

Pacific States Marine Fisheries Commission

John Day Dam Condition Monitoring Weekly Report, #22-3

Report Period: 4/16 – 4/22, 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	120.4	157.8	136.5	155.9	145.0
B. Powerhouse 1	65.2	105.3	79.4	89.0	76.8
C. Powerhouse 2	0.0	0.0	0.0	0.0	0.0
D. Spill (kcfs)	45.0	65.3	55.8	65.7	67.0
% of River Flow	32.0	45.9	41.1	42.1	46.3
E. Water Temp *	47.7	48.5	48.0	47.6	50.4
F. % Saturation *	105.7	110.2	108.1	102.4	105.4

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

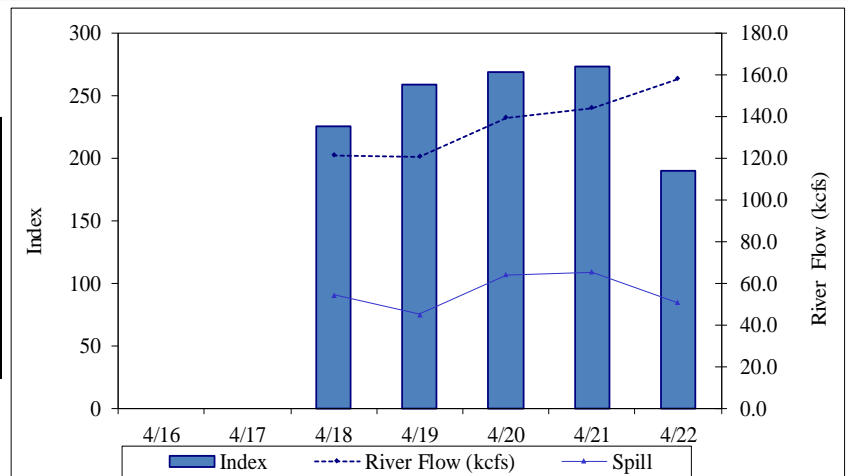
% SAMPLE COMPOSITION	This Week Last Week	
YEARLING CHINOOK	82.2%	82.0%
SUBYEARLING CHINOOK	0.2%	0.0%
CHINOOK FRY	0.2%	0.0%
UNCLIPPED STEELHEAD	3.0%	1.6%
CLIPPED STEELHEAD	14.2%	16.4%
COHO	0.3%	0.0%
COHO FRY	0.0%	0.0%
SOCKEYE	0.0%	0.0%

YEARLING CHINOOK							SUBYEARLING CHINOOK					COHO				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
4/16																
4/17																
4/18	100.0%	98	1.0	1.0	98	180	0	0.0	0.0	0	0	0	0.0	0.0	0	0
4/19	83.2%	108	2.8	0.0	126	202	0	0.0	0.0	0	0	1	0.0	0.0	2	3
4/20	83.4%	100	5.0	0.0	120	223	0	0.0	0.0	0	0	1	0.0	0.0	1	2
4/21	91.9%	114	3.5	0.9	126	232	0	0.0	0.0	0	0	0	0.0	0.0	0	0
4/22	100.0%	107	5.7	0.9	107	158	2	0.0	0.0	2	3	0	0.0	0.0	0	0
Weekly		527	3.6	0.6	577	995	2	0.0	0.0	2	3	2	0.0	0.0	3	5
Season to date		1,740	2.1	0.2	4,249	5,228	2	0.0	0.0	2	3	4	0.0	0.0	9	11

End Date	Sample Rate	UNCLIPPED STEELHEAD					CLIPPED STEELHEAD					SOCKEYE				
		# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
4/16																
4/17																
4/18	100.0%	4	0.0	0.0	4	7	21	10.0	4.8	21	38	0	0.0	0.0	0	0
4/19	83.2%	6	0.0	0.0	10	16	19	10.5	0.0	23	37	0	0.0	0.0	0	0
4/20	83.4%	0	0.0	0.0	0	0	19	10.5	0.0	23	43	0	0.0	0.0	0	0
4/21	91.9%	4	0.0	0.0	4	7	18	0.0	0.0	18	33	0	0.0	0.0	0	0
4/22	100.0%	5	0.0	0.0	5	7	14	21.4	0.0	14	21	0	0.0	0.0	0	0
Weekly		19	0.0	0.0	23	38	91	10.0	1.1	99	172	0	0.0	0.0	0	0
Season to date		47	2.1	0.0	112	137	257	8.6	0.4	551	735	0	0.0	0.0	0	0

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
4/16						
4/17						
4/18	100.0%	123	2.5	1.6	123	225
4/19	83.2%	134	3.7	0.0	161	258
4/20	83.4%	120	5.8	0.0	144	268
4/21	91.9%	136	3.0	0.7	148	273
4/22	100.0%	128	7.1	0.8	128	189
Weekly		641	4.4	0.6	704	1,213
Season to date		2,050	2.9	0.2	4,923	6,114

Notes: Condition percentages are calculated from sample numbers.
Subyearling chinook and coho include fry.



Western Brook

SECTION 2. Smolt and Lamprey Condition Monitoring Summary

			INJURY					DISEASE and OTHER CONDITIONS					PREDATION	
MP- Macrophthalmia This Week Last Week	End Date	SAMPLE #	BODY	EYE	HEAD	FIN	POPEYE	FIN HEM	Columnaris	FUNGUS	DEFORMITY	EYE HEM.	BIRD	FISH
	4/22	2	50.0%											
	4/15	5						20.0%						
AP - Ammocoetes This Week Last Week		SAMPLE #												
	4/22	0												
	4/15	1												

SECTION 3. Incidental Summary

	Bass Largemouth	Bass Smallmouth	Bluegill and Pumpkinseed	Bullhead	Carp	Catfish, Channel	Chiselmouth	Crappie species
This Week	0	0	2	0	0	0	0	1
Season to Date	0	1	2	0	0	0	0	4

	Dace - Longnose	Dace - Speckled	Chinook Jack	Kokanee	Lamprey Adult	Northern Pikeminnow	Peamouth	Perch Yellow
This Week	0	0	0	0	0	0	0	41
Season to Date	0	0	0	0	0	0	0	152

	Redside Shiner	Sand Roller	Sculpin species	Stickleback 3 spine	Sucker species	Shad Adult	Shad Juvenile	Sturgeon White
This Week	0	0	0	1	0	0	0	0
Season to Date	0	0	7	3	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	3	0	0
Season to Date	0	0	0	2	0	45	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, currently Yearling spring Chinook smolts. Debris at the separator bars and in the sample holding tank was moderate for week and consisted of sticks, plastic, and pieces of terrestrial vegetation.

SECTION 5. Research

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

SECTION 6. Pictures



Yearling spring Chinook (*Oncorhynchus tshawytscha*) smolt, showing eye injury and hemorrhaging associated with popeye, sampled on 15 April, 2022 at the John Day Dam Smolt Facility.



Yearling spring Chinook (*Oncorhynchus tshawytscha*) smolt showing descaling and fin hemorrhaging associated with a severe body injury, sampled on 22 April, 2022 at the John Day Dam Smolt Facility.