

# Pacific States Marine Fisheries Commission

## John Day Dam Condition Monitoring Weekly Report, #23-7

Report Period: 5/13 – 5/19, 2023

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### SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2022
A. River Flow	335.9	416.9	396.7	335.5	249.6
B. Powerhouse 1	115.4	210.7	183.4	131.2	114.6
C. Spill (kcfs)	204.7	221.4	212.2	203.1	133.9
% of River Flow	49.1	65.4	53.9	60.6	53.4
D. Water Temp *	55.5	56.8	56.1	54.5	54.3
E. % Saturation *	122.2	125.0	123.6	119.8	112.2

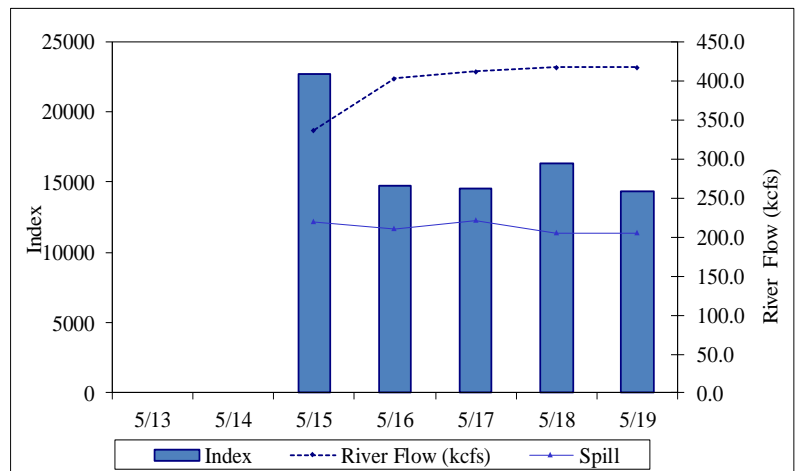
\* TDG data from USGS forebay sensor, water temp from lab and USGS sensor.

% SAMPLE COMPOSITION			This Week	Last Week
YEARLING CHINOOK	73.5%	52.0%		
SUBYEARLING CHINOOK	0.3%	0.0%		
CHINOOK FRY	1.7%	0.5%		
UNCLIPPED STEELHEAD	4.9%	6.2%		
CLIPPED STEELHEAD	11.8%	35.5%		
COHO	4.2%	3.6%		
COHO FRY	0.0%	0.0%		
SOCKEYE	3.7%	2.2%		

YEARLING CHINOOK							SUBYEARLING CHINOOK					COHO				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
5/13																
5/14																
5/15	1.6%	108	1.9	0.0	6,600	19,165	0	0.0	0.0	0	0	4	25.0	0.0	350	1,016
5/16	2.0%	111	0.9	0.0	5,550	11,630	1	0.0	0.0	50	105	6	0.0	0.0	300	629
5/17	2.0%	103	4.9	1.0	5,150	11,183	7	0.0	0.0	350	760	7	14.3	0.0	350	760
5/18	2.0%	99	4.0	0.0	4,950	9,759	5	0.0	0.0	250	493	4	0.0	0.0	200	394
5/19	2.0%	102	2.0	0.0	5,100	10,071	1	0.0	0.0	50	99	9	0.0	0.0	450	889
Weekly		523	2.7	0.2	27,350	61,808	14	0.0	0.0	700	1,456	30	6.7	0.0	1,650	3,688
Season to date		3,237	2.0	0.2	65,218	167,369	41	0.0	2.4	1,089	2,581	97	5.2	0.0	4,389	10,800

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
5/13																					
5/14																					
5/15	1.6%	2	0.0	0.0	150	436	12	0.0	0.0	700	2,033	0	0.0	0.0	0	0	0	0.0	0.0	0	0
5/16	2.0%	8	0.0	0.0	400	838	11	0.0	0.0	550	1,153	4	0.0	0.0	200	419	4	0.0	0.0	200	419
5/17	2.0%	3	1.0	0.0	150	326	13	0.0	0.0	650	1,411	1	0.0	0.0	50	109	1	0.0	0.0	50	109
5/18	2.0%	14	1.0	0.0	700	1,380	28	0.0	0.0	1,400	2,760	16	6.3	0.0	800	1,577	16	6.3	0.0	800	1,577
5/19	2.0%	8	0.0	0.0	400	790	20	10.0	0.0	1,000	1,975	5	0.0	0.0	250	494	5	0.0	0.0	250	494
Weekly		35	5.7	0.0	1,800	3,769	84	2.4	0.0	4,300	9,332	26	3.8	0.0	1,300	2,599	26	3.8	0.0	1,300	2,599
Season to date		223	2.7	0.0	7,146	18,023	755	3.6	0.0	32,515	83,708	46	4.3	0.0	2,225	5,373	46	4.3	0.0	2,225	5,373

