

To: Oregon Department of Fish and Wildlife Commission
From: Steve Beyerlin, on behalf of Curry County
Re: Lost Creek Lake Project, Damages to Fish and Environment
Date: September 13, 2019

Introduction

Thank you for coming to Gold Beach at the mouth of the Rogue River. The health of this river and its wildlife is of utmost importance to the three counties it passes through: Curry County, Josephine County and Jackson County.

For those of you who don't know me, I am Steve Beyerlin, I have 49 years' experience of Fish Conservation Efforts on the Rogue River and Oregon; 24 years' experience on boards or Task Forces for ODFW; Fisheries and Natural Resource Consulting and as Member Rogue River Spring Salmon Conservation Plan Task Force.

I am currently under contract with Curry County and make these comments to you in that capacity. I will try to be brief.

The matter I will address is the long-term short-comings of the Lost Creek Lake Project, an undertaking of the United States Army Corps of Engineers (Corps). I will discuss the 1972 Final EIS, which established fish production numbers and the Corps' designated method of restitution and mitigation to the fish species damaged by the project. I will describe the documented shortcomings in production and the tragic cost of that shortfall. I will include information of documented neglect in the Corps' maintenance and upkeep of the hatchery.

1. 1972 EIS Establishes Damage to Fisheries and Corps Obligation to Mitigate the Damages

After the 1955 flood, the Corps studied the possibility of placing a series of dams on the Rogue River watershed to limit damages from flooding.

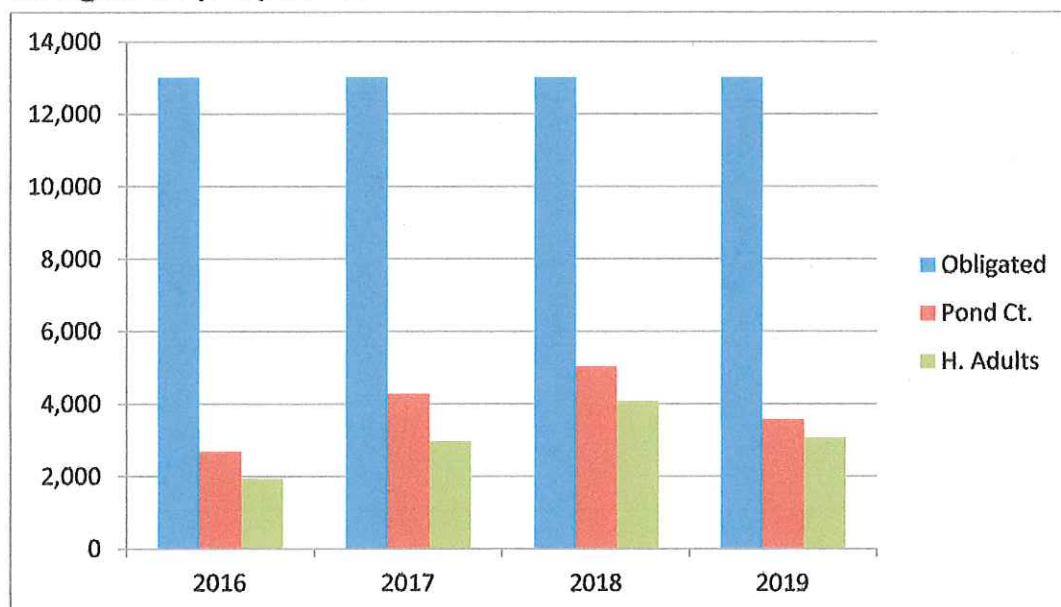
Ultimately, the Final EIS in 1972 stated. **Final EIS Page 3-10 “any flood control plan detrimental to the fishery resource would be unacceptable”.**

The Corps is obligated to abide by the terms of the EIS to produce 13,020 Hatchery Spring Chinook Adults back to the hatchery annually. Because federal law in form of the EIS specifically directed the Corps to undertake the project, we see this duty as non-transferable.

2. Documented shortfall in production of Spring Chinook

The following chart shows the past four years of Spring Chinook returns at Cole Rivers Hatchery.

Required return at Hatchery per Final EIS is 13,020 hatchery Adults for mitigation purposes.



Just looking at the last 4 years Cole River's Hatchery production has failed the obligated Hatchery Spring Chinook Adult return of 13,020 by over 10,000 annually, with average returns of just 3,014 hatchery Adults, with a released smolt to adult return rate of just 0.18%.

