California law requires that water rights be put to reasonable and beneficial use. Effective administration of this requirement depends on an information system that includes all water rights and their terms. Such a system doesn't exist.

Currently, legal records pertaining to this precious resource are housed as 10 million pages of paper files at the State Water Resources Control Board (SWRCB). The records are not indexed for search by author, date, or topics, and records for pre-1914 water rights are scattered throughout 58 county courthouses and other repositories. Thus, the SWRCB and stakeholders cannot effectively review legal records necessary to evaluate relative priorities among water rights in a given watershed, to resolve conflicts or to manage shortages.

Further, SB 88 enables the SWRCB to require real-time reporting of water use and diversion data by water users but will only enforce this requirement if it is able to assimilate and analyze the data collected.

An accurate accounting of water rights will empower more effective and sustainable management of statewide water resources.

The proposed water information system is the enabling capacity necessary for enforcement of SB 88, permitting decision making informed by real-time data in an era in which California frequently face systemic shortages and conflicts.

Successful development and widespread adoption of the proposed information system will lead to increased demand for real time data. This will stimulate technological innovation and adoption of hardware (e.g., devices for measuring diversions with mandated accuracy; tools for recording and relaying measurement data; accuracy assessment), software (tools for assimilating, reporting, and validating measurement data) and analytical methods.