



# Pacific States Marine Fisheries Commission

## Bonneville Smolt Monitoring Weekly Report, #24-30

Report Period: 9/21 – 9/27, 2024

Project Manager: Allan Martin

Prepared By: Dean Ballinger

### SECTION 1. River Flow and Sampling Results

#### WEEK 30

	Min	Max	Mean		
			Current	Last Week	2023
A. River Flow	75.7	89.7	83.3	80.5	78.3
B. Powerhouse 1	0.0	2.9	0.7	2.1	7.1
C. Powerhouse 2	66.8	80.9	73.8	69.7	62.5
D. Spill (kcfcs)	1.4	1.5	1.4	1.4	1.4
% of River Flow	1.6	2.0	1.7	1.8	1.8
E. Water Temp *	66.2	67.0	66.6	67.3	66.2
F. % Saturation *					

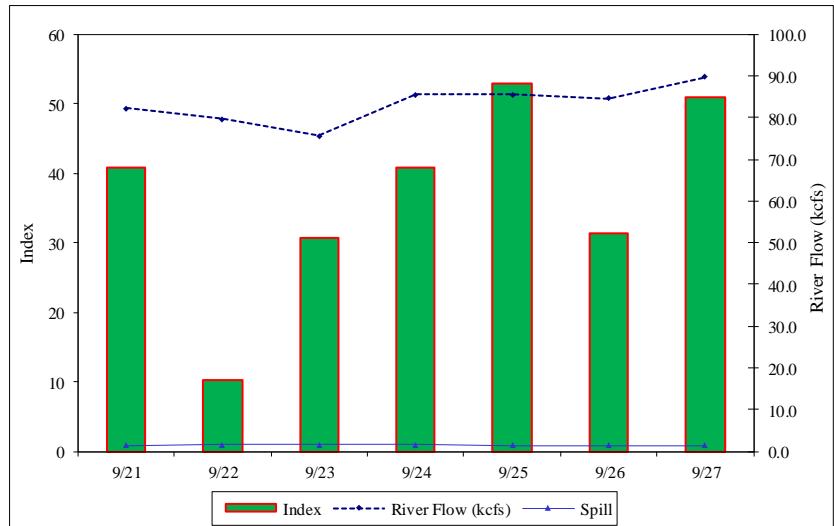
\* In sampling facility.

% 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				
9/21	10.0%	0	0.0	0.0	0	0	4	0.0	0.0	40	41	0	0.0	0.0	0	0				
9/22	10.0%	0	0.0	0.0	0	0	1	0.0	0.0	10	10	0	0.0	0.0	0	0				
9/23	10.0%	0	0.0	0.0	0	0	3	0.0	0.0	30	31	0	0.0	0.0	0	0				
9/24	10.0%	0	0.0	0.0	0	0	4	0.0	0.0	40	41	0	0.0	0.0	0	0				
9/25	10.0%	0	0.0	0.0	0	0	5	0.0	0.0	50	53	0	0.0	0.0	0	0				
9/26	10.0%	0	0.0	0.0	0	0	3	0.0	0.0	30	31	0	0.0	0.0	0	0				
9/27	10.0%	0	0.0	0.0	0	0	5	0.0	0.0	50	51	0	0.0	0.0	0	0				
Weekly		0	0.0	0.0	0	0	25	0.0	0.0	250	258	0	0.0	0.0	0	0				
Season to date		14,439	2.6	0.6	615,017	2,468,619	23,147	0.9	1.5	624,156	1,746,887	3,012	1.1	0.5	138,748	553,457				

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						
9/21	10.0%	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						
9/22	10.0%	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						
9/23	10.0%	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						
9/24	10.0%	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						
9/25	10.0%	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						
9/26	10.0%	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						
9/27	10.0%	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						
Season to date		368	0.3	0.5	15,750	59,527	1,210	1.3	0.2	71,514	296,645	893	5.6	2.2	50,456	175,565											

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
9/21	10.0%	4	0.0	0.0	40	41
9/22	10.0%	1	0.0	0.0	10	10
9/23	10.0%	3	0.0	0.0	30	31
9/24	10.0%	4	0.0	0.0	40	41
9/25	10.0%	5	0.0	0.0	50	53
9/26	10.0%	3	0.0	0.0	30	31
9/27	10.0%	5	0.0	0.0	50	51
Weekly		25	0.0	0.0	250	258
Season to date		43,069	1.6	1.1	1,515,641	5,300,700



