

# Pacific States Marine Fisheries Commission

## John Day Dam Condition Monitoring Weekly Report, #23-22

Report Period: 8/26 – 9/1, 2023

Project Manager: Allan Martin

Prepared By: Gregory Kovalchuk



### SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2022
A. River Flow	119.3	124.4	121.9	112.1	115.4
B. Powerhouse 1	97.4	103.4	100.4	89.5	97.9
C. Spill (kcfs)	20.0	21.1	20.6	21.1	16.5
% of River Flow	16.1	17.7	16.9	18.8	14.3
D. Water Temp *	70.5	71.7	71.1	72.2	71.9
E. % Saturation *	101.2	102.5	101.9	110.3	103.1

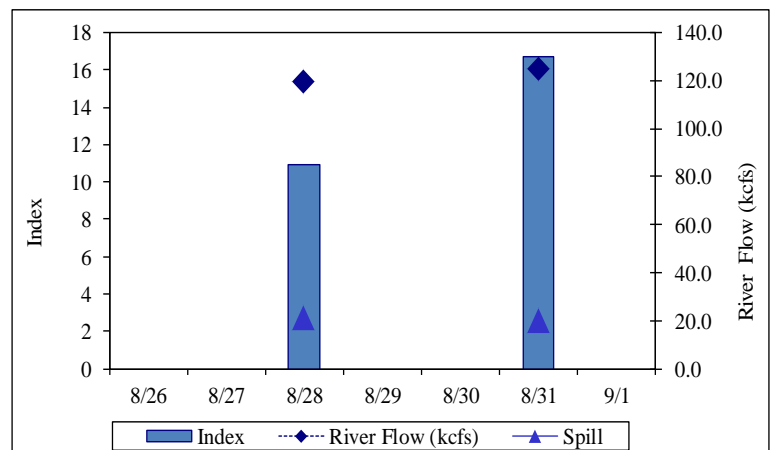
\* TDG data from USGS forebay sensor, water temp from lab and USGS sensor.

% SAMPLE COMPOSITION	This Week Last Week	
YEARLING CHINOOK	0.0%	0.0%
SUBYEARLING CHINOOK	95.7%	100.0%
CHINOOK FRY	0.0%	0.0%
UNCLIPPED STEELHEAD	0.0%	0.0%
CLIPPED STEELHEAD	4.3%	0.0%
COHO	0.0%	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
8/26	100.0%															
8/27																
8/28		0	0.0	0.0	0	0	8	0.0	0.0	8	10	0	0.0	0.0	0	0
8/29																
8/30	100.0%															
8/31		0	0.0	0.0	0	0	14	7.1	0.0	14	17	0	0.0	0.0	0	0
9/1																
Weekly		0	0.0	0.0	0	0	22	4.5	0.0	22	26	0	0.0	0.0	0	0
Season to date		3,888	2.2	0.2	84,181	214,016	3,700	1.3	0.2	54,547	144,127	284	4.9	0.0	8,145	22,040

End Date	Sample Rate	UNCLIPPED STEELHEAD					CLIPPED STEELHEAD					SOCKEYE				
		# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
8/26	100.0%															
8/27																
8/28		0	0.0	0.0	0	0	1	0.0	0.0	1	1	0	0.0	0.0	0	0
8/29																
8/30	100.0%															
8/31		0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0
9/1																
Weekly		0	0.0	0.0	0	0	1	0.0	0.0	1	1	0	0.0	0.0	0	0
Season to date		344	3.5	0.0	10,294	25,917	959	4.0	0.0	38,694	97,931	140	5.7	0.0	4,698	11,560

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
8/26	100.0%					
8/27						
8/28		9	0.0	0.0	9	11
8/29						
8/30	100.0%					
8/31		14	7.1	0.0	14	17
9/1						
Weekly		23	4.3	0.0	23	28
Season to date		9,315	2.2	0.2	200,559	515,592



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
8/26									
8/27									
8/28	0	0.0	0	1	0.0	1	0	0	0
8/29									
8/30									
8/31	0	0.0	0	0	0.0	0	0	0	0
9/1									
Weekly	0	0.0	0	1	0.0	1	0	0	0
Season to date	254	0.0	3,248	110	0.0	579	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	0	22	21	0	0	1	0	0	0	0	0
DESCALING	3-19% >20% Pred. Desc.			4.5%									
INJURY	BODY EYE HEAD OPERC. FIN POPEYE			4.5%									
OTHER CONDITION	PINK FIN Fin Discolor. FIN HEM.				4.8%								
DISEASE	Columnaris FUNGUS BKD PARASITES DEFORMITY EYE HEM.			4.5%	14.3%								
PREDATION	BIRD FISH LAMPREY OTHER												
end dates		9/1	8/25										

