Eagle Lake Guardians

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To US Fish and Wildlife

Public Comments Processing ATT: FWS-R8-ES-2012-0072 Division of Policy and Directives 4401 N. Fairfax Drive, MS 2042-PDM Arlington, VA 22203

RE: Eagle Lake Trout FWS-R8-ES-2012-0072

Endangered Species Petition/ Pine Creek Watershed and Impoundments. Eagle Lake basin Hydrology & VAIL REPORT

To Whom It May Concern,

Contained in Disk 1 of the CDs enclosed are photos of just a few of the water impoundments in lower Pine Creek Valley affecting flow of Pine Creek. Those off USFS 21 and Lassen County Road 105 are referred to as Impound 1 (nearest USFS 21) Impound 2 is the one Impound 1 drains into, from Impound 2 water flows to McCoy Water Pit. The entire west facing side of all the mountains south and west drain into these impoundments with nothing going to Pine Creek. Martin Creek drains off Fox and Antelope Mtns crosses USFS 21 and drains into Impound 1 with 30 goose mounds...and was the one presented on the field trip on Sept 12. Impound 1 drains into impound 2 where Logan Mt also drains into #2 (near camp 10), then downstream from #2 is McCoy Water Pit (referred to as #3 and in spring is guite a large lake visible from Prison Springs Road), Whaleback, Ice Cave Ridge to Cave Mt drain into these impoundments and nothing into Pine Creek, only the east facing sides of the mountains to runoff's to lower Pine Creek and into the lake from Little Merrill and various drainage channels leading to the lake (Merrill, Fox & Antelope Mnts) Shoestring and Burgess Impoundments are further northwest but only a short distance from impound 2 off Champs Flat road a mile or two. Shoestring and Burgess drain Harvey Mt (Harvey Creek) and Harvey Valley area where all the water from that drainage is impounded and any excess goes into a barrow ditch extending about a mile or more downstream. Several roads in this immediate area are closed yet another "Million Dollar Bridge" was built in 1989 to cross the flow leading to the barrow ditch that fills up with excess (See photos on Disc 1) yet these roads closed to vehicles and have been for guite some time now? None of this water is intended to reach Pine Creek as in the past. USFS did not take you there on the field trip reciting that there were too many vehicles on the field trip and that the road was not in good shape. However, the road was in fine shape as we accessed it again to be certain. USFS Lassen National Forest minimized the accumulation of water held back from Pine Creek and Eagle Lake for cattle grazing ... under guise of avian habitat and storing ground water. However, Lassen National Forest denied any Hydrology studies having been conducted at any time in the past for the Pine Creek watershed. We did send the Hydrology Report from the Vail Study which is included on Disk 2 documents. We must consider the accumulated affects of these large lakes on the impact of Eagle Lake itself and mandatory for the survival for a native spawn of the Eagle Lake trout. The folder titled Pine Creek Water Impounds contains photos of all the lower Pine Creek Valley water impounds in spring 2011 and some 2012. McCoy water pit can top 6 ft + deep in a fair water year. The impoundments are listed as having an effect when it comes to establishing a native spawn in the Cameron-Catot Paper (disk 2, Authors Copy is the recommended unedited version).

Accumulation of yearly filling of these quite large lakes over many, many decades has had an effect on Pine Creek and Eagle Lake. The water flow in Pine Creek is now so slow that the water temperatures rise unfavorably shortly after flows begin and generally before any fish are surgically transmitted and released upstream. The trout can move upstream in heavier currents than detailed so denying that the trout won't be able to make it upstream to spawn if the creek flowed before the impoundments began (1940's) and as it did in the mid to late 1800's as per historical signage regarding Pine Creek Valley (disc 1). The trout population was abundant in those years. Also note that the 2011 spawn produced around 200 minnows which were trapped by CDFG about 3.5 miles upstream of the lake which may indicate a scientific assumption of the spawning beds being 28 miles upstream to be reassessed. No doubt more spawning takes place in areas where the water flows year round, but the Eagle Lake trout eggs only need 50 days. At least there is hope if the scientists listen to nature. So, these projects have had over 20 years to have been completed and yet, only the cattle are benefiting and even they complain they don't have enough. Maybe Pine Creek needs to "flush" and the cattle need to find another resource or a while. If there wasn't a high concentration of cattle "nutrients" that need filtered by slowing down the flow and impounding water (settling ponds) that belongs in Pine Creek, would we need the impoundments? But, the impoundments retain water from Pine Creek, so filtering nutrients to Eagle Lake is out of the question. Historically, it appears that the trout did just fine when Pine Creek "flushed" into Eagle Lake.