3. Millions in damages not mitigated.

In its 2009 study, "The Value of Rogue River Salmon," ECONorthwest established a value of all Rogue River Salmon as \$1,824.00 each. When applied to the documented shortfall in production, this result is an economic loss of \$18.3 million dollars annually which equals **\$73 million over just the last 4 years**; over the last 15 years there has been a \$233 million dollar economic loss.

4. The Corps Failures

The failures in fish production are documented. Based on that, Josephine and Curry counties wrote a letter expressing no confidence in ODFW & USACE efforts with the Cole River Hatchery mitigation. In response to that letter, the Corps and ODFW met with Jackson County Commissioners in Spring of 2019. In that meeting, and referring to the project Authorization Document; House Document 566, the Corps took the position that they had no requirement to produce any specific number of fish back to the hatchery. ODFW made no comment.

However, in correspondence after that meeting, the Corps admitted it did not have a copy of the Final EIS, which is the document that establishes fish production numbers.

As far as the Final EIS... I don't know that a FOIA will help with that. I haven't been able to find one anywhere and only found the draft EIS through a Google search. Some of these documents are really hard to track down, even in the

age of digitizing nearly everything. If you happen to find one though, I'd appreciate if you would consider sending me a copy.

Sincerely, Tammy

Email from Tammy Mackey, CIV USARMY CENWP (US), June 18, 2019.

As reflected above, the Corps – the party responsible to mitigate harms caused by the Lost Creek lake Project – did not possess, nor could find the Final EIS for the Lost Creek Lake Project, the guiding document. How could mitigation efforts be recognized and completed without this document?

The fish production requirements were not in the Project Authorization House Document 566 of 1962, which they referred to. The 1972 EIS for the Lost Creek Lake Project is the managing document not the Authorization Document. A document neither USACE nor ODFW had.

Recent inspections of the hatchery facilities showed many infrastructure failures. In 2016, the Corps did not act on an ODFW request for \$500,000 to rebuild the hatch-house water system. This year over 1 million Spring Chinook Eggs were lost in the 2018 brood. The hatch-house water system is still un-repaired today almost 4 years later.

5. There is also a problem with Wild Naturally Producing Spring Chinook

Wild / NP Rogue River Spring Chinook have declined in population by 60% since Lost Creek Lake Project was built. The final Environmental Impact Statement continually pronounces fisheries will benefit!

Water releases from the dam during winter months are 3 to 4 degrees warmer than historical temperatures to the detriment to Spring Chinook eggs in the gravel, speeding hatching with many fry perishing in a too early hatch. Together with the loss of spawning gravel below the dam it is little wonder Wild Spring Chinook have declined 60% or more.

A letter included in project authorization testimony of 1962 from the US Fish and Wildlife Service said Spring Chinook spawning areas would be expanded, not at all true; Instead we have been dealt destruction of Spring Chinook habitat.

Warmer winter flows from the dam may have also allowed non-native species like the predatory Northern Pike Minnow to colonize the Rogue as they were not in the Rogue until after the dam construction.

The CORPS of Engineers is responsible for Wild Spring Chinook decline as the Effects of the Lost Creek Lake Project are known and this responsibility cannot be shifted to ODFW. The Corps is to mitigate for the effects of the project per EIS.

Naturally Producing (NP) / Wild Spring Chinook annual returns have plummeted 60% from pre-dam numbers. The dam was completed in 1977 with primary purposes of Flood Control and Fisheries Enhancement.

Years	Wild/NP Avg.	Average Run Size	Hatchery Component Avg.	Deficit Related To Dam Combined Wild + Hatchery	<u>Annual Avg. Economic Loss</u>
1968 -1977	28,882	30,262	1,380 - 4.7%	Impacts of 1964 flood felt	
1978 - 1987	25,361	40,631	15,270 - 31.5%	+ 6,631 avg.	
1988 - 1997	13,203	31,240	18,037 - 58%	-2,760 avg.	<u>\$ 5,034,240.00</u>
1998 - 2007	7,589	27,040	19,451 - 71.8%	-14,166 avg.	<u>\$ 25,838,784.00</u>
2008 - 2017	9,663	16,382	4,940 - 30%	-17,618 avg.	<u>\$32,250,144.00</u>
				21 yr. Economic Loss Total	<u>\$1,325,586,591.00</u>

4. Conclusion

It is clear there is a vast problem concerning Rogue River Spring Chinook an iconic species for Oregon and the nation. We feel the Corps is responsible for this tragic situation.

