

Pacific States Marine Fisheries Commission

John Day Dam Condition Monitoring Weekly Report, #22-12

Report Period: 6/18 – 6/24, 2022

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SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2021
A. River Flow	400.0	436.2	417.5	440.1	179.7
B. Powerhouse 1	228.6	239.1	233.1	228.9	116.3
C. Spill (kcf/s)	170.1	199.1	183.3	209.8	62.4
% of River Flow	42.1	46.5	43.9	47.7	34.7
D. Water Temp *	57.4	58.8	58.0	56.8	64.7
E. % Saturation *	114.2	120.6	117.9	112.8	105.7

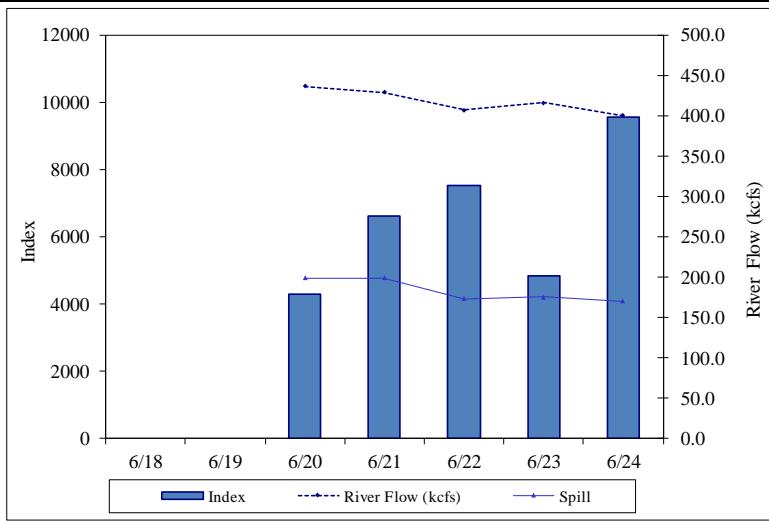
* TDG data from USGS forebay sensor, water temp from lab and USGS sensor.

% SAMPLE COMPOSITION	This Week	Last Week
YEARLING CHINOOK	1.5%	13.8%
SUBYEARLING CHINOOK	94.2%	60.5%
CHINOOK FRY	0.9%	2.0%
UNCLIPPED STEELHEAD	0.6%	4.6%
CLIPPED STEELHEAD	1.9%	9.7%
COHO	0.2%	4.4%
COHO FRY	0.0%	0.0%
SOCKEYE	0.8%	4.9%

YEARLING CHINOOK						SUBYEARLING CHINOOK						COHO					
End Date	Sample Rate	# Smpd	% Desc	% Mort	# Coll	Index	# Smpd	% Desc	% Mort	# Coll	Index	# Smpd	% Desc	% Mort	# Coll	Index	
6/18																	
6/19																	
6/20	5.0%	7	14.3	0.0	140	258	97	4.2	1.0	1,940	3,577	1	0.0	0.0	20	37	
6/21	2.9%	0	0.0	0.0	0	0	100	2.0	0.0	3,375	6,313	0	0.0	0.0	0	0	
6/22	2.5%	1	0.0	0.0	25	44	106	0.0	0.0	4,225	7,375	0	0.0	0.0	0	0	
6/23	3.6%	0	0.0	0.0	0	0	99	3.0	0.0	2,750	4,764	0	0.0	0.0	0	0	
6/24	1.9%	0	0.0	0.0	0	0	102	1.0	0.0	5,475	9,540	0	0.0	0.0	0	0	
Weekly		8	12.5	0.0	165	302	504	2.0	0.2	17,765	31,568	1	0.0	0.0	20	37	
Season to date		4,662	2.3	0.1	47,404	114,058	1,695	1.4	0.1	34,090	68,351	482	1.9	0.2	5,750	13,608	

UNCLIPPED						STEELHEAD						CLIPPED						SOCKEYE					
End Date	Sample Rate	# Smpd	% Desc	% Mort	# Coll	Index	# Smpd	% Desc	% Mort	# Coll	Index	# Smpd	% Desc	% Mort	# Coll	Index	# Smpd	% Desc	% Mort	# Coll	Index		
6/18																							
6/19																							
6/20	5.0%	2	0.0	0.0	40	74	7	0.0	0.0	140	258	2	0.0	0.0	40	74	2	0.0	0.0	40	74		
6/21	2.9%	0	0.0	0.0	0	0	1	0.0	0.0	50	94	2	0.0	0.0	100	187	0	0.0	0.0	0	0		
6/22	2.5%	1	0.0	0.0	50	87	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0		
6/23	3.6%	0	0.0	0.0	0	0	2	0.0	0.0	50	87	0	0.0	0.0	0	0	0	0.0	0.0	0	0		
6/24	1.9%	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		3	0.0	0.0	90	161	10	0.0	0.0	240	438	4	0.0	0.0	140	261	4	0.0	0.0	140	261		
Season to date		333	2.1	0.0	4,386	11,063	1,123	6.5	0.2	12,088	29,055	1,139	3.2	0.2	24,071	59,864							

TOTAL						
End Date	Sample Rate	# Smpd	% Desc	% Mort	# Coll	Index
6/18						
6/19						
6/20	5.0%	116	4.3	0.9	2,320	4,277
6/21	2.9%	103	1.9	0.0	3,525	6,594
6/22	2.5%	108	0.0	0.0	4,300	7,506
6/23	3.6%	101	3.0	0.0	2,800	4,851
6/24	1.9%	102	1.0	0.0	5,475	9,540
Weekly		530	2.1	0.2	18,420	32,767
Season to date		9,434	2.7	0.1	127,789	295,999



Notes: Condition percentages are calculated from sample numbers.

