

Pacific States Marine Fisheries Commission

John Day Dam Condition Monitoring Weekly Report, #22-10

Report Period: 6/4 – 6/10, 2022

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SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2021
A. River Flow	386.8	432.1	406.3	333.7	278.7
B. Powerhouse 1	163.9	231.1	190.4	104.3	114.9
C. Powerhouse 2	0.0	0.0	0.0	0.0	0.0
D. Spill (kcfs)	199.3	221.2	214.4	228.1	162.5
% of River Flow	46.1	57.2	52.9	68.4	58.4
E. Water Temp *	57.6	58.3	58.0	55.9	60.3
F. % Saturation *	117.6	120.5	118.6	114.9	105.9

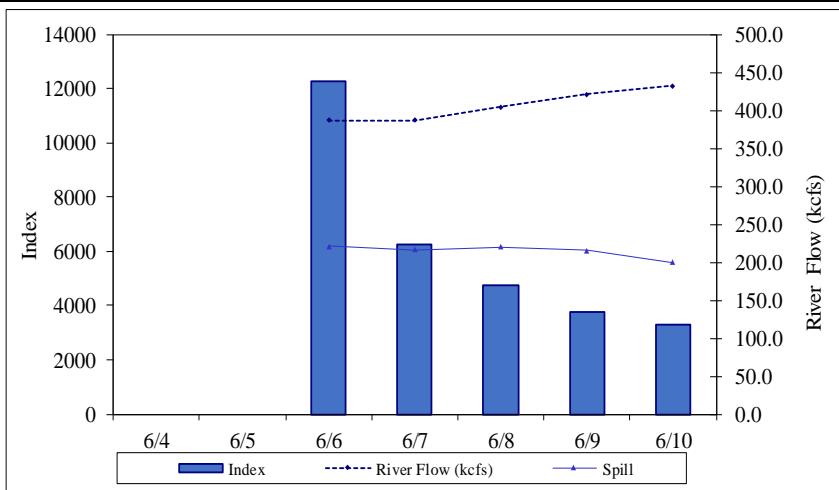
* TDG data from USGS forebay sensor, water temp from lab and USGS sensor.

% SAMPLE COMPOSITION	This Week	Last Week
YEARLING CHINOOK	17.0%	27.3%
SUBYEARLING CHINOOK	56.3%	18.2%
CHINOOK FRY	0.3%	0.0%
UNCLIPPED STEELHEAD	5.0%	6.3%
CLIPPED STEELHEAD	5.1%	6.9%
COHO	6.6%	3.3%
COHO FRY	0.0%	0.0%
SOCKEYE	9.7%	38.0%

YEARLING CHINOOK						SUBYEARLING CHINOOK						COHO					
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	
6/4																	
6/5																	
6/6	3.7%	45	2.2	0.0	1,225	2,878	93	0.0	0.0	2,475	5,815	10	0.0	0.0	275	646	
6/7	5.2%	16	0.0	0.0	340	776	95	0.0	0.0	1,790	4,086	2	0.0	0.0	30	68	
6/8	8.8%	22	4.5	0.0	265	584	118	0.0	0.8	1,285	2,830	14	0.0	0.0	155	341	
6/9	10.0%	33	6.1	0.0	330	676	98	0.0	0.0	980	2,007	15	0.0	6.7	150	307	
6/10	10.0%	35	0.0	0.0	350	652	99	1.0	0.0	990	1,844	18	0.0	0.0	180	335	
Weekly		151	2.6	0.0	2,510	5,566	503	0.2	0.2	7,520	16,582	59	0.0	1.7	790	1,698	
Season to date		4,545	2.3	0.1	46,069	111,509	697	0.3	0.1	11,210	26,979	446	1.8	0.2	5,365	12,871	

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		
6/4																							
6/5																							
6/6	3.7%	10	0.0	0.0	275	646	5	0.0	0.0	150	352	32	0.0	0.0	825	1,938							
6/7	5.2%	9	0.0	0.0	180	411	5	0.0	0.0	90	205	16	12.5	0.0	310	708							
6/8	8.8%	7	0.0	0.0	100	220	12	8.3	0.0	165	363	17	11.8	0.0	185	407							
6/9	10.0%	9	0.0	0.0	90	184	16	12.5	0.0	160	328	13	15.4	0.0	130	266							
6/10	10.0%	9	0.0	0.0	90	168	7	0.0	0.0	70	130	8	0.0	0.0	80	149							
Weekly		44	0.0	0.0	735	1,629	45	6.7	0.0	635	1,379	86	7.0	0.0	1,530	3,469							
Season to date		294	1.7	0.0	3,961	10,261	1,036	6.4	0.2	11,083	27,155	1,096	3.2	0.2	23,486	58,750							

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
6/4						
6/5						
6/6	3.7%	195	0.5	0.0	5,225	12,277
6/7	5.2%	143	1.4	0.0	2,740	6,254
6/8	8.8%	190	2.1	0.5	2,155	4,746
6/9	10.0%	184	3.3	0.5	1,840	3,769
6/10	10.0%	176	0.6	0.0	1,760	3,278
Weekly		888	1.6	0.2	13,720	30,323
Season to date		8,114	2.7	0.1	101,174	247,525



