

# Pacific States Marine Fisheries Commission

## John Day Dam Condition Monitoring Weekly Report, #22-21

Report Period: 8/20 – 8/26, 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	137.3	165.6	154.3	178.4	131.0
B. Powerhouse 1	115.3	143.2	132.0	156.0	109.2
C. Spill (kcfs)	21.1	21.2	21.2	21.4	20.6
% of River Flow	12.8	15.4	13.8	12.1	15.8
D. Water Temp *	71.2	72.0	71.6	71.6	70.5
E. % Saturation *	106.2	106.9	106.6	107.6	104.6

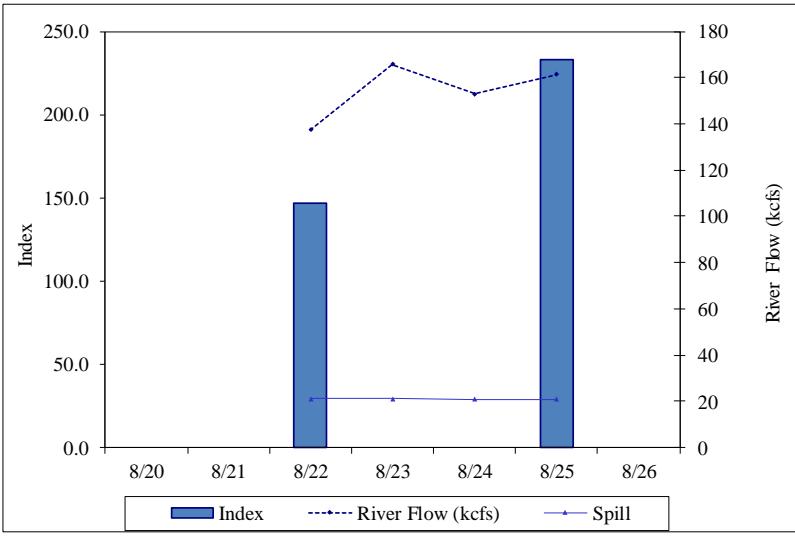
\* TDG and water temp data from USGS forebay sensors.

% SAMPLE COMPOSITION	This Week	Last Week
YEARLING CHINOOK	0.0%	0.0%
SUBYEARLING CHINOOK	100.0%	100.0%
CHINOOK FRY	0.0%	0.0%
UNCLIPPED STEELHEAD	0.0%	0.0%
CLIPPED STEELHEAD	0.0%	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	
8/20																	
8/21																	
8/22	32.8%	0	0.0	0.0	0	0	41	0.0	0.0	124	147	0	0.0	0.0	0	0	0
8/23																	
8/24																	
8/25	50.0%	0	0.0	0.0	0	0	101	1.0	2.0	202	233	0	0.0	0.0	0	0	0
8/26																	
Weekly		0	0.0	0.0	0	0	142	0.7	1.4	326	379	0	0.0	0.0	0	0	0
Season to date		4,676	2.3	0.1	47,784	114,702	4,062	1.5	0.1	95,876	168,628	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		
8/20																							
8/21																							
8/22	32.8%	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	
8/23																							
8/24																							
8/25	50.0%	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	0	
8/26																							
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	1,142	3.2	0.2	24,151	60,007							

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
8/20						
8/21						
8/22	32.8%	41	0.0	0.0	124	147
8/23						
8/24						
8/25	50.0%	101	1.0	2.0	202	233
8/26						
Weekly		142	0.7	1.4	326	379
Season to date		11,820	2.5	0.1	190,065	397,109



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

## Pacific Lamprey

## Macrophtalmia

## Ammocoetes

## Western Brook

## Ammocoetes

End Date	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll
8/20									
8/21									
8/22	0	0.0	0	2	0.0	7	0	0	0
8/23									
8/24									
8/25	0	0.0	0	0	0.0	0	0	0	0
8/26									
Weekly	0	0.0	0	2	0.0	7	0	0	0
Season to date	320	0.3	4,161	45	0.0	529	0	0	0