Subyearling chinook and coho include fry.

End Date	Pacific Lamprey			Ammocoetes			Western Brook Ammocoetes		
	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll
6/18									
6/19									
6/20	4	0.0	80	2	0.0	40	0	0	0
6/21	3	0.0	90	0	0.0	0	0	0	0
6/22	8	0.0	300	0	0.0	0	0	0	0
6/23	2	0.0	50	1	0.0	25	0	0	0
6/24	0	0.0	0	0	0.0	0	0	0	0
Weekly	17	0.0	520	3	0.0	65	0	0	0
Season to date	320	0.3	4,161	40	0.0	482	0	0	0

SECTION 2. Smolt and Lamprey Condition Monitoring Summary

	SAMPLE #	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 #	8 109	498	478	3	36	10	77	1	35	4	39		
DESCALING	3-19% >20% Pred. Desc.	14.7% 12.5%	1.0% 0.9% 0.9%	3.3% 1.0% 1.5%	8.3% 2.8% 2.8%	33.3%	7.8%	11.4%		15.4% 2.6%			
INJURY	BODY EYE HEAD OPERC. FIN POPEYE	1.8% 0.9% 0.9% 0.9% 0.2%	0.2% 0.4% 0.4% 0.4% 0.4%	0.4% 0.6% 0.4% 0.4% 0.4%	5.6% 2.8% 2.8% 20.0% 2.6%	2.8%	1.3% 1.3%	2.9%	2.9%	2.6%			
OTHER CONDITIONS	PINK FIN Fin Discolor. FIN HEM.		0.6%	1.0%			30.0%						
DISEASE	Columnaris FUNGUS BKD PARASITES DEFORMITY EYE HEM.					2.8%						5.1%	
PREDATION	BIRD FISH LAMPREY OTHER	12.5% 1.8% 0.9%	4.6% 0.6% 2.1%	0.6% 0.2% 0.4% 0.2%	1.0% 0.2% 0.4% 0.2%	33.3% 1.2% 5.6%	8.3% 0.4% 20.0% 3.9%	15.6% 2.9% 2.9%	5.7%	5.7%	7.7% 2.6%		
	end dates	6/24	6/17										

MP- Macrophthalmia	End Date	SAMPLE #	INJURY					DISEASE and OTHER CONDITIONS					PREDATION	
			BODY	EYE	HEAD	FIN	POPEYE	FIN HEM	Columnaris	FUNGUS	DEFORMITY	EYE HEM.	BIRD	FISH
This Week	6/24	17											5.9%	
Last Week	6/17	187						0.5%	0.5%		0.5%	1.1%		13.4%
AP - Ammocoetes		SAMPLE #												
This Week	6/24	3	33.3%		33.3%			33.3%						
Last Week	6/17	18											5.6%	5.6%

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	1	0	0
Season to Date	1	14	11	1	2	1	0	5

	Dace - Longnose	Dace - Speckled	Chinook Jack	Goldfish	Lamprey Adult	Northern Pikeminnow	Perch Yellow
This Week	0	0	0	0	0	0	0
Season to Date	0	0	1	1	1	0	357

	Redside Shiner	Sand Roller	Sculpin species	Stickleback 3 spine	Sucker species	Shad Adult	Shad Juvenile	Sturgeon White
This Week	0	0	0	0	0	0	0	0
Season to Date	0	0	8	6	1	0	0	0

	Trout Bull	Trout Cutthroat	Trout Rainbow	Walleye	Whitefish Mountain	Siberian Prawn	Chum Salmon	Banded Killifish
This Week	0	0	0	5	1	12	0	0
Season to Date	0	0	0	29	6	112	0	5

SECTION 4. Facility Operations

Condition Monitoring at John Day Dam was originally scheduled to sample Monday through Friday until 15 June, reducing sampling to 3 days a week until river water temperatures reach 70 deg. F. Due to continued high flows and higher than average debris levels at the project, this schedule has been modified slightly to include one more week of Monday through Friday sampling. Samples will be taken from the Juvenile Bypass System between approximately 0700 and 1300 hrs. Collection, Index, and River flow estimates and averages are for the sample period only. The Condition Exams will target approximately 100 of the predominant species of out-migrant, currently Subyearling Fall Chinook (94.2% composition). Debris at the separator bars and in the sample holding tank was moderate to high throughout the week and consisted of sticks, plastic, and pieces of terrestrial vegetation. Juvenile Pacific lamprey passage continued to be higher than average during the week.

SECTION 5. Research

Genetic fin clip samples were taken from 17 Pacific Lamprey macrophthalmia and 3 Pacific Lamprey ammocoetes for the Columbia River Inter-Tribal Fish Commission during this report period.

SECTION 6. Pictures



Banded killifish (*Fundulus diaphanus*), approximately 65 mm fork length, sampled at the John Day Dam Smolt Facility on 7 June, 2022.



Walleye fry (*Sander vitreus*), approximately 28 mm fork length, sampled at the John Day Dam Smolt Facility on 17 June, 2022.