

Sierra Lakes County Water District Water Supply Assessment Discussion

The State of California issued a permit in 1964 to the Sierra Lakes County Water District to annually use up to 1,177 acre-feet of water for Municipal, Recreation, Fish Cultural and Industrial uses within the District's Boundary. The conditions of the permit included certain conditions:

- The water may be collected for storage during the period of October 1st through June 30th of the succeeding year. During the period of July 1st through September 30th, any water entering Serene Lakes must be released.
- Construction of the infrastructure necessary to use the water was to be completed in a timely manner
- The District was required to prove Beneficial Use of the entire 1,177 acre-feet of the water by 2005. Because the District did not use the entire amount within the allotted time, the State can reduce the permitted amount to the highest annual use in the preceding five years (120 acre-feet).
- Because of a clerical error in the original application, the District is not allowed to use "Direct Diversion" to remove water from the lakes, but instead is required to remove it from a "sump" adjacent to the lakes. The District has been withdrawing water directly from the lakes since 1964, but during an inspection by the State in 2008 this conflict was identified.

In 2005 the District filed an *Extension of Time* to request additional time to prove beneficial use of the water, i.e. increase the amount of time allowed for build-out of the subdivisions and thus establish the annual demand at build out. In June 2009, the District filed a *Petition for Change* to allow use of the "Direct Diversion" withdrawal method. The two filings require an environmental analysis in compliance with the California Environmental Quality Act before the State can act on the District's proposed changes to the existing permit. The environmental document is being prepared by a consultant in Sacramento and two important components of the analysis are an understanding of the amount of water that is available from the watershed (Water Availability Analysis) and the amount of water that will be required to support the District at build out of the existing subdivisions (Water Demand Analysis). The WAA used 20-years of precipitation data from the Central Sierra Snowlab and measurement of flow over the dam during the past three years to predict the amount of water passing through the lakes and into Serena Creek for the study period. The WDA looked at four scenarios to determine how much water would be required at build out of the subdivisions at 46% occupancy. The scenarios included summer drawdown under both "normal" and four-year drought conditions and ice formation during "normal" and high snow years when ice thickness would increase.

The following PowerPoint slides are a summary of the findings and show the projected summer and winter water levels at build out under the various climatic conditions. After the Board of Directors has reviewed and approved the CEQA document, it will be submitted along with the WAA and WDA to the State to support the *Extension* and *Petition*.