			INJURY					DISEASE and OTHER CONDITIONS					PREDATION	
<b>MP- Macrophthalmia</b> This Week Last Week	<b>End Date</b>	<b>SAMPLE #</b>	BODY	EYE	HEAD	FIN	POPEYE	FIN HEM	Columnaris	FUNGUS	DEFORMITY	EYE HEM.	BIRD	FISH
	9/1	<b>0</b>												
	8/25	<b>0</b>												
<b>AP - Ammocoetes</b> This Week Last Week		<b>SAMPLE #</b>												
	9/1	<b>1</b>												
	8/25	<b>0</b>												

### **SECTION 3. Incidental Summary**

	Bass Largemouth	Bass Smallmouth	Bluegill and Pumpkinseed	Bullhead	Carp	Catfish, Channel	Chiselmouth	Crappie species
This Week	0	4	2	0	0	0	0	0
Season to Date	0	41	8	0	4	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	3	1	0	83

	Redside Shiner	Sand Roller	Sculpin species	Stickleback 3 spine	Sucker species	Shad Adult	Shad Juvenile	Sturgeon White
This Week	0	0	0	0	0	5	84,174	0
Season to Date	0	0	41	4	2	10	310,762	0

	Trout Bull	Trout Cutthroat	Trout Rainbow	Walleye	Whitefish Mountain	Siberian Prawn	Chum Salmon	Banded killifish
This Week	0	0	0	12	0	0	0	1
Season to Date	0	0	0	164	4	185	0	5

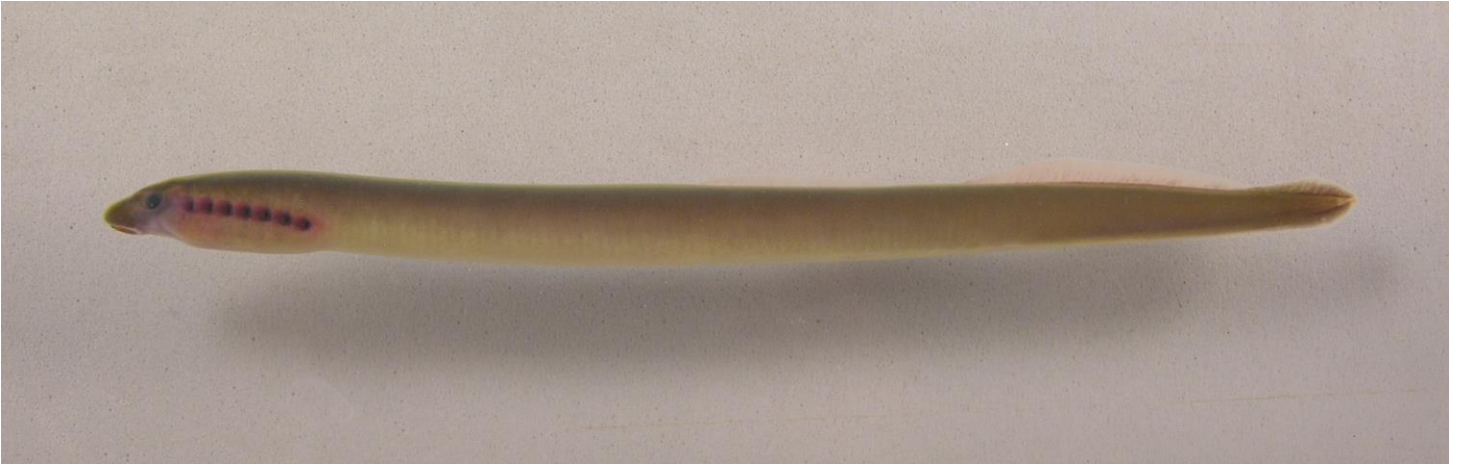
### **SECTION 4. Facility Operations**

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 are now sampling 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 are 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 95.7% of the sample this week. Collection, Index, and River flow estimates and averages are for the sample period only. Debris at the separator bars continued to be very low for the week and consisted of a few sticks, soft debris such as aquatic macrophytes and bryozoans, and adult American shad.

### **SECTION 5. Research**

One genetic fin clip was taken from a juvenile Pacific Lamprey ammocoete (which was “transforming”, see picture section for an example) during this report period.

## SECTION 6. Pictures



Juvenile Pacific Lamprey “Transformer” (*Entosphenus tridentatus*), approximately 143 mm total length, sampled at the John Day Dam Smolt Facility on August 28, 2023. This specimen is in an intermediate life stage for lamprey between the filter feeding ammocoete life stage and the parasitic macrophthalmia life stage. Note the developing eye and mouth.



Mid-sized Bluegill Sunfish (*Mylocheilus caurinus*), approximately 105 mm fork length, similar to one sampled at the John Day Dam Smolt Facility on August 28 and August 31, 2023.