

**IN THE MATTER OF ALLEDGED WASTE AND UNREASONABLE USE OF WATER  
BY THE HIDDEN LAKES ESTATES HOMEOWNERS ASSOCIATION**

**DIVISION OF WATER RIGHTS PROSECUTION TEAM EXHIBIT (PT-21)**

**WRITTEN TESTIMONY OF CHARLES RICH, SENIOR WATER RESOURCES  
CONTROL ENGINEER**

My name is Charles Rich. I am a professional Engineer, registered in California, and a Senior Water Resources Control Engineer with the State Water Resources Control Board (State Water Board), Division of Water Rights (Division). I have over 30 years of water rights experience working for the Division in programs dealing with water right application acceptance, protest and hearing actions, permit issuance, licensing, complaint and compliance actions including those dealing with waste and unreasonable use, adjudications, and petitions for change and/or transfer of water rights. I currently serve as the Chief of the Complaint Unit in the Division. During my tenure with the Division, I have had the opportunity and occasion to review and/or analyze thousands of California water rights based on western water law including riparian, pre-1914 appropriative, post-1914 appropriative, percolating groundwater, diffused surface runoff, pueblo, and inter-state claims of right as well as dealing with a large number of waste and unreasonable use or unreasonable method of diversion (i.e., "misuse") actions. A copy of my resume is attached. (PT-22).

My testimony herein provided, identifies my personal knowledge of the evidence, actions, and rationale for the Division's recommendation to issue a finding of misuse regarding the use of water by the Hidden Lakes Estates Homeowners Association (Association).

A complaint filed with the Division by Tony and Donna Wood and Ted and Cheri Allegra (Complainants) dated April 2, 2005, alleged that excessive seepage from the Association's north lake was causing unreasonable damage to their properties. The testimony and exhibits of Charles NeSmith address the concerns of Complainants. My testimony addresses the misuse of water issue from the perspective of the affected community, including other customers within the San Juan Water District and public trust resources.

The Association retained the services of John H. Humphrey, a hydrogeologist, to conduct geotechnical investigations regarding the source of the water on the Complainants' properties

that was the subject of the complaint. Mr. Humphrey concluded that the upper (north) lake is leaking, and calculated the rate of leakage to be about 3 to 4 gallons per minute. I utilized water delivery records (PT-23) obtained during the course of the complaint investigation regarding the amount of water delivered to the lakes by the San Juan Water District and long-term water surface evaporation data for Folsom Lake (PT-24) to compute the approximate amount of seepage by subtracting evaporation from total deliveries over the 38 month period of record. This resulted in a total computed seepage of 19.15 acre-feet of seepage over a 38 month period. The average rate of seepage was 3.75 gallons per minute or 6.05 acre-feet per annum, which is in agreement with the conclusions of Mr. Humphrey, the Association's expert.

The total surface area of the north lake was computed using Google Planimeter to be 1.15 acres. If the maximum depth of this facility is 10 feet, total capacity would be no more than 7 acre-feet. Seepage of 19.15 acre-feet over 38 months from this facility, or 6.05 acre-feet per annum, would equate to an annual seepage amount of approximately 85% of the capacity of the lake. If the same ratio were accepted for Folsom Lake, annual seepage losses would be in excess of 850,000 acre-feet per annum. Obviously, seepage losses at the Association's north lake are **relatively** very large and therefore unreasonable, constituting a misuse of water.

In addition, the San Juan Water District, who supplies water to the Association to maintain the lakes, issued a Stage 3 Water Warning in late February 2009 (PT-25). The requirements for this level of conservation (PT-26) include:

1. Use water for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.
2. Confine water to your property and do not allow it to run onto adjoining properties or to the roadside ditch or gutter. Do not water past the point of saturation.
3. Repair leaking pipes or faulty sprinklers immediately.
4. Ensure all pools, spas and ornamental fountains/ponds are leak-proof and install a recirculation pump. Draining or refilling pools is only allowed for health, maintenance or structural reasons.

Seepage from the north lake onto adjacent properties serves no beneficial purpose, is not confined to the Association's property, has not been repaired or corrected even though many years have passed (most of which were drought years), and results in the use of water for decorative / recreational purposes in a fashion clearly more wasteful than allowed for pools, spas and ornamental fountains/ponds. Leakage of up to 85% of the capacity per annum of the storage facility would not appear to meet either the letter or the spirit of these requirements.

Besides causing additional strain on the tenuous water supply for the San Juan Water District, water utilized by the Association to offset seepage losses is reduced in quality before being discharged into a storm drain system north of the Association's north lake that eventually discharges into the Sacramento River via the Dry Creek watershed. This is a different watershed than where the water originates (i.e., the American River watershed). Flows in the American River below Folsom Dam, especially during drought years such as have recently occurred, are not always maintained at optimum levels for public trust resources (e.g., salmon, steelhead, etc.) to supply domestic needs in the metropolitan Sacramento area and provide water to the Sacramento-San Joaquin Delta. While the Association's excessive seepage by itself does not have a quantifiable impact of flows in the American River, these seepage losses nevertheless contribute to a cumulative impact that has increased in recent years as the demand for water supplies in the metropolitan Sacramento area increases in relation to the available supply. If all of the end users of water from Folsom Lake were allowed to maintain practices such as those employed by the Association, flows in the American River would often be reduced to levels that are incompatible with minimal protection to public trust resources.

For the above reasons alone, requiring the Association to correct the excessive seepage is reasonable. If the Association does not wish to pay for the actions necessary to correct the waste and unreasonable use of water at its lake or lakes , it could instead turn the lakes into green spaces that would consume significantly less water than currently lost by seepage and evaporation, or come up with some other plan to eliminate the waste and unreasonable use occurring at the lakes.