However, this is your state and your charge is “to protect and enhance Oregon’s fish and wildlife and their habitats for use and enjoyment by present and future generations.” We invite you to join us in a conversation about solutions to this problem.

I have source documents to support the facts and figures in this memorandum. **I make myself available for further conversation on this subject.**

Steve Beyerlin

Gold Beach, Oregon

(541) 247-4138

48 years of Fish Conservation Efforts on the Rogue River

24 Years on boards or Task Forces for ODFW

Member Rogue River Spring Salmon Conservation Plan Task Force

Fisheries and Natural Resouce Consulting

2016

13,020 Hatchery Adults
Require for mitigation

ACTUAL RETURN 1962
SHORT FALL 11,058

COLE RIVERS HATCHERY ADULT COLLECTION & INVENTORY

DATE: 12/14/2016

11,058 x \$1824.00 = \$20,169.79
Economic Loss

SPECIES: ROGUE CHS LOT # 52.16

	COLLECTED TODAY					SEASON				
	M	F	J	SJ	Day Total	M	F	J	SJ	Season Total
Unmarked	0	0	0	0	0	88	55	12	27	182
Marked*	0	0	0	0	0	873	1069	197	377	2516
Recaptures**	0	0	0	0	0	32	7	152	1	192
Total	0	0	0	0	0	961	1124	209	404	2698

-182 wild
-574 Jacks
-756
Hatchery Adults 1962
-2698
-756
1962
Hatchery Adults

Note: Numbers not final; collection pond tally only

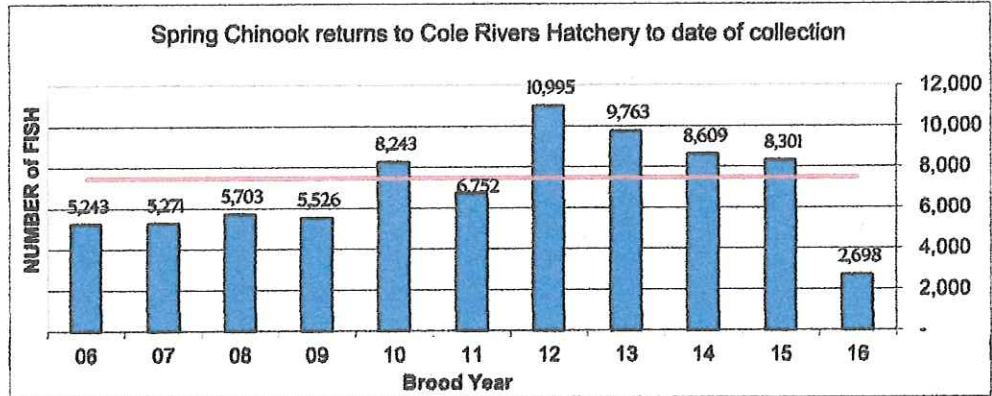
*Marked fish are hatchery fish with a clipped adipose fin. CRH strives to mark 100% of its 1.7 million spring Chinook smolts, annually.

**Recaptured fish not included in daily or season totals. Recaptured fish are fish that have been recycled downstream and returned to the hatchery.

**Some Fish will be recycled multiple times throughout season.

Yearly comparison of run to date

Fish Return to Date	Brood Year	Total Return
2698	18	2698
8301	15	8301
8609	14	8609
9763	13	9763
10995	12	10995
6752	11	6752
8243	10	8243
5526	09	5526
5703	08	5703
5271	07	5271
5243	06	5243



Note: Numbers not final; collection pond tally only

2006 to 2015 average run to date

7441

2017

COLE RIVERS HATCHERY ADULT COLLECTION & INVENTORY

DATE: 10/25/2017

Obligation of 13,020 Hatchery Adults
Return to Cole Rivers Hatchery

SPECIES: Rogue Spring Chinook LOT # 52.17

COLLECTED TODAY

	SEASON							Total
	M	F	J	SJ	J	F	M	
Unmarked	0	0	0	0	31	122	169	338
Marked*	1	0	1	0	498	1620	1414	3942
Recaptures**	0	0	0	0	186	0	169	409
Total	1	0	1	0	529	1742	1583	4280

	SEASON							Total
	M	F	J	SJ	J	F	M	
Unmarked	0	0	0	0	16	122	169	338
Marked*	1	0	1	0	410	1620	1414	3942
Recaptures**	0	0	0	0	54	0	169	409
Total	1	0	1	0	426	1742	1583	4280

Wild 338
Hatchery Joels 908
Sub from Total 1246
→ Hatchery Adults Return

Note: Numbers not final; collection pond tally only

*Marked fish are hatchery fish with a clipped adipose fin. CRH strives to mark 100% of its 1.7 million spring Chinook smolts, annually.