There are only 7 permitted impoundments out of 87 listed on USFS documents. Dirt tanks as we call small dug out water holes that collect rain water are minimal compared to these large Impounded Lakes that divert water away from Pine Creek. The intent to filter nutrients would have little function as the cattle nutrients is the major polluting factor for Eagle Lake and the Pine Creek watershed now. (Removed Pine Creek from 303 Listing Disk 2). Removal of Pine Creek from the 303 listing could be the key to why there are so many pollutants IE Nutrients flowing now. The Eagle Lake trout doesn't stand a chance if intense cattle grazing is going to continue to be allowed in Pine Creek watershed. Too much water being diverted and impounded over decades isn't helping. If Eagle Lake evaporates 1 inch per week plus, then the impoundments are evaporating at a good rate too. Just how much water is evaporating vs being drank up by cattle (estimated between 45 and 50 gallons per day?). We see these impoundments fill every year and the accumulative affects just to support grazing along the lake shore during the summer and several weeks in fall. There were over 200 cows in at the mouth of Pine Creek and Halfmoon Bay as well as many in the estuary leading to the egg collection facility (Photos on Disc 2 pdf format). A trade of nutrients should not over rule a native and quite special heritage trout.

Also enclosed is documentation allowing for these impoundments under guise of avian habitat. A file on extra bones showing up in our trout several years ago and despite contacting all the right people at UC Davis, CDFG and USFS, no one cared that we have strange happenings except one fish geneticist and our private conversation is enclosed with a video of an anomaly of two floating bones on one flank and one on the other flank. This is becoming common but for decades prior to 2000, Eagle Lake trout didn't have these floating bones, nor extra bones coming out of the back of the head which are more of a concern. I have omitted the name of the geneticist by his request.

There are two copies of the Carmona-Catot paper on captive breeding of the Eagle Lake rainbow trout. Authors copy is unedited where as the public version is edited. This document (original authors copy) is pretty well laid out as to what needs to happen and what is wrong.

The accumulative affects of sharing a perceived abundance of water from Pine Creek and the lack of restoration despite CRMP Pine Creek so called projects. See document titled 1994 CRMP Pine Creek GrantMoney Spent Projects never done. Example of projects to help Pine Creek: First, \$100,000 grant was given to USFS for a well to serve the rest stop and Bogard Ranger Station on Highway 44 which is and has been using water from Pine Creek for both establishments since they were built. However, it appears that there were mitigations that allowed them to continue to use Pine Creek water rather than spend the grant for a well. Where did that \$100,000 get spent if there isn't a well to serve the rest stop and ranger station? Let me share one more of those projects (1994 CRMP) regarding reestablishing vegetation along the stream bank in Pine Creek Valley from severe erosion by cattle activity by planting willows in the bank all along the area of the 1962 Million Dollar bridge (USFS 32N07c) where deep holes were dug upstream and downstream of the bridge that retain water year round. Barrow ditches impound any excess. The willow cuttings were planted in summer and the water was already dried up. Had this project been done early in the spring when there was water, chances are it would have produced more than one willow in many miles of cutting placements. We were told that the area was too muddy to access to plant any earlier however, guite a few of us who actually live at the lake had been accessing that area for a couple months easily. There are still no willows in the most severely damaged areas of Pine Creek determined by CRMP themselves. The culverts were also an issue and it appears that grant money was made available however, the projects were never completed. The fish passage is inhibited. The furthest one male made it in 2011 was just above highway 44...but the meager spawn of minnows was only a few miles upstream of the lake (Authors Copy Captive Breeding). Does this mean nothing? Besides, the trout have no shade or structure to duck into to this day in spite of the money being spent and projects (IE Culverts 1994 CRMP)) have not been completed even though the money appears to have been "spent". Warm slow water isn't conductive to the establishment of a native spawn of the Eagle Lake trout. A forensic audit of all funds for Pine Creek CRMP may be needed to protect the taxpayers investment in this endeavor.

The mitigation to prevent continued cattle erosion to some of the worst sections of stream bank on Pine Creek was to fence the cattle out of the creek. The fencing exists to pretend to keep grazing cattle out of the creek but many get pushed over by thirsty cows. Now, the fencing off of Pine Creek from cattle is a wildlife concern that affects antelope. The fence was so designed that the bottom wire is held up 18 inches above the ground so antelope can get under it, considering antelope don't jump fences. In the years and decades before fencing the cattle out of Pine Creek streambed in lower and mid Pine Creek Valley there were large herds of antelope. The fencing devastated the antelope migration possibly because they compete with the cattle grazing allowed. Few antelope actually go under these fences but there are some. But, no longer the large herds that were common as their travel ways were and are chopped up by fencing (CRMP solving problems with stream bank erosion from grazing cattle). Another mitigated wildlife migration issue attributed to sharing more water for grazing from Pine Creek drainage. More than just the trout are imperiled by the grazing issues. See enclosed printed copies of grazing permits, grazing plan and decisions from USFS Lassen National Forest.

