

## Scope of Work

The Indian Wells Valley Cooperative Groundwater Management Group (Group) has received two previous LGA grants. The 2000/2001 grant was awarded to the Eastern Kern County Resources Conservation District on behalf of the Group and was used to survey wells used for groundwater monitoring, to develop a GIS management system to archive, track and present data, and to develop a website to allow public access to information. The grant funding was also used to develop a conceptual groundwater model based on existing groundwater information collected during earlier studies conducted throughout the Indian Wells Valley (IWV). The conceptual model and compiled information were documented in a final report titled “Groundwater Management in the Indian Wells Valley Basin” (June 2003).

In 2005/2006, the Indian Wells Valley Water District (IWWVD) obtained an LGA grant on behalf of the Group. At that time, the primary goals of the groundwater study was to refine the conceptual groundwater model and to evaluate the groundwater resource as a reliable, long-term source of potable water for the IWV. Study results would then be used to evaluate management practices, which may include treatment, and/or importation to maintain a reliable water supply. The objectives of the study were to install monitoring wells in areas where recharge may be occurring; to collect water quality samples and isotopic samples in new wells and in wells previously sampled; to interpret new data and compare new data to historical data to determine trends; to conduct continuous water level and water quality monitoring in the vicinity of extraction areas; to make recommendations for management strategies to assure a safe, reliable water supply to the IWV. The objectives of this AB303 grant were documented in a final report titled “Installation and Implementation of a Comprehensive Groundwater Monitoring Program for the Indian Wells Valley, California” (March 2008).

Utilizing the interpretational tools, datasets and monitoring programs either initiated or enhanced by the two previous grants, the Group is now applying for the latest round of LGA Grant funding to generate a baseline groundwater quality characterization of the Indian Wells Valley groundwater basin to be used as a basis for groundwater management, land use planning, fate/transport modeling, development of a Salt and Nutrient Management Plan and compliance with the State of California Irrigated Lands Management Program.

- Properly utilize the groundwater while minimizing changes to groundwater quality and groundwater chemistry.
- Develop a Salt and Nutrient Management Plan for the basin.
- Comply with the State of California Irrigated Lands Management Program.
- Develop a geochemical fate and transport model to work conjunctively with the groundwater flow model developed for the major IWV groundwater stakeholders (Indian Wells Valley Water District (IWWVD), Naval Air Weapons Station, China Lake (NAWS) and Searles Minerals, Inc.) by Brown and Caldwell, Inc. (January, 2009).