

Pacific States Marine Fisheries Commission

John Day Dam Condition Monitoring Weekly Report, #23-15

Report Period: 7/8 – 7/14, 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	119.8	135.9	127.9	129.9	269.1
B. Powerhouse 1	77.2	86.6	81.9	83.4	174.8
C. Spill (kcfs)	41.2	47.6	44.4	45.6	93.1
% of River Flow	34.4	35.0	34.7	35.1	34.6
D. Water Temp *	70.3	70.4	70.4	69.9	66.1
E. % Saturation *	104.5	107.2	105.9	109.2	112.6

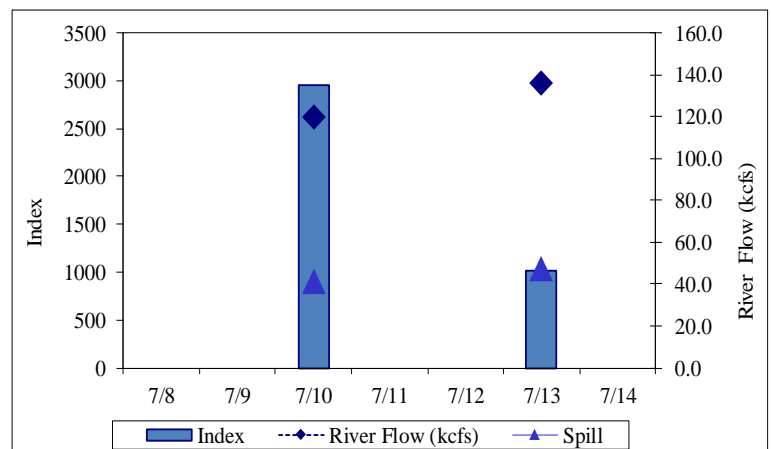
* TDG data from USGS forebay sensor, water temp from lab and USGS sensor.

% SAMPLE COMPOSITION		This Week	Last Week
YEARLING CHINOOK		0.0%	0.5%
SUBYEARLING CHINOOK		100.0%	98.5%
CHINOOK FRY		0.0%	0.0%
UNCLIPPED STEELHEAD		0.0%	0.0%
CLIPPED STEELHEAD		0.0%	0.0%
COHO		0.0%	0.5%
COHO FRY		0.0%	0.0%
SOCKEYE		0.0%	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
7/8																
7/9																
7/10	5.3%	0	0.0	0.0	0	0	103	1.0	0.0	1,930	2,960	0	0.0	0.0	0	0
7/11																
7/12																
7/13	17.1%	0	0.0	0.0	0	0	112	1.8	0.9	655	1,015	0	0.0	0.0	0	0
7/14																
Weekly		0	0.0	0.0	0	0	215	1.4	0.5	2,585	3,975	0	0.0	0.0	0	0
Season to date		3,887	2.2	0.2	84,179	214,013	2,771	1.2	0.1	50,389	137,734	283	4.9	0.0	8,144	22,038

UNCLIPPED STEELHEAD							CLIPPED STEELHEAD					SOCKEYE				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
7/8																
7/9																
7/10	5.3%	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0
7/11																
7/12																
7/13	17.1%	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0
7/14																
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		344	3.5	0.0	10,294	25,917	958	4.0	0.0	38,693	97,930	136	5.9	0.0	4,670	11,517

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
7/8						
7/9						
7/10	5.3%	103	1.0	0.0	1,930	2,960
7/11						
7/12						
7/13	17.1%	112	1.8	0.9	655	1,015
7/14						
Weekly		215	1.4	0.5	2,585	3,975
Season to date		8,379	2.3	0.1	196,369	509,149



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
7/8									
7/9									
7/10	0	0.0	0	0	0.0	0	0	0	0
7/11									
7/12									
7/13	0	0.0	0	0	0.0	0	0	0	0
7/14									
Weekly	0	0.0	0	0	0.0	0	0	0	0
Season to date	253	0.0	3,247	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 #		0	1	214	203	0	0	0	0	0	1	0	1
DESCALING	3-19%			4.7%	4.9%							100.0%	
	>20%				1.5%								
	Pred. Desc.			1.4%	0.5%								
INJURY	BODY			0.9%									
	EYE												
	HEAD												
	OPERC.												
	FIN			1.9%	2.0%								
OTHER CONDITIONS	POPEYE												
	PINK FIN												
	Fin Discolor.												
DISEASE	FIN HEM.			6.1%	3.9%								
	Columnaris												
	FUNGUS			0.5%									
	BKD			0.5%	3.9%								
	PARASITES			29.9%	21.2%								
DEFORMITY	EYE HEM.												
PREDATION	BIRD			0.9%									
	FISH			2.3%	2.0%								
	LAMPREY			0.9%									
	OTHER												
end dates		7/14	7/7										

			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
	7/14	0												
	7/7	0												
AP - Ammocoetes This Week Last Week		SAMPLE #												
	7/14	0												
	7/7	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	0	16	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	0
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	1	0	0	0	0	0
Season to Date	0	0	12	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	1	0	0	0	0
Season to Date	0	0	0	22	4	184	0	2

SECTION 4. Facility Operations

Condition Monitoring at John Day Dam was scheduled to sample Monday, Wednesday, and Friday until the Columbia River water temperature averages 70 degrees F., which occurred on July 6. We will now sample Mondays and Thursdays until the Columbia River water temperature averages 69.5 degrees F, at which point we will go back to Monday, Wednesday, and Friday sampling. 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 100% of the sample this week. Collection, Index, and River flow estimates and averages are for the sample period only. Debris at the separator bars was very low for the week and consisted of a few sticks and tumbleweed pieces but mostly soft debris such as aquatic macrophytes and bryozoans.

SECTION 5. Research

No genetic fin clip samples were taken from Pacific Lamprey macrophthalmia or ammocoetes for the Columbia River Inter-Tribal Fish Commission during this report period because no lamprey were sampled this week.

SECTION 6. Pictures



Juvenile walleye (*Sander vitreus*), approximately 50 mm fork length and probably hatched this spring, sampled at the John Day Dam Smolt Facility on July 13, 2023.



Unclipped Subyearling Fall Chinook smolt (*Oncorhynchus tshawytscha*), approximately 130 mm fork length, showing scars in the shape of a walleye mouth (note teeth marks), similar to one sampled at the John Day Dam Smolt Facility on July 13, 2023.