

# Pacific States Marine Fisheries Commission

## John Day Dam Condition Monitoring Weekly Report, #23-5

Report Period: 4/29 – 5/5, 2023

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### SECTION 1. River Flow and Sampling Results

	Mean				
	Min	Max	Current	Last Week	2022
A. River Flow	221.3	328.9	286.5	139.9	158.0
B. Powerhouse 1	51.4	146.7	93.6	86.6	96.2
C. Spill (kcfs)	169.1	229.9	191.6	52.0	60.8
% of River Flow	54.8	79.2	67.9	36.9	38.5
D. Water Temp *	53.1	54.4	53.8	51.6	52.1
E. % Saturation *	110.4	125.5	119.9	109.9	109.7

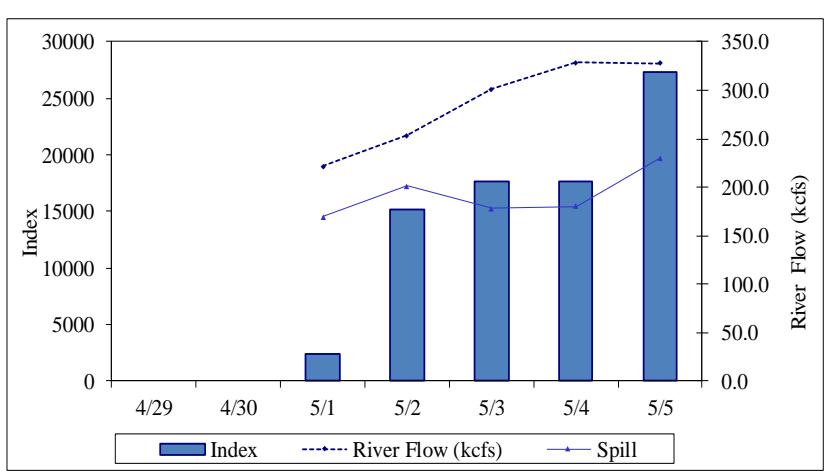
\* TDG data from USGS forebay sensor, water temp from lab and USGS sensor.

SAMPLE COMPOSITION	This Week	Last Week
YEARLING CHINOOK	51.0%	88.9%
SUBYEARLING CHINOOK	0.1%	0.0%
CHINOOK FRY	0.1%	0.7%
UNCLIPPED STEELHEAD	8.4%	3.4%
CLIPPED STEELHEAD	36.5%	6.8%
COHO	3.8%	0.2%
COHO FRY	0.0%	0.0%
SOCKEYE	0.0%	0.0%

YEARLING CHINOOK						SUBYEARLING CHINOOK						COHO					
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	
4/29																	
4/30																	
5/1	22.0%	100	1.0	0.0	453	1,943	0	0.0	0.0	0	0	1	0.0	0.0	4	17	
5/2	3.9%	105	1.9	0.0	2,715	13,321	0	0.0	0.0	0	0	2	0.0	0.0	50	245	
5/3	2.8%	85	5.9	0.0	2,825	6,937	0	0.0	0.0	0	0	10	0.0	0.0	350	859	
5/4	2.0%	52	5.8	0.0	2,600	5,794	1	0.0	0.0	50	111	6	16.7	0.0	300	669	
5/5	2.0%	45	4.4	0.0	2,250	7,621	1	0.0	0.0	50	169	10	0.0	0.0	500	1,694	
Weekly		387	3.4	0.0	10,843	35,617	2	0.0	0.0	100	281	29	3.4	0.0	1,204	3,484	
Season to date		2,236	1.9	0.2	15,068	41,989	22	0.0	4.5	139	348	34	2.9	0.0	1,214	3,498	

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		
4/29																							
4/30																							
5/1	22.0%	9	0.0	0.0	41	176	12	16.7	0.0	54	232	0	0.0	0.0	0	0	0	0.0	0.0	0	0		
5/2	3.9%	4	0.0	0.0	95	466	9	0.0	0.0	225	1,104	0	0.0	0.0	0	0	0	0.0	0.0	0	0		
5/3	2.8%	14	0.0	0.0	525	1,289	89	4.5	0.0	3,500	8,594	0	0.0	0.0	0	0	0	0.0	0.0	0	0		
5/4	2.0%	16	0.0	0.0	800	1,783	83	2.4	0.0	4,150	9,248	0	0.0	0.0	0	0	0	0.0	0.0	0	0		
5/5	2.0%	21	0.0	0.0	1,050	3,557	84	4.8	0.0	4,200	14,227	0	0.0	0.0	0	0	0	0.0	0.0	0	0		
Weekly		64	0.0	0.0	2,511	7,271	277	4.3	0.0	12,129	33,404	0	0.0	0.0	0	0	0	0.0	0.0	0	0		
Season to date		131	1.5	0.0	2,671	7,528	344	4.7	0.0	12,290	33,660	0	0.0	0.0	0	0	0	0.0	0.0	0	0		

