

Pacific States Marine Fisheries Commission

John Day Dam Condition Monitoring Weekly Report, #22-6

Report Period: 5/7 – 5/13, 2022

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SECTION 1. River Flow and Sampling Results

	Min	Max	Mean		
			Current	Last Week	2021
A. River Flow	224.9	249.9	240.0	166.7	230.7
B. Powerhouse 1	102.1	139.2	124.9	105.9	109.7
C. Powerhouse 2	0.0	0.0	0.0	0.0	0.0
D. Spill (kcfs)	97.0	128.7	114.0	59.7	119.1
% of River Flow	43.1	55.0	47.5	36.1	51.7
E. Water Temp *	52.8	53.1	52.9	52.7	55.7
F. % Saturation *	105.8	108.8	106.8	109.7	105.3

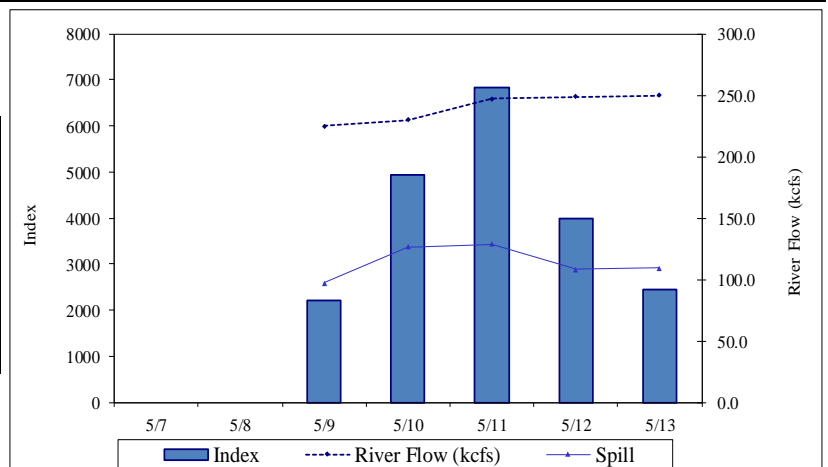
* TDG data from USGS forebay sensor, water temp from lab and USGS sensor.

% SAMPLE COMPOSITION		This Week	Last Week
YEARLING CHINOOK		55.6%	58.6%
SUBYEARLING CHINOOK		0.2%	0.6%
CHINOOK FRY		0.0%	0.5%
UNCLIPPED STEELHEAD		2.2%	3.8%
CLIPPED STEELHEAD		25.3%	18.9%
COHO		9.0%	16.9%
COHO FRY		0.0%	0.0%
SOCKEYE		7.6%	0.7%

YEARLING CHINOOK							SUBYEARLING CHINOOK					COHO				
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
5/7																
5/8																
5/9	14.3%	106	1.9	0.0	789	1,391	1	0.0	0.0	4	7	26	0.0	0.0	217	383
5/10	7.3%	103	3.9	0.0	1,470	3,293	0	0.0	0.0	0	0	20	5.0	0.0	260	582
5/11	6.6%	126	1.6	0.0	1,960	4,110	0	0.0	0.0	0	0	12	8.3	0.0	160	336
5/12	8.1%	91	2.2	0.0	1,070	1,904	1	0.0	0.0	10	18	10	0.0	0.0	130	231
5/13	14.6%	94	4.3	0.0	650	1,161	0	0.0	0.0	0	0	16	12.5	0.0	105	188
Weekly		520	2.7	0.0	5,939	11,859	2	0.0	0.0	14	25	84	4.8	0.0	872	1,719
Season to date		3,262	2.2	0.2	12,854	21,363	15	0.0	0.0	45	74	265	2.6	0.0	1,465	2,642

End Date	Sample Rate	UNCLIPPED					STEELHEAD					CLIPPED					SOCKEYE				
		# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index	# Smpld	% Desc	% Mort	# Coll	Index
5/7																					
5/8																					
5/9	14.3%	2	0.0	0.0	8	14	41	5.0	2.4	229	404	2	0.0	0.0	8	14	2	0.0	0.0	8	14
5/10	7.3%	1	0.0	0.0	20	45	30	0.0	0.0	360	806	7	0.0	0.0	90	202	7	0.0	0.0	90	202
5/11	6.6%	4	0.0	0.0	70	147	64	3.1	0.0	910	1,908	8	0.0	0.0	160	336	8	0.0	0.0	160	336
5/12	8.1%	8	0.0	0.0	120	213	55	5.5	0.0	730	1,299	16	0.0	6.3	180	320	16	0.0	6.3	180	320
5/13	14.6%	6	0.0	0.0	40	71	47	0.0	0.0	350	625	38	5.3	0.0	225	402	38	5.3	0.0	225	402
Weekly		21	0.0	0.0	258	491	237	3.0	0.4	2,579	5,042	71	2.9	1.4	663	1,273	71	2.9	1.4	663	1,273
Season to date		134	1.5	0.0	551	916	759	6.2	0.3	3,953	7,077	79	2.6	1.3	691	1,317	79	2.6	1.3	691	1,317

