

Pacific States Marine Fisheries Commission

John Day Dam Condition Monitoring Weekly Report, #23-11

Report Period: 6/10 – 6/16, 2023

Project Manager: Allan Martin

Prepared By: Gregory Kovalchuk and Aaron Young



SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2022
A. River Flow	166.9	210.9	184.9	222.6	438.7
B. Powerhouse 1	52.5	119.1	66.1	52.2	228.5
C. Spill (kcfs)	64.2	156.8	117.6	169.0	208.7
% of River Flow	34.8	74.3	63.4	75.9	47.6
D. Water Temp *	64.4	65.7	65.0	63.1	57.0
E. % Saturation *	106.6	113.9	109.6	117.3	113.6

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

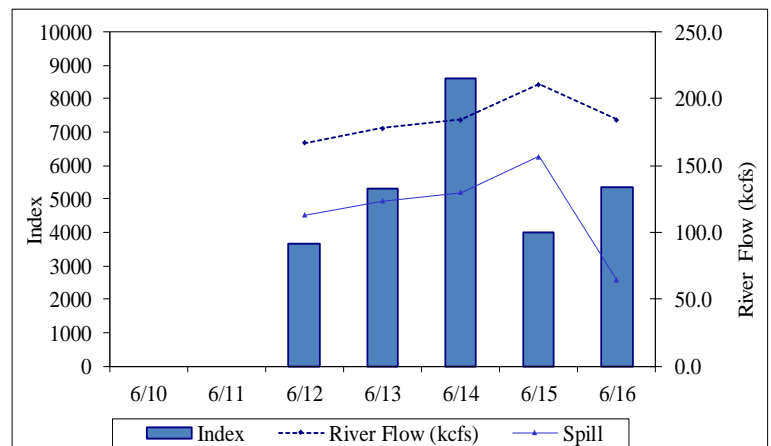
% SAMPLE COMPOSITION		This Week	Last Week
YEARLING CHINOOK		1.4%	2.4%
SUBYEARLING CHINOOK		95.4%	90.7%
CHINOOK FRY		0.4%	0.7%
UNCLIPPED STEELHEAD		0.4%	0.7%
CLIPPED STEELHEAD		0.0%	0.3%
COHO		2.1%	4.5%
COHO FRY		0.0%	0.0%
SOCKEYE		0.4%	0.5%

YEARLING CHINOOK							SUBYEARLING CHINOOK					COHO				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
6/10																
6/11																
6/12	9.5%	1	0.0	0.0	20	63	104	0.0	0.0	1,095	3,452	5	0.0	0.0	45	142
6/13	6.8%	1	0.0	0.0	20	67	104	0.0	0.0	1,500	5,008	3	0.0	0.0	50	167
6/14	5.0%	2	50.0	0.0	40	138	120	0.0	0.0	2,400	8,280	2	0.0	0.0	40	138
6/15	11.4%	2	50.0	0.0	15	59	111	0.9	0.0	975	3,865	1	0.0	0.0	10	40
6/16	3.0%	2	0.0	0.0	70	108	101	0.0	0.0	3,350	5,156	1	0.0	0.0	50	77
Weekly		8	25.0	0.0	165	435	540	0.2	0.0	9,320	25,760	12	0.0	0.0	195	563
Season to date		3,878	2.2	0.2	84,047	213,809	1,722	1.0	0.1	29,158	104,975	275	5.1	0.0	7,960	21,754

UNCLIPPED STEELHEAD							CLIPPED STEELHEAD					SOCKEYE				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
6/10																
6/11																
6/12	9.5%	0	0.0	0.0	0	0	0	0.0	0.0	0	0	1	0.0	0.0	5	16
6/13	6.8%	1	0.0	0.0	20	67	0	0.0	0.0	0	0	0	0.0	0.0	0	0
6/14	5.0%	0	0.0	0.0	0	0	0	0.0	0.0	0	0	1	0.0	0.0	20	69
6/15	11.4%	1	0.0	0.0	10	40	0	0.0	0.0	0	0	0	0.0	0.0	0	0
6/16	3.0%	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0
Weekly		2	0.0	0.0	30	106	0	0.0	0.0	0	0	2	0.0	0.0	25	85
Season to date		344	3.5	0.0	10,294	25,917	957	4.0	0.0	38,689	97,924	134	6.0	0.0	4,625	11,448