## SECTION 2. Smolt and Lamprey Condition Monitoring Summary

Subyearling	DESCALING			INJURY					Other Conditions				
Chinook	SAMPLE #	3-19%	>20%	Pred. Desc.	BODY	EYE	HEAD	OP	FIN	POPEYE	PINK FIN	Fin Discolor.	FIN HEM
This Week	140	2.9%		0.7%				0.7%	1.4%				6.4%
Last Week	188	3.7%	0.5%	0.5%	1.6%				4.8%				11.2%

	DISEASE						PREDATION			
SAMPLE #	Columnaris	FUNGUS	BKD	PARASITES	DEFORMITY	EYE HEM	BIRD	FISH	LAMPREY	OTH
140		0.7%		6.4%				2.1%		
188		0.5%	1.6%	3.7%			0.5%	3.2%		

### 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	34	11	1	2	1	0	6
	Dace - Longnose	Dace - Speckled	Chinook jack/mini-jack	Goldfish	Lamprey Adult	Northern Pikeminnow	Perch Yellow	Perch Yellow
This Week	0	0	2	0	0	0	0	0
Season to Date	0	0	3	1	1	1	0	362
	Redside Shiner	Sand Roller	Sculpin species	Stickleback 3 spine	Sucker species	Shad Adult	Shad Juvenile	Sturgeon White
This Week	0	0	0	0	0	3	87,085	0
Season to Date	0	0	9	6	1	8	101,751	0
	Trout Bull	Trout Cutthroat	Trout Rainbow	Walleye	Whitefish Mountain	Siberian Prawn	Chum Salmon	Banded Killifish
This Week	0	0	0	0	0	0	0	0
Season to Date	0	0	0	31	6	122	0	5

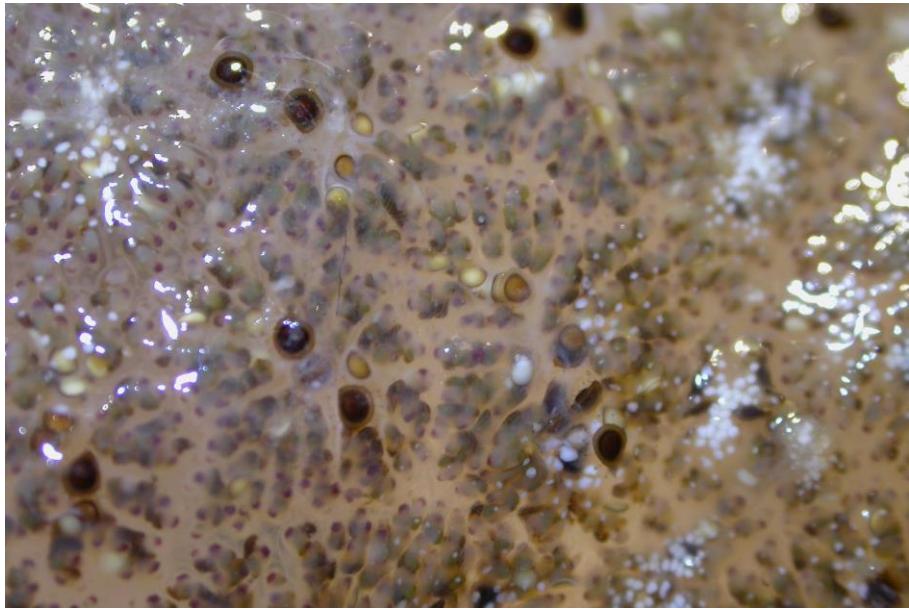
### SECTION 4. Facility Operations

Condition Monitoring at John Day Dam is adhering to the warm river water temperature sampling mode. Samples will continue to target 100 of the predominant out-migrant smolt, currently Subyearling Fall Chinook (100% composition), on Mondays and Thursdays until daily average river water temperatures fall below 69.5 deg. F. Samples are taken from the Juvenile Bypass System between approximately 0700 and 1300 hrs and the Collection, Index, and River flow estimates and averages are for the sample period only. Debris at the separator bars and in the sample holding tank was high for the week and consisted mostly of aquatic vegetation, some bryozoans, a few sticks, plastic, and some terrestrial vegetation.