TOTAL						
End Date	Sample Rate	# Smpld	% Desc	% Mort	# Coll	Index
5/7						
5/8						
5/9	14.3%	178	2.3	0.6	1,255	2,213
5/10	7.3%	161	3.1	0.0	2,200	4,928
5/11	6.6%	214	2.3	0.0	3,260	6,837
5/12	8.1%	181	2.8	0.6	2,240	3,985
5/13	14.6%	201	4.0	0.0	1,370	2,447
Weekly		935	2.9	0.2	10,325	20,410
Season to date		4,514	2.9	0.2	19,559	33,389



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
5/7									
5/8									
5/9	5	20.0	21	0	0.0	0	0	0	0
5/10	1	0.0	10	0	0.0	0	0	0	0
5/11	0	0.0	0	0	0.0	0	0	0	0
5/12	2	0.0	30	0	0.0	0	0	0	0
5/13	2	0.0	20	0	0.0	0	0	0	0
Weekly	10	10.0	81	0	0.0	0	0	0	0
Season to date	33	3.0	136	1	0.0	2	0	0	0

SECTION 2. Smolt and Lamprey Condition Monitoring Summary

		Yearling		Subyearling		Unclipped		Clipped		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 #		520	498	2	5	21	32	236	161	84	144	70	6
DESCALING	3-19%	4.6%	2.0%	40.0%				7.2%	8.1%	6.0%	3.5%	8.6%	
	>20%	1.5%	1.0%							1.2%		2.9%	
	Pred. Desc.	1.2%	1.6%			3.1%		3.0%	5.6%	3.6%	1.4%		
INJURY	BODY	1.3%	1.8%	40.0%				1.3%		1.2%	0.7%	1.4%	
	EYE	0.6%	0.6%									2.9%	
	HEAD	0.2%	0.4%					0.6%					
	OPERC.	0.4%						1.3%	0.6%		0.7%	2.9%	16.7%
	FIN	0.4%	1.4%					0.4%	1.9%	1.2%	2.8%	1.4%	
	POPEYE		0.2%										
OTHER CONDITIONS	PINK FIN												
	Fin Discolor. FIN HEM.	1.0%	1.4%					1.2%					
DISEASE	Columnaris							0.4%					
	FUNGUS	0.6%	0.8%					0.8%		0.6%			
	BKD	1.3%	1.4%										
	PARASITES		0.2%			4.8% 3.1%							
	DEFORMITY	0.4%	0.2%					1.7%		0.6%			
EYE HEM.		1.5%	0.6%					0.8%		1.2%	0.7%	2.9%	16.7%
PREDATION	BIRD	2.1%	1.0%			3.1%		5.1%	11.2%	4.8%	0.7%	1.4%	
	FISH	1.0%	1.0%					1.3%	0.6%	1.2%	1.4%		
	LAMPREY		0.2%										
	OTHER												
end dates		5/13	5/6										

			INJURY					DISEASE and OTHER CONDITIONS					PREDATION	
MP- Macrophthalmia	End Date	SAMPLE #	BODY	EYE	HEAD	FIN	POPEYE	FIN HEM	Columnaris	FUNGUS	DEFORMITY	EYE HEM.	BIRD	FISH
This Week	5/13	9											11.1%	
Last Week	5/6	2												
AP - Ammocoetes	End Date	SAMPLE #												
This Week	5/13	0												
Last Week	5/6	0												

SECTION 3. Incidental Summary

	Bass Largemouth	Bass Smallmouth	Bluegill and Pumpkinseed	Bullhead	Carp	Catfish, Channel	Chiselmouth	Crappie species
This Week	0	0	3	0	1	0	0	0
Season to Date	0	2	6	0	1	0	0	4
	Dace - Longnose	Dace - Speckled	Chinook Jack	Kokanee	Lamprey Adult	Northern Pikeminnow	Peamouth	Perch Yellow
This Week	0	0	0	0	0	0	0	19
Season to Date	0	0	0	0	0	0	0	216
	Redside Shiner	Sand Roller	Sculpin species	Stickleback 3 spine	Sucker species	Shad Adult	Shad Juvenile	Sturgeon White
This Week	0	0	1	0	0	0	0	0
Season to Date	0	0	8	5	0	0	0	0
	Trout Bull	Trout Cutthroat	Trout Rainbow	Walleye	Whitefish Mountain	Siberian Prawn	Chum Salmon	Goldfish
This Week	0	0	0	2	0	1	0	0
Season to Date	0	0	0	11	0	53	0	1

SECTION 4. Facility Operations

Condition Monitoring at John Day Dam is scheduled to sample Monday through Friday until early 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 Yearling spring Chinook smolts. Debris at the separator bars and in the sample holding tank was low for week and consisted of sticks, plastic, and pieces of terrestrial vegetation.

SECTION 5. Research

Genetic fin clip samples were taken from 10 Pacific Lamprey macrophthalmia for the Columbia River Inter-Tribal Fish Commission during this report period.

SECTION 6. Pictures



Sockeye salmon smolt mortality (*Oncorhynchus nerka*), approximately 108 mm (?) “fork” length, showing hemorrhaging in the body and fins and a missing caudal fin due to a fungal infection, sampled on 12 May, 2022 at the John Day Dam Smolt Facility.



Yearling spring Chinook (*Oncorhynchus tshawytscha*) smolt, approximately 153 mm, showing gills covered in fungus, sampled on 11 May, 2022 at the John Day Dam Smolt Facility.



Detail of fungus on gills from specimen above.