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
4/29						
4/30						
5/1	22.0%	122	2.5	0.0	552	2,368
5/2	3.9%	120	1.7	0.0	3,085	15,137
5/3	2.8%	198	4.5	0.0	7,200	17,679
5/4	2.0%	158	3.8	0.0	7,900	17,604
5/5	2.0%	161	3.7	0.0	8,050	27,268
Weekly		759	3.4	0.0	26,787	80,056
Season to date		2,767	2.2	0.2	31,382	87,023



Notes: Condition percentages are calculated from sample numbers.

Subyearling chinook and coho include fry.

Pacific Lamprey				Western Brook					
Macrophthalmia			Ammocoetes			Ammocoetes			
End Date	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll
4/29									
4/30									
5/1	1	0.0	5	2	0.0	10	0	0	0
5/2	0	0.0	0	0	0.0	0	0	0	0
5/3	0	0.0	0	0	0.0	0	0	0	0
5/4	0	0.0	0	1	0.0	50	0	0	0
5/5	3	0.0	150	0	0.0	0	0	0	0
Weekly	4	0.0	155	3	0.0	60	0	0	0
Season to date	179	0.0	583	104	0.0	465	0	0	0

## SECTION 2. Smolt and Lamprey Condition Monitoring Summary

		Yearling Chinook		Subyearling Chinook		Unclipped Steelhead		Clipped Steelhead		Coho		Sockeye	
SAMPLE #		This Week	Last Week	This Week	Last Week	This Week	Last Week	This Week	Last Week	This Week	Last Week	This Week	Last Week
<b>DESCALING</b>	3-19%	4.4%	3.1%			1.6%	10.0%	7.2%	7.5%	10.3%			
	>20%	0.8%						0.7%					
	Pred. Desc.	2.6%	1.5%				5.0%	3.6%	5.0%	3.4%			
<b>INJURY</b>	BODY	1.6%	1.0%					1.8%					
	EYE		0.4%					0.4%					
	HEAD		0.2%					1.1%					
	OPERC.	0.3%	0.2%					0.4%					
	FIN	0.5%	0.8%					0.7%					
	POPEYE	0.3%											
<b>OTHER CONDITIONS</b>	PINK FIN												
	Fin Discolor.												
	FIN HEM.	1.6%	1.0%					0.4%					
<b>DISEASE</b>	COLUMNARIS												
	FUNGUS	0.5%	5.8%					0.4%					
	BKD	0.5%	0.8%					2.9%	2.5%				
	PARASITES	0.3%	0.2%					0.4%					
	DEFORMITY	0.3%						0.7%					
	EYE HEM.	0.8%	0.4%										
<b>PREDATION</b>	BIRD	2.8%	1.4%					7.9%	12.5%				
	FISH	2.3%	2.1%					5.0%	0.4%				
	LAMPREY												
	OTHER												

end dates 5/5 4/28

			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
			5/5	4										
AP - Ammocoetes		SAMPLE #												
			5/5	3										
		SAMPLE #												
			4/28	3						33.3%				

### **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	2
Season to Date	0	0	0	0	0	0	0	59

	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	1	0	18	0	0
Season to Date	0	0	0	21	0	160	0	0

### **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 transitioning from Yearling Spring Chinook last week to Steelhead smolt this week. Collection, Index, and River flow estimates and averages are for the sample period only. Debris at the separator bars was moderate for the week. Debris consisted of sticks, plastic, and pieces of terrestrial vegetation.

### **SECTION 5. Research**

Genetic fin clip samples were taken from 4 Pacific Lamprey macrourhthalmia and 2 Pacific Lamprey ammocoetes for the Columbia River Inter-Tribal Fish Commission during this report period.

## SECTION 6. Pictures



Steelhead smolt (*Oncorhynchus mykiss*), approximately 175 mm fork length, showing numerous raised bumps which are diagnostic symptoms of a parasitic trematode infection, sampled at the John Day Dam Smolt Facility on May 5, 2023.



Yearling Spring Chinook smolt (*Oncorhynchus tshawytscha*), approximately 95 mm fork length, showing a distended stomach, body hemorrhaging, and partial descaling- all symptoms of Bacterial Kidney Disease, sampled at the John Day Dam Smolt Facility on May 4, 2023.