The first flows of Pine Creek can happen as early as February (2005/2006 winter most all tributaries were flowing on December 18th & flowed through spring...major fish rescues in tributaries that year) but those generally stop and go as ambient temperatures still drop to single digits or below overnight. Before steady flow comes, this van happen for two to three weeks, generally not more than three. As

long as Pine Creek flows early, the water temperatures hold well for spawning. If the flow starts later in April, the water ends up too warm. Trail signs indicate that Pine Creek and good water flowed in Sept and Oct in the 1800's.

The transmitting of fish released upstream. Failures resulted in trucking loads of spawn ready trout to the upper spawning beds of Pine Creek from the trap at Eagle Lake. Why did most attempts fail for trucking to take over? Because Lassen National Forest and CA DFG could not coordinate the surgery schedule until they knew the creek was flowing and there were large enough numbers to warrant opening the trap and allowing fish to enter. Hatchery needs come first and foremost and are a top priority but scheduling releasing the trout takes several weeks and generally happens before the creek stops flowing. Failure is obvious and the trout lost is a wasted resource. Getting a time set up to do it took no less than three weeks on any given year (except 2011 when under public pressure to do so,) by then the creek flows were down and water temperatures were up. The trout who were surgically implanted with transmitters didn't have a chance when being released near the end of the flow of Pine Creek. The native spawn has never been a priority, just a project with little intention of actually establishing something until the petition to list it came to light after nearly 20 years of wasteful spending or collecting grant money but not actually doing the set project with it bad science or serious intent. We believe these folks need to have serious intent.

In 2011 Eagle Lake Guardians paid to replace two solar receiving units and control panels to track the transmitted fish upstream failed in the field. Only to find later that there was plenty of funds in grants for this purpose. Is this another circumstance of wasteful spending. For what? Almost 30 years of science and so little has been done. Next, will the trout with extra bones and anomalies who are allowed to go upstream "naturally" (2012 ladder installed) to spawn be called "native" Eagle Lake Trout? Will the hatchery syndrome go away or will it perpetuate in the wild creating two different skeletons of Eagle Lake trout in Eagle Lake? This trait of extra bones and anomalies reproduces and can go upwards of 70% in a pod of trout. If so, which one will be considered the native. Video of the extra bones and email conversation is enclosed on the CD Disc 1 folder Xtra Bones as well communication to CDFG.

The agencies have been dragging their feet and spending money but little results have changed in well over 20 years...but the bone structure of the Eagle Lake trout is changing. Projects have been "done" but not completed or were started and completed with no results such as the willows and well. One sad note that mitigations to enhance extensive grazing are adding to the demise of Eagle Lake and inhibiting possibility of a native spawn, the survival of the native Heritage Eagle Lake trout and Pine Creek watershed in general.

The VAIL REPORT Volumes 1 thru 5. The VAIL REPORT was the study **performed by Raymond Vail in 1970 and was the study that all agencies signed to abide by for the Eagle Lake Basin Plan**. All agencies have lost their copies, however one remains in existence in our hands. Volume 4 is the Hydrology of Pine Creek Valley . **That is the document that Lassen National Forest supervisor Ann Carlson stated did not exist and that no hydrology had been performed in this area.** This was during the field trip to Pine Creek during the CRMP meeting Sept 12. We did email her a copy. This document is the Eagle Lake "Bible". Included on Disc 2 is Volume 1; Introduction. Vol 2 Geology. Volume 3 General Soils. Vol 4 Hydrology (emailed to Ann Carlson LNF). Volume 5 Limnological.

Cloud seeding by PGE. We continue to question as to our weather being robbed by cloud seeding in the Almanor Basin. If there is one thing the scientists agree on it is that it enhances one area with the