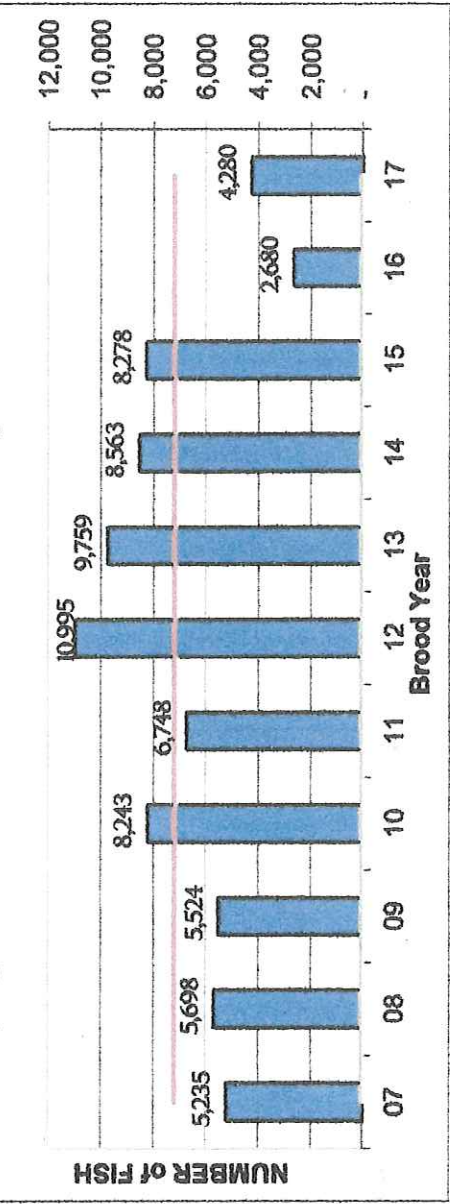
**Recaptured fish not included in daily or season totals. Recaptured fish are fish that have been recycled downstream and returned to the hatchery.

Yearly comparison of run to date

Deficit of 10,051 Hatchery Adults
@ \$1824.00 = \$18.3 million Economic Loss

Fish Return to Date	Brood Year	Total Return	Percent of run to date
4280	17	2698	99.3%
2680	16	8301	99.7%
8278	15	8609	99.5%
8563	14	9763	100.0%
9759	13	10995	100.0%
10995	12	6752	99.9%
6748	11	8243	100.0%
8243	10	5526	100.0%
5524	09	5703	99.9%
5698	08	5271	99.3%
5235	07		

Spring Chinook returns to Cole Rivers Hatchery to date of collection



Note: Numbers not final; collection pond tally only

2007 to 2016 average run to date

7172

JULIO

13,020 Hatchery Adults
Required for mitigation

- Wild - 233
- Tanks - 696
- 929
- 5027
4098
Hatchery Adults

COLE RIVERS HATCHERY ADULT COLLECTION & INVENTORY

DATE: 11/28/2018

SPECIES: Rogue Spring Chinook Brood Year 2018

LOT # 52.18

COLLECTED TODAY

	SEASON							Total
	M	F	J	Jen	SJ	Day	Total	
Unmarked	0	0	0	0	0	0	0	0
Marked*	0	0	0	0	0	0	0	0
Recaptures**	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0

SEASON

	SEASON							Total
	M	F	J	Jen	SJ	Day	Total	
Unmarked	111	99	8	5	10	8	233	
Marked*	2022	2076	383	110	203	383	4794	
Recaptures**	256	63	43	11	0	43	373	
Total	2133	2175	391	115	213	391	5027	

Hatchery Adults 4098

Note: Numbers not final; collection pond tally only

*Marked fish are hatchery fish with a clipped adipose fin. CRH strives to mark 100% of its 1.7 million spring Chinook smolts, annually.