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
6/10						
6/11						
6/12	9.5%	111	0.0	0.0	1,165	3,673
6/13	6.8%	109	0.0	0.0	1,590	5,308
6/14	5.0%	125	0.8	0.0	2,500	8,625
6/15	11.4%	115	1.7	0.0	1,010	4,004
6/16	3.0%	104	0.0	0.0	3,470	5,340
Weekly		564	0.5	0.0	9,735	26,950
Season to date		7,310	2.4	0.1	174,773	475,827

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
6/10									
6/11									
6/12	0	0.0	0	0	0.0	0	0	0	0
6/13	1	0.0	20	0	0.0	0	0	0	0
6/14	0	0.0	0	0	0.0	0	0	0	0
6/15	0	0.0	0	0	0.0	0	0	0	0
6/16	0	0.0	0	0	0.0	0	0	0	0
Weekly	1	0.0	20	0	0.0	0	0	0	0
Season to date	250	0.0	3,173	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 #		8	14	538	519	2	4	0	2	12	26	2	3
DESCALING	3-19%		7.1%	2.4%	1.5%	50.0%				8.3%	11.5%	33.3%	
	>20%				0.4%						3.8%		
	Pred. Desc.	25.0%	7.1%	0.2%	1.2%						7.7%		
INJURY	BODY	12.5%	7.1%	0.6%	0.2%					8.3%	3.8%		
	EYE												
	HEAD				0.2%								
	OPERC.			0.2%	0.2%						3.8%		
	FIN		7.1%	0.2%	0.6%					8.3%	3.8%		
	POPEYE												
OTHER CONDITIONS	PINK FIN												
	Fin Discolor.												
	FIN HEM.			4.5%	3.3%								
DISEASE	Columnaris			0.2%	0.4%								
	FUNGUS				0.2%								
	BKD												
	PARASITES			0.4%	0.6%	50.0%							
	DEFORMITY												
	EYE HEM.		7.1%		0.2%								
PREDATION	BIRD			0.6%	0.8%	50.0%				8.3%			
	FISH	25.0%	7.1%	0.6%	1.0%						11.5%		
	LAMPREY			0.2%									
	OTHER												
end dates		6/16	6/9										

			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	6/16	1	100.0%					100.0%						
Last Week	6/9	1												
AP - Ammocoetes		SAMPLE #												
This Week	6/16	0												
Last Week	6/9	0												

SECTION 3. Incidental Summary

	Bass Largemouth	Bass Smallmouth	Bluegill and Pumpkinseed	Bullhead	Carp	Catfish, Channel	Chiselmouth	Crappie species
This Week	0	1	0	0	0	0	0	0
Season to Date	0	13	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	0	0	0	1
Season to Date	0	0	0	0	2	0	0	68

	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	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	2	0	0
Season to Date	0	0	0	21	2	184	0	1

SECTION 4. Facility Operations

Condition Monitoring at John Day Dam was scheduled to sample Monday through Friday until 15 June and will now sample three times a week (M,W,F) until the Columbia River water temperature averages 70 degrees F. 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 Subyearling Fall Chinook which were 95.4% of the sample this week. Collection, Index, and River flow estimates and averages are for the sample period only. Debris at the separator bars very was low for the week which continued to coincide with lower river flows than last week. Debris consisted of sticks, tumbleweeds, pieces of terrestrial vegetation, and plastic.

SECTION 5. Research

A genetic fin clip sample was taken from one Pacific Lamprey macrophthalmia for the Columbia River Inter-Tribal Fish Commission during this report period.

SECTION 6. Pictures



Unclipped Subyearling Fall Chinook smolt (*Oncorhynchus tshawytscha*), approximately 120 mm fork length, showing symptoms of a trematode infection, similar to one sampled at the John Day Dam Smolt Facility on June 14, 2023.



Unclipped Subyearling Fall Chinook smolt (*Oncorhynchus tshawytscha*), approximately 110 mm fork length, showing a leech (*Hirudinea sp.*) on the left side, similar to one sampled at the John Day Dam Smolt Facility on June 16, 2023.