

Pacific States Marine Fisheries Commission

John Day Dam Condition Monitoring Weekly Report, #22-8

Report Period: 5/21 – 5/27, 2022

Project Leader: Rick Martinson

Prepared By: Gregory Kovalchuk and Aaron Young



SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2021
A. River Flow	253.6	282.5	268.3	259.6	211.3
B. Powerhouse 1	79.1	139.3	102.7	114.6	77.0
C. Powerhouse 2	0.0	0.0	0.0	0.0	0.0
D. Spill (kcfs)	129.4	201.9	164.0	143.9	133.0
% of River Flow	47.8	71.5	61.1	55.3	62.7
E. Water Temp *	55.3	56.1	55.7	54.6	57.0
F. % Saturation *	112.2	118.4	116.4	112.8	104.7

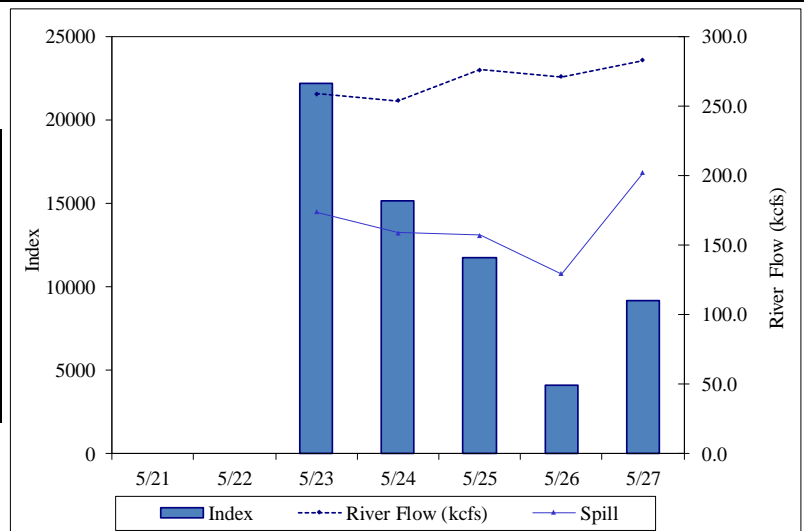
* TDG data from USGS forebay sensor, water temp from lab and USGS sensor.

% SAMPLE COMPOSITION	This Week	Last Week
YEARLING CHINOOK	46.8%	51.9%
SUBYEARLING CHINOOK	0.6%	0.4%
CHINOOK FRY	0.1%	0.0%
UNCLIPPED STEELHEAD	3.9%	2.6%
CLIPPED STEELHEAD	7.3%	11.7%
COHO	5.4%	4.8%
COHO FRY	0.0%	0.0%
SOCKEYE	35.8%	28.7%

YEARLING CHINOOK							SUBYEARLING CHINOOK					COHO				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
5/21																
5/22																
5/23	2.6%	107	4.7	0.0	4,275	13,121	0	0.0	0.0	0	0	4	0.0	0.0	125	384
5/24	3.0%	97	2.1	0.0	3,300	8,900	1	0.0	0.0	50	135	5	0.0	0.0	175	472
5/25	3.7%	91	3.3	0.0	2,375	5,532	0	0.0	0.0	0	0	18	0.0	0.0	575	1,339
5/26	8.5%	53	1.9	0.0	650	1,254	5	0.0	0.0	80	154	9	0.0	0.0	135	260
5/27	7.7%	86	2.3	0.0	1,030	3,659	1	0.0	0.0	10	36	14	0.0	0.0	200	710
Weekly		434	3.0	0.0	11,630	32,465	7	0.0	0.0	140	325	50	0.0	0.0	1,210	3,166
Season to date		4,141	2.3	0.1	38,879	93,838	25	0.0	0.0	230	479	356	2.0	0.0	4,045	9,690

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
5/21																					
5/22																					
5/23	2.6%	7	1.0	0.0	300	921	19	5.3	0.0	825	2,532	53	5.7	0.0	1,700	5,218					
5/24	3.0%	10	0.0	0.0	275	742	13	0.0	0.0	450	1,214	43	2.4	2.3	1,375	3,708					
5/25	3.7%	4	0.0	0.0	125	291	9	11.1	0.0	300	699	65	3.1	0.0	1,675	3,901					
5/26	8.5%	7	0.0	0.0	85	164	8	0.0	0.0	125	241	99	2.0	0.0	1,065	2,054					
5/27	7.7%	8	0.0	0.0	110	391	19	10.5	0.0	260	924	72	0.0	0.0	960	3,410					
Weekly		36	2.8	0.0	895	2,508	68	5.9	0.0	1,960	5,609	332	2.4	0.3	6,775	18,292					
Season to date		192	1.6	0.0	2,286	5,854	927	6.2	0.2	9,413	22,722	657	2.3	0.3	14,906	39,511					