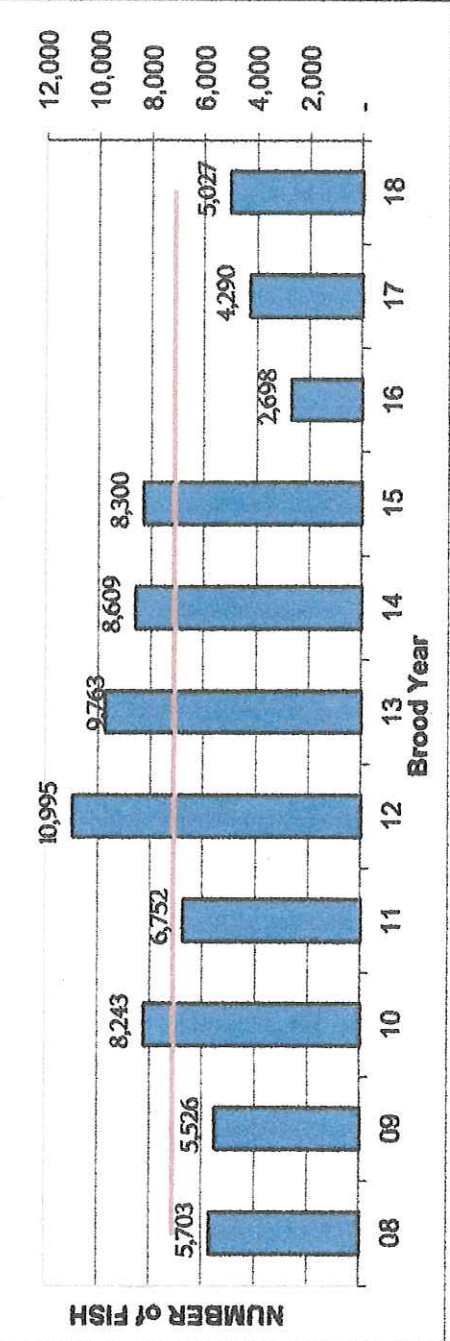
**Recaptured fish not included in daily or season totals. Recaptured fish are fish that have been recycled downstream and returned to the hatchery.

Yearly comparison of run to date

Deficit of 8,922 Hatchery Adults @ \$1,825.00 = \$16.3 million

Fish Return to Date	Brood Year	Total Return	Percent of run to date
5027	18	4290	100.0%
4290	17	2698	100.0%
2698	16	8301	100.0%
8300	15	8609	100.0%
8609	14	9763	100.0%
9763	13	10995	100.0%
10995	12	6752	100.0%
6752	11	8243	100.0%
8243	10	5526	100.0%
5526	09	5703	100.0%
5703	08		

Spring Chinook returns to Cole Rivers Hatchery to date of collection



Note: Numbers not final; collection pond tally only

2008 to 2017 average run to date

7088

2019

USACE mitigation obligation 13,020 Hatchery Adult Return to Hatchery

COLE RIVERS HATCHERY ADULT COLLECTION & INVENTORY

DATE: 9/4/2019 94% in

SPECIES: Rogue Spring Chinook Brood Year 2019

LOT # 52.19

	COLLECTED TODAY						SEASON						10 year Average to date	10 year Avg % of Run to date
	M	F	J	Jen	SJ	Day Total	M	F	J	Jen	SJ	Season Total		
Unmarked	7	6	0	0	0	13	95	71	6	0	19	191	WILD = 191 Jacks = 318 509 94.11%	
Marked*	37	38	8	0	16	99	1337	1721	151	3	164	3376		
Recaptures**	1	0	0	0	0	1	110	63	23	0	0	196		
Total	44	44	8	0	16	112	1432	1792	157	3	183	3567	6638	

Hatchery Adults = 3058 to Date

+ 6% Est. run total = 3242*

Note: Numbers not final; collection pond tally only

*Marked fish are hatchery fish with a clipped adipose fin. CRH strives to mark 100% of its smolt production annually.

**Recaptured fish not included in daily or season totals. Recaptured fish are fish that have been recycled downstream and returned to the hatchery.

Note: 10 yr Average to Date includes Wild + Jacks Actual is low

Angler Enhancement (Fish Recycling Program)

LAST DATE RECYCLED

7/3/2019

TODAY'S SITE:

Touvelle

LAST 4 yrs Hatchery Adult Avg. 3067

	M	F	J	Jen	SJ	TOTAL
AS OF DATE SHOWN	113	28	7	0	0	148
SEASON TOTAL	174	199	10	0	0	383

These fish are given an operculum (gill plate) hole punch mark when they first arrive to hatchery, then they are recycled downstream. Recycled fish are trucked from the hatchery downstream to a boat ramp for anglers to have another chance at catching these hatchery fish. Location chosen is typically based on river temperature to reduce stress on the fish.