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

End Date	Pacific Lamprey			Ammocoetes			Western Brook		
	Macrophthalmia			Ammocoetes			Ammocoetes		
# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll	# Smpld	% Mort	# Coll	
6/4	0	0.0	0	0	0.0	0	0	0	0
6/5	0	0.0	0	0	0.0	0	0	0	0
6/6	0	0.0	0	0	0.0	0	0	0	0
6/7	0	0.0	0	0	0.0	0	0	0	0
6/8	4	0.0	40	2	0.0	20	0	0	0
6/9	30	0.0	300	7	0.0	70	0	0	0
6/10	25	0.0	250	7	0.0	70	0	0	0
Weekly	59	0.0	590	16	0.0	160	0	0	0
Season to date	116	0.9	1,406	19	0.0	237	0	0	0

SECTION 2. Smolt and Lamprey Condition Monitoring Summary

	Yearling		Subyearling		Unclipped		Clipped		Coho		Sockeye	
	Chinook	Chinook	Chinook	Steelhead	Steelhead	Steelhead	This Week	Last Week	This Week	Last Week	This Week	Last Week
SAMPLE #	151	253	499	169	44	58	45	64	58	31	86	353
DESCALING	3-19%	5.3%	4.3%	2.4%	1.8%	2.3%	3.4%	11.1%	10.9%	8.6%	6.5%	4.7% 4.2%
	>20%	1.3%		0.4%	0.6%							4.7% 2.5%
	Pred. Desc.	1.3%	2.4%			3.4%		6.7% 9.4%			3.2%	2.3% 1.4%
INJURY	BODY	0.4%		0.6%				3.1%	1.7% 6.5%			0.3%
	EYE	0.7%	0.4%	0.6%								
	HEAD				0.6%							
	OPERC.				0.8%	1.2%	3.4%					3.5% 2.0%
	FIN											1.2% 0.8%
	POPEYE											
OTHER CONDITIONS	PINK FIN											
	Fin Discolor.											
	FIN HEM.			0.8%								1.2% 0.6%
DISEASE	Columellaris											
	FUNGUS	0.7%										
	BKD											0.3%
	PARASITES											
	DEFORMITY	0.7%		2.0%	0.6%	2.3%	3.4%					
	EYE HEM.	0.7%	0.8%									1.2% 0.3%
PREDATION	BIRD	3.3%	2.8%	0.8%	4.5%	5.2%	20.0%	9.4%	3.4% 6.5%			
	FISH	1.3%	2.0%	0.6%	2.3%	1.7%		3.1%				3.5% 0.6%
	LAMPREY			0.2%								2.3%
	OTHER											
end dates	6/10	6/3										

MP- Macrophthalmia	End Date	SAMPLE #	INJURY					DISEASE and OTHER CONDITIONS					PREDATION	
			BODY	EYE	HEAD	FIN	POPEYE	FIN HEM	Columnellaris	FUNGUS	DEFORMITY	EYE HEM.	BIRD	FISH
			1.7%			1.7%		3.4%		5.1%			22.0%	
AP - Ammocoetes	This Week	59												
		6												
		SAMPLE #												
AP - Ammocoetes	Last Week	16												
		0												

SECTION 3. Incidental Summary

	Bass Largemouth	Bass Smallmouth	Bluegill and Pumpkinseed	Bullhead	Carp	Catfish, Channel	Chiselmouth	Crappie species
This Week	0	4	0	1	0	0	0	1
Season to Date	0	6	6	1	1	0	0	5
	Dace - Longnose	Dace - Speckled	Chinook Jack	Goldfish	Lamprey Adult	Northern Pikeminno	Peamouth	Perch Yellow
This Week	0	0	0	0	0	0	0	27
Season to Date	0	0	0	1	0	0	0	296
	Redside Shiner	Sand Roller	Sculpin species	Stickleback 3 spine	Sucker species	Shad Adult	Shad Juvenile	Sturgeon White
This Week	0	0	0	1	0	0	0	0
Season to Date	0	0	8	6	0	0	0	0
	Trout Bull	Trout Cutthroat	Trout Rainbow	Walleye	Whitefish Mountain	Siberian Prawn	Chum Salmon	Banded Killifish
This Week	0	0	0	3	0	15	0	4
Season to Date	0	0	0	18	0	76	0	4

SECTION 4. Facility Operations

Condition Monitoring at John Day Dam is scheduled to sample Monday through Friday until mid-June. 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 (56.3% composition) and Yearling Spring Chinook (17% composition). Debris at the separator bars and in the sample holding tank started out low at the beginning of the week but increased significantly with the higher river flows the last few days and consisted of sticks, plastic, and pieces of terrestrial vegetation. Of note, we sampled more than half of the season total for juvenile Pacific lamprey this week, which coincided with the maximum river flows reaching 432 kcfs on 10 June.

SECTION 5. Research

Genetic fin clip samples were taken from 59 Pacific Lamprey macrophthalmia and 16 Pacific Lamprey ammocoetes for the Columbia River Inter-Tribal Fish Commission during this report period.

SECTION 6. Pictures



Subyearling fall Chinook (*Oncorhynchus tshawytscha*) smolt, approximately 115 mm fork length, showing a curved spine deformity, sampled on 9 June, 2022 at the John Day Dam Smolt Facility.



Subyearling fall Chinook (*Oncorhynchus tshawytscha*) smolt, approximately 95 mm fork length, showing stunted growth deformity, sampled on 8 June, 2022 at the John Day Dam Smolt Facility.