moisture that is due to another. It is highly suspect when 5 ft of snow fall only a few miles from the lake and the lake basin and watershed receives only 0.5 inches of snow. Cloud seeding is documented of times and dates on NOAA and should be inspected. Not only do we not want the pollution and contamination allowed to happen at Lake Almanor (mercury and aluminum tests are also enclosed with our letter to PGE and their response (Disc 2 Cloud Seeding Folder) that is not relayed to the public regarding consumption of fish. Eagle Lake Guardians are planning to begin testing Pine Creek water and sediment as well as the fish and other aquatic life for chemical and heavy metal contamination from cloud seeding which will assist in determining just how much we are benefitting or not benefitting from PGE cloud seeding. Letters enclosed on CD and responses included from Lake Almanor whistleblowers including Ph.D's. Eagle Lake Guardians are in the process of asking more questions and information from PGE in this matter regarding the affects to the Eagle Lake Basin and Pine Creek watershed . Mother Nature appears to be only half the problem for Eagle Lake and Pine Creek and we march on in pursuit of the truth. Information regarding getting water from Northern CA to Southern CA is the key for PGE and the state of CA, at the expense of the lives of residents and especially the possible demise of Eagle Lake and ELRt as per the Monterey Agreement (available online).

ENCLOSURES: Due to large file size including original file size photos, two CDs were burned in order to complete the filing of this information. They are labeled as to contents. Photos on disc 1, Documents on disc 2

Hard copies of all grazing permits for Eagle Lake Basin 2006-2009, AOI, Memos, Management plan & decision.

List of Files Disc 1 PHOTOS

2011 Pine Cr Lake Goose Ponds (Impound #1)

- 2012 McCoy Water Pit (Impound #3 in the series of impoundments flowing into each other)
- 2012 Pine Creek Water Impounds
- 2012 Pine Cr Impound Shoestring/Burgess 1989 Million Dollar Bridge. Impounding Harvey Mt, Harvey Valley and Harvey Creek water from Pine Creek.

Houseman Reservoir (Cave Mt area drainage)

2012 McCoy Water Pit

McCoy Water Pit Goose Ponds (May-August 2011

Triangle Lake Rebecca Walker, Flow to Pine Creek appears inhibited or drainage changed.

Triangle Lake Rudy Whitmer

FOLDER: XTRA BONES SHOWING UP IN OUR TROUT VIDEO OF ANOMALY.

TRAIT CAN GO EXPEDIENTIAL WITH ARTIFICIAL SPAWNING AS IT APPEARS TO REPRODUCE.

CONVERSATIONS WITH CDFG AND FISH GENETICIST IN 2009. RE: HATCHERY SYNDROME.

Solo Photos of Shoestring Impound with descriptive text

Historical signs indicating "good water in Pine Creek Valley" in Fall (1800's) must have flowed year round.

List of Files Disc 2 (Documents) (PineCrPGECS)

1994 Pine Creek CRMP Section

Authors unedited copy Captive Breeding Lessons Learned from Eagle Lake Rainbow Trout. Cameron Catot (Recommended version, un cut)

Edited version of Captive Breeding, Lessons Learned from Eagle Lake Rainbow Trout, Cameron Catot 1989 Pine Creek Watershed Report

REMOVE PINE CREEK FROM 303 LISTING (is this where everything went wrong?)

VAIL REPORT: This is the document signed by all agencies to abide by for the Eagle Lake Basin Plan. All agencies have lost their hard copies. Eagle Lake Guardians have the only remaining copy of this 1970's Study on Eagle Lake and Pine Creek.

Volume 1 Introduction
Volume 2 Geology
Volume 3 General Soils
Volume 4 Hydrology (this is what Lassen National Forest denied was ever done.
Eagle Lake Guardians have emailed a copy to Ann Carlson, Eagle Lake Ranger
District and it is online on Eagle Lake Guardians website.
Volume 5 Limnological Study (this was sent to LNF biologist by request when learning of the last remaining copy of the Vail Report surfaced.

Cattle Grazing at Eagle Lake photos of over 200 cows

FOLDER: PGE Cloud Seeding; Altering Climates, Weather Manipulation. **Mercury and Aluminum testing of species in target area;** astronomical amounts performed by UC Davis Toxicologist. Heavy metals Tests are included. Eagle Lake and Pine Creek watershed need protection from chemical pollutants, not welcome them. FDA may need to perform mercury and aluminum testing of cattle drinking this water and eating plants that absorb the metals. Results on fish are included.

Lake Almanor Basin group concerns regarding PGE response to Eagle Lake Guardians and other enquiries. If there is anything the scientists agree upon it is that you can't make it snow unless you take moisture away from a specific area to drop it in a specific area. The "Chips" fire in Yellow Creek showed exactly where our air flow comes from. We believe that our moisture is being hijacked before it gets to Eagle Lake. EL Guardians scientific teams will be testing for chemicals and heavy metals in spring 2013 to help determine just how much the Pine Creek watershed is benefiting (or not) from Cloud Seeding. Results will be public information. Cloud seeding events are posted on NOAA website for your information.

Thank you, Eagle Lake Guardians