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

## **SECTION 2. Juvenile Lamprey Sampling Results**

Juvenile lamprey are differentiated by species (Pacific or Western Brook lamprey) and by life stage (Macropterus, the fully formed actively migrating juvenile, and Ammocoete, the blind, filter feeding larval stage). Weekly results and season to date totals are presented in the table below:

Macrophthalmia			Ammocoetes			Western Brook Ammocoetes		
End Date	# Smpld	% Mort	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll
9/21	0	0.0	0	0	0.0	0	0	0
9/22	0	0.0	0	0	0.0	0	0	0
9/23	0	0.0	0	0	0.0	0	0	0
9/24	0	0.0	0	0	0.0	0	0	0
9/25	0	0.0	0	0	0.0	0	0	0
9/26	0	0.0	0	0	0.0	0	0	0
9/27	0	0.0	0	0	0.0	0	0	0
Weekly	0	0.0	0	0	0.0	0	0	0
Season to date	202	2.5	3,046	7	0.0	46	0	0

### **SECTION 3. Smolt and Juvenile Lamprey Condition Monitoring Summary**

## Smolt Condition

## WEEK 30

SAMPLE #	DISEASE					PREDATION					
	Columnaris	FUNGUS	BKD	PARASITES	DEFORMITY	EYE	HEM	BIRD	FISH	LAMPREY	OTH
25											
15					6.7%						

## Juvenile Lamprey Condition

## SECTION 4. Incidental Summary

**Week 30**

	Bass Largemouth	Bass Smallmouth	Bluegill and Pumpkinseed	Bullhead	Carp	Catfish, Channel	Chiselmouth	Crappie species
This Week	0	1	5	4	0	0	0	0
Season to Date	0	68	17	14	4	1	0	0

	Dace - Longnose	Dace - Speckled	Chinook Jack	Kokanee	Lamprey Adult	Northern Pikeminnow	Peamouth	Perch Yellow
This Week	0	0	0	0	0	4	66	0
Season to Date	0	0	1	0	2	23	1,348	83

	Redside Shiner	Sand Roller	Sculpin species	Stickleback 3 spine	Sucker species	Shad Adult	Shad Juvenile	Sturgeon White
This Week	0	0	2	0	0	0	135,478	0
Season to Date	1	0	51	52	4	289	975,342	0

	Trout Bull	Trout Cutthroat	Trout Rainbow	Walleye	Whitefish Mountain	Siberian Prawn		Other/Not Listed
This Week	0	0	0	0	0	1	0	0
Season to Date	0	0	0	0	0	189	0	59

\*Other/Not Listed Season-to-Date totals include: 52 Banded killifish and seven Pink salmon fry.

## SECTION 5. PIT Tag Summary

**Bonneville season to date detections, 2024.**

Migration Year	Chinook	Coho	Steelhead	Sockeye	Cutthroat	Pacific Lamprey	Other	Orphan/ Unknown	Grand Total
2020			2				1		3
2021	5		41				1		47
2022	6		103	1			2		112
2023	704	9	698				1		1,412
2024	40,450	3,350	19,244	2,408	7		6		65,465
Grand Total	41,165	3,359	20,088	2,409	7	0	11	5,213	72,252

## SECTION 6. Facility Operations

Sample collections at the Smolt Monitoring Facility (SMF) began at 0700 on 2 March. Debris at the primary dewatering structure (PDS) and fish/debris separator ranged from light to heavy this week consisting mostly of aquatic macrophytes and sticks. The Outfall hydro-cannons are operating.

Spill and corner collector operations for the juvenile fish passage season concluded just after midnight on 1 September.

Gas Bubble Trauma (GBT) examinations have concluded for the season. Please follow this link: <https://www.fpc.org/currentdaily/gbtsumbybatchdate.pdf> to the FPC web page for further details.

Truck releases of summer/fall out-migrants originating from Little Goose and Lower Granite dams began at Bonneville on 3 August and occur every other day.

Fallbacks observed this week: five salmon.

## **SECTION 7. Research**

No Pacific Lamprey macrourhalmia or ammocoetes were sampled at the Bonneville Smolt Monitoring Facility during this report week.

## **SECTION 8. Pictures**



Example of Steelhead (*O. mykiss*), predation upon juvenile lamprey, similar to one sampled on 21 May, 2024 at Bonneville SMF.