Rebuttal Testimony of Douglas Cole

I. Background regarding Marble Mountain Ranch prior to the Cole Family's Purchase

When we purchased the ranch in August of 1994, the electrical systems at Marble Mountain Ranch (the "Ranch") were being run by a World War II era generator and a 100-year-old cast iron waterwheel. The ditch itself had been poorly maintained. The wiring throughout the Ranch was riddled with ground faults requiring far too much electrical output to meet the needs of the Ranch. The water conveyance crossed over a ravine in an old leaky wooden trestle that resulted in high water loss. We began several phases of work to rectify these problems working toward improved efficiencies at the Ranch.

To ensure that we were able to afford the improvements, we used a phased approach. The phases are discussed below in chronological order. Receipts demonstrating the costs included herein are provided as **Exhibit A**. Not all receipts associated with these costs are included because they were destroyed as part of the snow damage at the Ranch during the 2016-2017 winter season.

II. Phase 1: Replacement of Old Water Wheel and Related Improvements

Within the first two years of purchasing the Ranch we replaced the old water wheel with a newer version costing **$45,700**. The costs to replace the old water wheel included building a cover to protect the electrical components, rewiring as needed, and a cement slab on which to mount the wheel. Shortly after this we began the arduous process of removing the legacy, leaky wooden trestle and building a more permanent berm with a double walled culvert to stop the loss of water at the ravine. The cost of this process including labor, and culverts was approximately **$2,450.00**.

Approximate Total Expense for Phase 1 Improvements: **$48,150.00**

III. Phase 2: Rewiring the Ranch

The wiring throughout the Ranch was not up to code with many of the wires running between buildings just a few inches under the soil and not contained in any type of conduit for protection. Additionally, the wiring in the buildings was riddled with loose connections. These two issues: (1) lack of conduit protection, and (2) loose connections in buildings, were causing a great deal of power loss due to ground faults caused by these conditions. In 1995, we began the process of redistributing power to make the water wheel more efficient and upgrading wiring running from the main house to the lodge and to the public bathrooms to eliminate the ground faults and power drains. Total expenses, including professional electricians, manual labor and materials for the initial work on this problem are as follows:

Electrician (Blakeslee Electric): **$1,163.00**
Materials and manual labor: **$4,900.00**
Initial portion of Phase 2 costs: **$6,063.00**

The process of upgrading and improving the power system to reduce the load on the water wheel continued over the next 15 years, but has yet to be completed. It would still be ongoing, but all of our time, energy, and financial resources, outside the immediate demands of our business, has been diverted to addressing the defense of our water rights.

The Electrician: **$8,957.50**
Wholesale electrical supplies: **$30,250.81**

Total current costs of ongoing Phase 2 project: **$45,271.31**

IV. Phase III: Strengthen the Ditch and Berm for Improved Water Conveyance

The Ranch had cast iron pipes throughout the existing infrastructure that were leaking when we purchased the Ranch. As an initial step to improve water conveyance efficiency, we replaced the old cast iron pipes throughout the Ranch to eliminate leaks. Water is conveyed through the old leaking, but now replaced pipes to cabins and agricultural points of distribution.

The piping replacement project began immediately after the replacement of the wooden trestle associated with the hydroelectric power system was complete and continued until we were financially unable to continue. Instead, all financial resources were consumed addressing the increased overhead to purchase diesel fuel since the hydroelectric system could not be used and retaining legal counsel was required to address the State Water Resources Control Board's and North Coast Regional Water Quality Control Board's enforcement actions.

Replacing the cast iron pipes is a labor and materials intensive process. It includes hiring equipment operators, purchasing of double walled culverts, and manual labor. The expenses below detail some of the hard expenses for Phase III up to this point.

Phase III Expenses

Source of Expense	**Amount of Expense**
HD Fowler	$7,287.61
Ewing	$9,458.98
Fluid Connectors	$1,134.50
Atwood Equipment	$1,780.00
Robinson Backhoes	$10,780.00
Brian Crocker Backhoe	$4,630.00
ABC Logging for an Excavator	$3,600.00
White City Metals	$1,253.20
Total Current Phase III expenses:	**$39,924.29**

We have continued working to improve the infrastructure at the Ranch as a small family business, but opposition from other stakeholders, such as the California Department of Fish and Game, the National Marine Fisheries Service, the State Water Resources Control Board, the North Coast Regional Water Quality Control Board, the Karuk Tribe and neighboring landowners has delayed our efforts. That resistance now poses a threat to our family's ability to survive at the Ranch. The access to water through our pre-1914 three cubic feet per second ("cfs") is necessary for both our consumptive and domestic use and for electricity at the Ranch.

There is no other more efficient option for us to implement while we are faced with the financial burdens that are detailed below.

V. Additional Expenses to Address Regulatory Activities

Listed below are the many additional expenses that our small family venture has experienced over the past 15-20 years to address regulatory requirements on our pre-1914 three cfs water right on Stanshaw Creek.

