Testimony of Lee Bettencourt

Presented to the State Water Resources Control Board Cachuma Project Operations Permit Hearing

My name is Lee Bettencourt. I am a farmer in the Santa Ynez Valley. I am the owner and operator of our family vineyard and I am familiar with the irrigation practices of other farmers in the Santa Ynez Valley. My operation is typical for the area. We now have 115 acres of nine different types of varietal wine grapes. My income is derived entirely from farming. I am a 6th generation Californian and the 4th generation in the Santa Ynez Valley. My Grandparents bought the ranch in 1923 and our family has been farming there for the past 80 years. My wife, my mother, my son and his wife and children, all live on the ranch and share in the work.

My father, Boyd Bettencourt, was the Secretary for the Santa Ynez River Water Conservation District and the Special District formed under it, Santa Ynez River Water Conservation District, Improvement District No. 1, from March 1965 to May 1992. I am a Trustee for the Santa Ynez River Water Conservation District ID #1 and, have been, since 2000. I have been a director on the board of the Cachuma Resource Conservation District for Santa Barbara since 1993 and I am a Trustee for the Oak Hill Cemetery District. My family and I have been long time members of the Farm Bureau. I attended college at Cal Poly in San Luis Obispo and with my experience and my heritage I have a good working knowledge of the water in our area.

The ranch, which we now farm, was part of a 35,000-acre land grant that supported a Catholic College named Our Lady of Refugio, later called Our Lady of Guadalupe. It was established in 1844. The house that we live in was the chapel for the college. The College had a gravity water delivery system with storage reservoirs. The water came from an open ditch approximately three miles long that delivered creek water from near the town of Santa Ynez. At that time, the Sanja Cota Creek had a live stream. The water was used to irrigate the land and operated the gristmill near the Santa Inez Mission in Solvang.

My grandfather bought the land in 1923 because it was one of the few ranches in the Valley that was irrigated. He had a dairy and hogs. He grew pasture, hay, silage corn and some row crops. It was all grown with flood irrigation. The cost of his water was under \$1.00 per acre ft. The primary costs associated with water production were for ditch maintenance and repair, pumping, and vegetation management.

As years passed more and more deep farm wells were developed up stream along Sanja Cota Creek, which decreased the flow of the water to the ranch. It was necessary for us to develop sprinkler irrigation to conserve water and still maintain our farming acreage. We grew alfalfa, silage corn, and permanent pasture, all to support our dairy. We had to install large booster pumps, distribution piping, enlarge our holding ponds, and buy moveable sprinkler pipe. By the 1950s, the cost of this water was over \$7.50 per acre ft. In drought conditions it was hard to irrigate in a timely manner and some crops would suffer from lack of water.

When the Cachuma Project water deliveries began to Improvement District No. 1 in the 1960's we got a more reliable source of water. It was better quality and at adequate pressure for sprinkler irrigation. It was no longer necessary for us to boost the water pressure, therefore conserving energy. Because the water source was reliable, we were able to irrigate on a more efficient schedule. The cost of his water was over \$40.00 per acre ft

In the 1960's the Valley grew an increased acreage of tomatoes, corn, sugar beets, alfalfa, and other field crops. This was all because of the new source of water from the Cachuma Project. Over the years these crops gave way to higher income crops. This was due to higher cost of water and pressure from land development.

In 1968 my family established the first commercial wine grape vineyard in the Santa Ynez Valley. Wine grapes netted a higher income per acre therefore we could absorb the water cost. At the time, the University of California recommended that grapes should be planted on a 6 x 12 foot spacing with permanent overhead sprinkler system for irrigation and frost protection. In 1976 we sold our dairy and started the first area winery, The Santa Ynez Valley Winery.

With the advent of drip irrigation, newer vineyards in our area have either drip or a dual watering system. In our vineyard, even though costly, we have been adding drip irrigation since the mid-80's in conjunction with our existing overhead sprinklers which remain available for frost protection. The early drip systems did not compensate for the change in pressure due to the elevation changes in our hilly terrain. The newer drip emitters compensate for this pressure difference so more exact amounts of water can be delivered. With a dual system we can deliver water in the amounts needed in a more efficient manner.

Once you have a good irrigation system, you need to use it properly. It is important to monitor the moisture in the soil for both water conservation and grape quality. Only quality grapes make quality wine. There are many devices to help me measure the crop water demands. We have used everything from a shovel, tensiometer, neutron probes, to a CIMIS weather station. We now use an electronic moisture probe called AquaPro. It measures the percent of moisture in the soil at different depths to show me a soil profile. We have established that grapes need more then a 60 percent moisture presence to continue to grow. Once the moisture nears 60 percent we irrigate to replace only the water that is needed to refill the soil to about 90 percent. By shooting for 90 percent we can eliminate any run off. We try to irrigate only at night when there is less evaporation by the sun and wind. By all these methods we use less water and therefore have less cost.

Many field crops such as peppers, broccoli, peas and lettuce are now being grown in the Valley. This is due to the improvement of drip irrigation and water conservation methods. One of the things not seen in the Santa Ynez Valley is tail water from row crops. It is inefficient, costly, and there is no place for the water to go. At the present water rate of \$121.97 per acre ft. even these crops may not remain viable in our area much longer.

Historically, agriculture has been the best method of keeping open and scenic space in a growing community. Horse ranches, golf courses, parks and cemeteries are additional examples of our open space. The Cachuma Resource Conservation District has an agriculture and turf water evaluation service available to the residents of Santa Barbara County. The District has tested an average of 50 systems per year. Since 1985, the total impacted acreage is over 57,000-acres with a potential savings of 16,656-acre ft. of water per year county-wide. Many of the landowners in the Santa Ynez Valley have used this service to make their water systems more efficient.

With viable agriculture it is easier to hold off the pressure of residential development. But Ag water is interruptible. In the case of an insufficient water supply the Ag water is the first to be limited. Consequently, with the increase in land taxes, higher costs of production, and pressure from urban development my income and my way of life may be in jeopardy.

As a Trustee of ID #1, I am concerned about the long-term reliability of an adequate water supply for our community. As a farmer I need adequate water at an affordable rate to sustain my vineyard. As a resident of the Santa Ynez Valley, I am concerned about keeping a balance of agriculture and rural residential living. As a grandfather, I worry that without intelligent water use planning, my grandchildren will not be able to carry on our family heritage in farming. I am fortunate that one of my sons chose to live on the ranch, raise his family and continue the family's farm heritage.