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
5/21						
5/22						
5/23	2.6%	190	5.3	0.0	7,225	22,174
5/24	3.0%	169	1.8	0.6	5,625	15,171
5/25	3.7%	187	3.2	0.0	5,050	11,762
5/26	8.5%	181	1.7	0.0	2,140	4,128
5/27	7.7%	200	2.0	0.0	2,570	9,130
Weekly		927	2.8	0.1	22,610	62,365
Season to date		6,298	2.8	0.2	69,759	172,093



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

Western Brook

End Date	Macrophthalmia			Ammocoetes			Ammocoetes		
	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll
5/21									
5/22									
5/23	0	0.0	0	0	0.0	0	0	0	0
5/24	7	0.0	300	1	0.0	50	0	0	0
5/25	5	0.0	150	1	0.0	25	0	0	0
5/26	3	0.0	30	0	0.0	0	0	0	0
5/27	3	0.0	50	0	0.0	0	0	0	0
Weekly	18	0.0	530	2	0.0	75	0	0	0
Season to date	51	2.0	666	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 #		434	445	6	3	36	22	68	100	50	41	331	246
DESCALING	3-19%	5.1%	5.2%			8.3%		4.4%	6.0%	4.0%	2.4%	4.8%	2.4%
	>20%	1.2%	0.9%						1.0%			0.9%	1.2%
	Pred. Desc.	1.8%	1.6%			2.8%		5.9%	5.0%			1.5%	0.8%
INJURY	BODY	1.4%	1.1%					1.5%	1.0%			0.6%	0.4%
	EYE	0.9%	0.2%					1.5%					
	HEAD	0.2%										0.3%	
	OPERC.	0.5%	0.9%			2.8%	4.5%	4.4%	1.0%			0.9%	0.8%
	FIN	1.2%	1.6%			2.8%	4.5%			12.2%		1.2%	1.6%
	POPEYE		0.2%									0.3%	
OTHER CONDITIONS	PINK FIN												
	Fin Discolor. FIN HEM.	0.2%	0.2%						1.0%				
DISEASE	Columnaris												
	FUNGUS	0.2%				9.1%		3.0%				0.3%	
	BKD		0.4%									0.3%	
	PARASITES					2.8%							
	DEFORMITY	0.5%	0.2%			2.8%		10.3%		2.0%			
	EYE HEM.	0.9%	0.7%					2.9%		2.0%		0.6%	0.4%
PREDATION	BIRD	4.4%	2.0%			8.3%		7.4%	8.0%	2.0%		2.4%	0.8%
	FISH	1.8%	1.3%			5.6%		1.5%	2.0%	2.0%	2.4%	0.9%	0.4%
	LAMPREY		0.2%										
	OTHER												
end dates		5/27	5/20										

			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			
	5/27	18														5.6%	11.1%	22.2%
	5/20	0																
AP - Ammocoetes This Week Last Week																		
	5/27	2	50.0%															
	5/20	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	14
Season to Date	0	0	0	0	0	0	0	246

	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	1	0	0
Season to Date	0	0	0	14	0	55	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 Yearling spring Chinook and sockeye smolts. Debris at the separator bars and in the sample holding tank was slightly higher than last week but still low and consisted of sticks, plastic, and pieces of terrestrial vegetation.

SECTION 5. Research

Genetic fin clip samples were taken from 18 Pacific Lamprey macrophthalmia and 2 Pacific Lamprey ammocoetes for the Columbia River Inter-Tribal Fish Commission during this report period.

SECTION 6. Pictures



Pacific lamprey macrophthalmia, sampled at the John Day Dam Smolt Facility, May 24, 2022.



Pacific lamprey macrophthalmia, sampled at the John Day Dam Smolt Facility, April 17, 2008.



Pacific lamprey macrophthalmia, sampled at the John Day Dam Smolt Facility, June 2, 2006.