One expense that cannot be assigned a monetary value or cost is the emotional devastation of these actions against our family. The emotional and subsequent physical stress caused by this long process cannot be calculated. One example of the agencies total lack of concern for the human side of this took place when we had a near fatality of our two young children in an automobile accident one January. After 4 weeks in the hospital we were able to bring our children home under hospice care to try and strengthen them, outside the hospital environment, in preparation for the future surgeries both would be required to undergo. On the day we returned home, we received a cease and desist order from a judge for our use of water. Water that was required to generate needed heat and power in our home as well as to be able to provide a sterile environment for changing bandages and providing medical home care for our children. Although we made a plea to the court for leniency while we worked through this time, we were denied. After 2 weeks of painful loading of our children into cars in winter conditions and driving up to a kind neighbor, 20 miles away, to bathe and change bandages, my wife, Heidi went up in the middle of the night and blew out the rock damn, turning the water back into the ditch defying the court order. At that time, we hired our first legal counsel, Stoel Rives, LLP and had the cease and desist order overturned. We have been paying for legal counsel ever since. This is money that could have been spent on addressing infrastructure improvement at the Ranch, had all stakeholders been interested in finding a solution. Instead, our family has experienced ongoing difficulty in being treated as anything other than a scapegoat for decline of fish populations in the Klamath River. That decline is a result of many, many contributing factors, and our diversion and use of water at the Ranch is not a significant factor in the solution to the issue.

A. Purchase and Installation of Generators

As a result of regulatory requirements, we have had to reduce the use of and for the last several months completely stop the use of our Pelton wheel. Consequently, we have had to install a main generator and a backup generator for power production. As generators are not designed to run 24/7 the associated cost of upkeep and repairs has been high. The noise and pollution and carbon footprint caused by forcing us to use diesel fuel 24/7 is a cost which we do not know how to put into monetary terms. However, those costs are in addition to what is outlined below.

Fixed Costs of Generator Operation, Not Including Diesel Fuel

Source of Expense	**Amount of Expense**
Generator Purchase	$6,700.00
Robertson Repair and Service	$8,331.00
Thompson/Howe	$1,261.63

Cornwell Welding	$506.25
Canyon Industries	$4,409.46
Brian Crocker Backhoe	$4,630.00
Applied Industrial Technology	$1,346.35
Rheems	$1,059.26

Total Costs related for the generators, not including fuel: **$28,243.95**

B. Petroleum Costs

Costs of diesel fuel since 2005 are outlined below. The expenses for the first 7 years, 2005-2012, are listed as a single figure. During that 7-year time period, we only utilized the diesel generator when water flows were too low to meet the needs of the fishery interests, as dictated by the regulatory agencies. The costs for fuel are itemized by year from 2013 through August 31, 2017 to show the steep increase in costs as a consequence of our inability to use our Pelton wheel.

Diesel Fuel Costs

Year(s) Covered	**Cost Incurred for Diesel Fuel**
2005-2012	$38,090.12
2013	$15,644.38
2014	$22,068.18
2015	$16,146.52*
2016	$24,307.43
2017, through August 31st	$24,363.90
Estimated Costs for the rest of 2017	$14,000.00 (at a cost of $3,500/month)

*Diesel fuel costs were at an all-time low during 2015, resulting in a lower cost in 2015

Total Diesel Fuel Costs from 2005 through projected end of 2017: **$154,620.53**

The increased costs to operate the diesel generators has coincided with the highest historical water records in the area since May of 2016. The costs for diesel fuel for just the year, 2017, will exceed the cost of the 7-year period of 2005-2012, when we were able to operate our Pelton wheel during high flow months of the year. Additionally, diesel fuel as continued to increase in costs, for almost all of the years that we have had to rely upon it. Further increases in costs will put our ability to live on and operate the Ranch in jeopardy.

C. Water Filtration and Storage Tanks

As the pressure to not use our water right to its full capacity increased over the past two years with the issuance of enforcement orders against us, it became necessary to install an advanced water filtration and storage system to allow us to have the needed water at times of low flows in Stanshaw Creek. The costs for this system are listed below:

Water Filtration and Storage Tank Costs

Source of Expense	**Amount of Expense**
QC Chlorine Injector	$552.04

Watson Well, Water Treatment System	$27,345.00
Bandera	$6,243.68
Banjo	$612.15
ASAP Parts Fee	$321.73

Total Cost of Water Filtration and Storage Tanks: **$35,074.60**

D. Legal Costs, Professional Services and Regulatory Permitting Fees

Additional Expenses related to legal defense, permit fees for existing water rights, and professionals to aide in defense of water rights are listed below:

Legal Fees, Professional Services, and Regulatory Permitting Fees

Source of Expense	**Amount of Expense**
Legal Services, Stoel Rives, LLP	$16,914.14
Churchwell White, LLP	$69,500.20 (currently unpaid: $115,437.03)
Cramer Fish Sciences	$4,500.00
ECORP, Environmental Consulting	$11,401.25
Hach Water Testing	$79.17
Swoofer	$426.96
Water Board Permitting Fees	$681.11

Total Legal Services, Professional Services, and Regulatory Permitting Fees: **$218,939.86** (Paid and Unpaid)

E. Manual Labor and Office Time

Most of the efforts at the Ranch to implement resource improvements are made through my employee's and family's manual labor and time. The costs associated with these efforts are detailed below. This reflect time and labor that could have been used in other manners, but instead has been focused on the projects detailed above in this supplemental testimony. Spreadsheets detailing the hours outlined below are attached as **Exhibit B**.

