

Pacific States Marine Fisheries Commission

John Day Dam Condition Monitoring Weekly Report, #22-16

Report Period: 7/16 – 7/22, 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	198.1	219.0	208.2	258.1	128.2
B. Powerhouse 1	127.8	140.3	134.1	167.3	82.3
C. Spill (kcfs)	69.5	77.1	73.0	89.6	44.6
% of River Flow	34.8	35.2	35.0	34.7	34.8
D. Water Temp *	66.3	68.4	67.5	66.5	71.6
E. % Saturation *	108.2	109.7	109.1	112.9	105.2

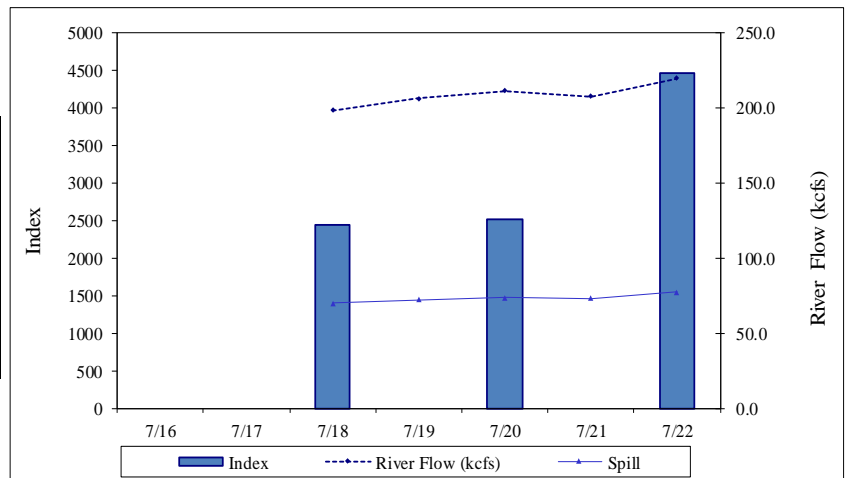
* TDG data from USGS forebay sensor, water temp from lab and USGS sensor.

% SAMPLE COMPOSITION			This Week	Last Week
YEARLING CHINOOK	0.0%	1.7%		
SUBYEARLING CHINOOK	99.7%	98.0%		
CHINOOK FRY	0.0%	0.0%		
UNCLIPPED STEELHEAD	0.0%	0.0%		
CLIPPED STEELHEAD	0.0%	0.0%		
COHO	0.3%	0.3%		
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
7/16																
7/17																
7/18	6.4%	0	0.0	0.0	0	0	100	1.0	0.0	1,570	2,424	1	0.0	0.0	10	15
7/19																
7/20	7.1%	0	0.0	0.0	0	0	116	2.6	0.0	1,630	2,509	0	0.0	0.0	0	0
7/21																
7/22	3.6%	0	0.0	0.0	0	0	104	2.9	0.0	2,875	4,455	0	0.0	0.0	0	0
Weekly		0	0.0	0.0	0	0	320	2.2	0.0	6,075	9,388	1	0.0	0.0	10	15
Season to date		4,676	2.3	0.1	47,784	114,702	3,115	1.6	0.1	84,270	151,217	484	1.9	0.2	5,780	13,654

End Date	Sample Rate	UNCLIPPED STEELHEAD					CLIPPED					SOCKEYE				
		# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
7/16																
7/17																
7/18	6.4%	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0
7/19																
7/20	7.1%	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0
7/21																
7/22	3.6%	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0
Weekly		0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0
Season to date		333	2.1	0.0	4,386	11,063	1,123	6.5	0.2	12,088	29,055	1,141	3.2	0.2	24,141	59,991

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
7/16						
7/17						
7/18	6.4%	101	1.0	0.0	1,580	2,439
7/19						
7/20	7.1%	116	2.6	0.0	1,630	2,509
7/21						
7/22	3.6%	104	2.9	0.0	2,875	4,455
Weekly		321	2.2	0.0	6,085	9,403
Season to date		10,872	2.6	0.1	178,449	379,682



