

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

	Mean				
	Min	Max	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

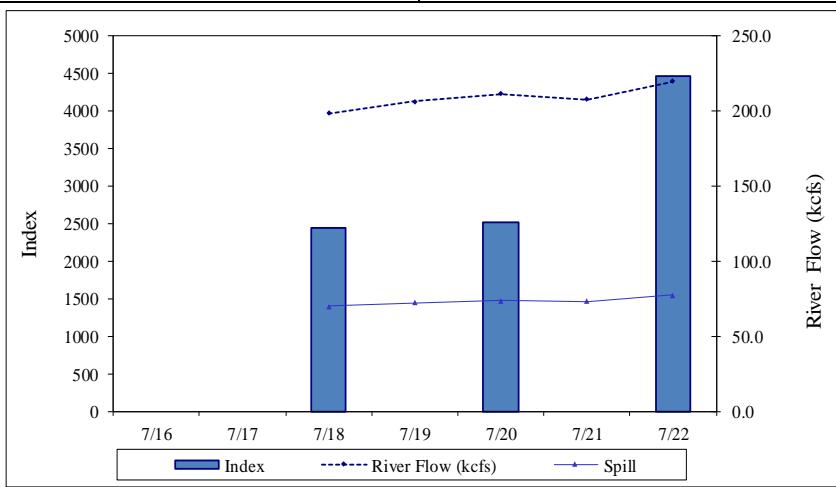
* TDG data from USGS forebay sensor, water temp from lab and USGS sensor.

% 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	

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			
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	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	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	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	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 Lamprey					
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				0.3%							
	HEAD				0.3%							
	OPERC.				1.6%	3.0%						
	FIN											
OTHER CONDITIONS	POPEYE											
	PINK FIN											
	Fin Discolor.											
DISEASE	FIN HEM.	20.0%		3.8%	3.4%							
	COLUMNARIS											
	FUNGUS				0.3%	0.3%						
	BKD				0.9%							
	PARASITES				28.1%	2.0%						
	DEFORMITY				0.3%	1.3%						
PREDATION	EYE HEM.											
	BIRD											
	FISH											
	LAMPREY				1.6%	1.3%					100.0%	
OTHER	OTHER				3.1%	2.0%						

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.