.5%	6	0.0	0.0	90	419	4	0.0	0.0	60	279	6	0.0	0.0	80	372	6	0.0	0.0	80	372
5/31	10.0%	1	0.0	0.0	10	52	4	0.0	0.0	40	208	5	0.0	0.0	50	261	5	0.0	0.0	50	261
6/1	9.7%	5	0.0	0.0	50	253	3	0.0	0.0	15	76	7	14.3	0.0	65	329	7	14.3	0.0	65	329
6/2	10.9%	2	0.0	0.0	20	87	4	0.0	0.0	35	152	1	0.0	0.0	5	22	1	0.0	0.0	5	22
Weekly		21	4.8	0.0	310	1,369	22	0.0	0.0	290	1,274	20	5.0	0.0	220	1,063	20	5.0	0.0	220	1,063
Season to date		338	3.6	0.0	10,226	25,651	955	4.0	0.0	38,665	97,819	129	6.2	0.0	4,510	10,984	129	6.2	0.0	4,510	10,984

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
5/27						
5/28						
5/29	5.0%	183	0.5	0.0	3,660	14,604
5/30	6.5%	124	0.0	0.0	1,890	8,789
5/31	10.0%	185	1.6	0.0	1,850	9,641
6/1	9.7%	144	4.9	0.0	1,480	7,489
6/2	10.9%	144	0.7	0.0	1,315	5,704
Weekly		780	1.5	0.0	10,195	46,227
Season to date		6,174	2.6	0.1	154,847	405,541

Notes: Condition percentages are calculated from sample numbers.

Subyearling chinook and coho include fry.



Western Brook

	Macrophthalmia			Ammocoetes			Ammocoetes		
End Date	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll
5/27									
5/28									
5/29	3	0.0	60	0	0.0	0	0	0	0
5/30	2	0.0	40	0	0.0	0	0	0	0
5/31	8	0.0	80	0	0.0	0	0	0	0
6/1	4	0.0	40	0	0.0	0	0	0	0
6/2	1	0.0	10	1	0.0	10	0	0	0
Weekly	18	0.0	230	1	0.0	10	0	0	0
Season to date	248	0.0	3,133	107	0.0	575	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 #		123	496	509	95	21	94	22	178	81	59	20	63
DESCALING	3-19%	5.7%	3.8%	2.2%	1.1%	4.8%	1.1%	4.5%	4.5%	6.2%	3.4%		6.3%
	>20%		1.2%		3.2%		2.1%		0.6%			5.0%	3.2%
	Pred. Desc.	1.6%	2.2%	0.8%	2.1%	4.8%	3.2%		5.6%	4.9%	3.4%		4.8%
INJURY	BODY	1.6%	0.8%	1.0%			1.1%			1.7%			
	EYE		0.2%				1.1%		0.6%			5.0%	1.6%
	HEAD						2.1%	4.5%	1.1%				
	OPERC.	0.8%		0.4%	1.1%		1.1%	4.5%	1.1%	3.7%	1.7%	5.0%	4.8%
	FIN	3.3%	1.4%			9.5%	1.1%	4.5%	1.1%	1.2%			3.2%
	POPEYE		0.2%										
OTHER CONDITIONS	PINK FIN												
	Fin Discolor.												
	FIN HEM.	3.3%	0.4%	3.5%	2.1%	1.1%				1.2%		5.0%	3.2%
DISEASE	Columnaris					4.8%		4.5%					
	FUNGUS					4.8%	1.1%		1.7%	1.2%	1.7%		
	BKD	1.6%	1.0%	0.2%									
	PARASITES	0.8%	0.2%	0.2%		4.8%	4.3%			1.2%			
	DEFORMITY		0.4%	0.6%			2.1%						
	EYE HEM.		1.2%				2.1%		0.6%			1.6%	
PREDATION	BIRD	0.8%	1.4%	0.2%		4.8%	2.1%	9.1%	5.6%	2.5%	5.1%		
	FISH	2.4%	2.0%	0.8%	2.1%		2.1%		3.4%	6.2%		4.8%	
	LAMPREY			0.2%									
	OTHER												
end dates		6/2	5/26										

			INJURY					DISEASE and OTHER CONDITIONS					PREDATION	
MP- Macrophthalmia This Week Last Week	End Date	SAMPLE #	BODY	EYE	HEAD	FIN	POPEYE	FIN HEM	Columnaris	FUNGUS	DEFORMITY	EYE HEM.	BIRD	FISH
	6/2	18						5.6%					11.1%	
	5/26	14											28.6%	
AP - Ammocoetes This Week Last Week		SAMPLE #												
	6/2	1	100.0%		100.0%									
	5/26	1												

SECTION 3. Incidental Summary

	Bass Largemouth	Bass Smallmouth	Bluegill and Pumpkinseed	Bullhead	Carp	Catfish, Channel	Chiselmouth	Crappie species
This Week	0	5	0	0	0	0	0	0
Season to Date	0	8	6	0	2	1	0	7

	Dace - Longnose	Dace - Speckled	Chinook Jack	Kokanee	Lamprey Adult	Northern Pikeminnow	Peamouth	Perch Yellow
This Week	0	0	0	0	1	0	0	1
Season to Date	0	0	0	0	2	0	0	66

	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	10	4	2	0	0	0

	Trout Bull	Trout Cutthroat	Trout Rainbow	Walleye	Whitefish Mountain	Siberian Prawn	Chum Salmon	Banded Killifish
This Week	0	0	0	0	0	4	0	0
Season to Date	0	0	0	21	1	180	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 0700 and 1300 hrs. and the Condition Exams will target approximately 100 of the predominant species of out-migrant, which has switched from Yearling Spring Chinook last week to Subyearling Fall Chinook this week. Collection, Index, and River flow estimates and averages are for the sample period only. Debris at the separator bars was low to moderate for the week which coincided with lower river flows and less turbid water than last week. Debris consisted of sticks, tumbleweeds, pieces of terrestrial vegetation, and plastic.

SECTION 5. Research

Genetic fin clip samples were taken from 18 Pacific Lamprey macrophthalmia and one Pacific Lamprey ammocoete for the Columbia River Inter-Tribal Fish Commission during this report period.

SECTION 6. Pictures



Clipped Subyearling Fall Chinook smolt (*Oncorhynchus tshawytscha*), approximately 105 mm fork length, showing a scar caused by a Pacific Lamprey macrophthalmia (*Entosphenus tridentatus*), similar to one sampled at the John Day Dam Smolt Facility on June 2, 2023.



Juvenile Smallmouth Bass (*Micropterus dolomieu*), approximately 87 mm fork length, sampled at the John Day Dam Smolt Facility on June 2, 2023.