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
7/16	0	0.0	0	0	0.0	0	0	0	0
7/17	0	0.0	0	0	0.0	0	0	0	0
7/18	0	0.0	0	0	0.0	0	0	0	0
7/19	0	0.0	0	0	0.0	0	0	0	0
7/20	0	0.0	0	0	0.0	0	0	0	0
7/21	0	0.0	0	0	0.0	0	0	0	0
7/22	0	0.0	0	0	0.0	0	0	0	0
Weekly	0	0.0	0	0	0.0	0	0	0	0
Season to date	320	0.3	4,161	40	0.0	482	0	0	0

SECTION 2. Smolt and Lamprey Condition Monitoring Summary

		Yearling Chinook		Subyearling		Unclipped		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 #		0	5	320	297	0	0	0	0	1	1	0	0
DESCALING	3-19%	20.0%		4.1%	2.0%					100.0%			
	>20%			0.9%	1.7%								
	Pred. Desc.			1.6%	0.7%								
INJURY	BODY	20.0%		2.2%	1.3%								
	EYE												
	HEAD				0.3%								
	OPERC.			0.3%									
	FIN			1.6%	3.0%								
	POPEYE												
OTHER CONDITIONS	PINK FIN												
	Fin Discolor.												
	FIN HEM.	20.0%		3.8%	3.4%								
DISEASE	Columnaris												
	FUNGUS			0.3%	0.3%								
	BKD			0.9%									
	PARASITES			28.1%	2.0%								
	DEFORMITY			0.3%	1.3%								
	EYE HEM.												
PREDATION	BIRD			1.6%	1.3%					100.0%			
	FISH			3.1%	2.0%								
	LAMPREY												
	OTHER												
end dates		7/22	7/15										

			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	7/22	0												
Last Week	7/15	0												
AP - Ammocoetes		SAMPLE #												
This Week	7/22	0												
Last Week	7/15	0												

SECTION 3. Incidental Summary

	Bass Largemouth	Bass Smallmouth	Bluegill and Pumpkinseed	Bullhead	Carp	Catfish, Channel	Chiselmouth	Crappie species
This Week	0	2	0	0	0	0	0	0
Season to Date	1	22	11	1	2	1	0	6

	Dace - Longnose	Dace - Speckled	Chinook Jack	Kokanee	Lamprey Adult	Northern Pikeminnow	Peamouth	Perch Yellow
This Week	0	0	0	0	0	1	0	1
Season to Date	0	0	1	0	1	1	0	361

	Redside Shiner	Sand Roller	Sculpin species	Stickleback 3 spine	Sucker species	Shad Adult	Shad Juvenile	Sturgeon White
This Week	0	0	0	0	0	2	0	0
Season to Date	0	0	9	6	1	3	0	0

	Trout Bull	Trout Cutthroat	Trout Rainbow	Walleye	Whitefish Mountain	Siberian Prawn	Chum Salmon	Banded Killifish
This Week	0	0	0	0	0	1	0	0
Season to Date	0	0	0	31	6	122	0	5

SECTION 4. Facility Operations

Condition Monitoring at John Day Dam is occurring 3 days per week (M, W, F) until river water temperatures reach 70 deg. F. Samples were 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. Condition Exams targeted approximately 100 of the predominant species of out-migrant, currently Subyearling Fall Chinook (99.7% composition). Debris at the separator bars and in the sample holding tank was low for the week and consisted of sticks, plastic, and pieces of terrestrial vegetation.

SECTION 5. Research

No research activity occurred during this report period.

SECTION 6. Pictures



Subyearling fall Chinook smolt (*Oncorhynchus tshawytscha*) with a parasitic trematode infection also known as “Black-spot disease”, approximately 110 mm fork length, similar to one sampled at the John Day Dam Smolt Facility on 22 July, 2022.