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
5/13						
5/14						
5/15	1.6%	126	2.4	0.0	7,800	22,650
5/16	2.0%	141	0.7	0.0	7,050	14,773
5/17	2.0%	134	5.3	0.7	6,700	14,549
5/18	2.0%	166	3.6	0.0	8,300	16,364
5/19	2.0%	145	2.8	0.0	7,250	14,317
Weekly		712	3.0	0.1	37,100	82,652
Season to date		4,399	2.4	0.2	112,582	287,855



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
5/13									
5/14									
5/15	3	0.0	150	0	0.0	0	0	0	0
5/16	5	0.0	250	0	0.0	0	0	0	0
5/17	5	0.0	250	0	0.0	0	0	0	0
5/18	16	0.0	800	0	0.0	0	0	0	0
5/19	6	0.0	300	1	0.0	50	0	0	0
Weekly	35	0.0	1750	1	0.0	50	0	0	0
Season to date	216	0.0	2,433	105	0.0	515	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 #		522	476	2	0	35	57	84	327	30	33	26	20
DESCALING	3-19%	5.2%	6.3%			2.9%	1.8%	4.8%	4.3%		12.1%	15.4%	5.0%
	>20%	1.1%	0.6%							3.3%	3.0%	3.8%	
	Pred. Desc.	1.5%	0.8%			5.7%	3.5%	2.4%	2.8%	3.3%	3.0%		5.0%
INJURY	BODY	1.5%	0.6%						0.3%				
	EYE	0.2%	0.2%										
	HEAD												
	OPERC.	0.8%	0.8%					1.2%	1.8%			7.7%	5.0%
	FIN	1.3%	1.5%				1.8%		0.9%	3.3%	3.0%		10.0%
OTHER CONDITIONS	PINK FIN												
	Fin Discolor.												
	FIN HEM.	0.6%	0.8%						0.3%			3.8%	
DISEASE	Columnaris		0.2%						0.3%				
	FUNGUS	0.4%	9.9%					1.2%	1.2%				
	BKD	1.0%	0.8%							3.3%			
	PARASITES	0.4%	0.2%			8.6%	8.8%		0.3%				
	DEFORMITY	0.2%											
	EYE HEM.	0.6%	0.4%					1.2%	0.9%				5.0%
PREDATION	BIRD	2.3%	1.5%			5.7%	3.5%	7.1%	8.3%		6.1%		
	FISH	1.7%	1.1%				1.8%	1.2%	0.9%	3.3%	3.0%		5.0%
	LAMPREY	0.2%											
	OTHER												
end dates		5/19	5/12										

			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	5/19	35	2.9%					2.9%					5.7%					22.9%
Last Week	5/12	2																
AP - Ammocoetes		SAMPLE #																
This Week	5/19	1																
Last Week	5/12	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	3	5	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	0	0	0	4
Season to Date	0	0	0	0	0	0	0	64

	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	10	4	0	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	7	0	0
Season to Date	0	0	0	21	0	169	0	1

### **SECTION 4. Facility Operations**

Condition Monitoring at John Day Dam is scheduled to sample Monday through Friday until early 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 is currently Yearling Spring Chinook. Collection, Index, and River flow estimates and averages are for the sample period only. Debris at the separator bars continued to be high for the week which coincided with higher river flows and extremely turbid water. Juvenile Pacific Lamprey had very high passage the past few days with an estimate of about 174 individuals passing the separator bars per hour on 18 May. Visibility in the sample holding tank was about 10 to 12 inches for part of the week which made fish processing challenging during those periods. Debris consisted of sticks, tumbleweeds, pieces of terrestrial vegetation, and plastic.

### **SECTION 5. Research**

Genetic fin clip samples were taken from 35 Pacific Lamprey macrophthalmia and one Pacific Lamprey ammocoete for the Columbia River Inter-Tribal Fish Commission during this report period.

## SECTION 6. Pictures



Yearling Spring Chinook smolt (*Oncorhynchus tshawytscha*), approximately 140 mm fork length, sampled at the John Day Dam Smolt Facility on May 18, 2023. This example illustrates the distended stomach and vent as well as descaling which are external characteristic of Bacterial Kidney Disease (*Renibacterium salmoninarum*).



Pacific Lamprey Macrophthalmia (*Entosphenus tridentatus*), approximately 135 mm total length, showing damage and fungus on the caudal fin, similar to one sampled at the John Day Dam Smolt Facility on May 18, 2023.