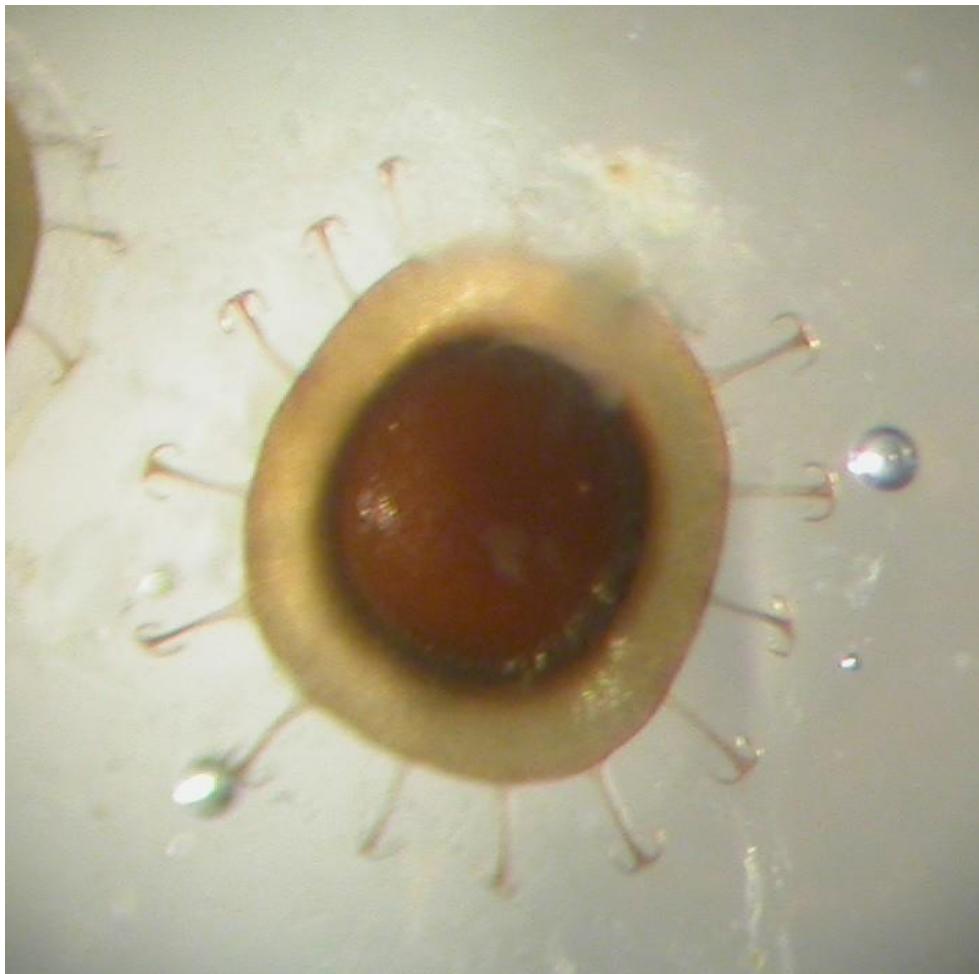
### SECTION 5. Research

A genetic fin clip sample was collected from two Pacific Lamprey ammocoete during this report period.

## SECTION 6. Pictures



Above left, the bryozoan *Pectinatella magnifica*, approximately 160 mm long, showing the inner pectin-like base growing on an aquatic plant stem, sampled at the John Day Dam Smolt Facility on 15 August, 2022.  
Above right, close up detail of bryozoans and their reproductive cells called statoblasts.



Detail of statoblast, approximate size is one millimeter across.