Employee time for ditch maintenance and repairs: 17,856 hours
Cost for those hours: **$320,943.00**

Cole Family office and meetings time: 3,750 hours
Cost for those hours based on a rate of $20.00/hour: **$75,000.00**

Total costs as detailed in this testimony: $937, 923.59

VI. Additional Sacrifices and Complications from this Regulatory Effort

To offset the costs of the regulatory actions against us and for improvements at the Ranch, we have made many personal and business sacrifices. For example, as part of our guest ranch operations, we used to have a speed boat that we would use to take guests on tours of the Klamath River. We have sold that boat to help offset the expenses detailed in this supplemental

testimony. We no longer have that resource to provide our guests with an additional experience at the Ranch and to attract additional guests to the Ranch to help continue to operate our small family business.

Upon the purchase of the Ranch, we also made some investigation of the existing infrastructure and alternative sources of water. We were concerned about the possibility of drought, so we explored the option of relying on groundwater. We had two test wells drilled on our property, but they produced no water. This effort was at a cost of approximately $20,000.00. We have also been engaged in the process of updating the irrigation system since we first purchased the Ranch. Until we purchased the Ranch, flood irrigation was used to water stock and for agricultural purposes. We have implemented a filtration and distribution system that is much more efficient than previous owners of the Ranch.

Further, the Prosecution Team staff has noted that we have improved our guest facilities at the Ranch by adding a covered horseback riding arena at the Ranch. That improvement was a gift from my wife, Heidi's family. Heidi is not only an avid horseback rider, but she is also a cancer survivor. Her family was concerned that the extended periods of time that she spent in the sun as a leader of our horseback riding program was dangerous to her health and exposed her to too great a risk of cancer relapse. They decided to gift us the covered arena to minimize any negative impacts to Heidi's health that they could. Despite this, Heidi remains under the regular care and supervisor of her doctors. She continues to experience negative health consequences from the stress associated with this ongoing regulatory process.

These sacrifices have come at both personal and business costs. We continue to take all necessary actions to continue to reside at the Ranch and operate our business. However, the costs, both financial and personal, are becoming greater with each passing year and each additional regulatory requirement.

VII. Observations of the Stanshaw Creek System this Summer

With one of the wettest winters on record in the 2016-2107 winter season, the Klamath National Forest and the Ranch experienced a very active fire season during this 2017 summer season. Two items of note as a result of the large wildfires this year. First, there are large patches of sediment leaking from the banks of Stanshaw Creek, especially on the opposite bank from where my diversion is located. That sedimentation is consistently a part of the Stanshaw system. I am unaware of any study of the sediment budget of Stanshaw Creek demonstrating the additional of sediment to Stanshaw Creek from the creek itself.

Second, as demonstrated in the pictures included in MMR-Exhibit 10, the wildfires this year came within one half (1/2) of a mile of my property, and burned large areas of the hillside where the diversion is located. The photographs also show that the diversion is operating well even in the event of wildfire, if the diversion had been piped with PVC pipe, which was part of the 6" pipe project, the pipe would not have survived the fires and the piped diversion system would have been a waste of resources.

I never accepted the conclusions of the Lennihan report as the full extent of my pre-1914 three cfs right. The Lennihan Report's conclusion of 1.16 cfs would provide for my domestic and consumptive use at the Ranch. Any statements of acceptance regarding the Lennihan Report's conclusion with regard to the scope of my water right, would be acceptance of that conclusion as the extent of my domestic and consumptive use at the Ranch only. I would not accept the conclusions of the Lennihan Report as the full extent of my pre-1914 right, which includes hydroelectric power generation use.

VIII. Conclusion

My family and I have been committed stewards of the Ranch and Stanshaw Creek. From the time we purchased the Ranch in 1994 to the present day, we have implemented improvements with our time, effort, and financial resources as they were available to increase efficiency at the Ranch. This effort has come at a great personal cost to my family and me. Our efforts have not been met with cooperation and an interest in being partners to further our efforts. Consequently, we have had to forego many of our outstanding projects to address the immediate demands of regulatory orders. These requirements have prevented us from continuing our projects to improve the diversion ditch and to upgrade the electrical system at the Ranch. We make investment in the Ranch when we can and sometime even when we cannot to ensure that we can continue to live at the Ranch and operate our business here. The future of our operation and home at the Ranch is not certain where we are no longer able to exercise our full pre-1914 three cfs water right.