Southern California Water Rights Litigation

Many of the groundwater basins in California have been experiencing declines in groundwater levels for many decades. Between 2012 and 2015, California experienced extreme drought conditions. The lack of recharge to groundwater basins accelerated the decline in groundwater levels. In addition, with limited access to surface water resources in the drought, groundwater pumping was increased to meet local water demands. Thus, the decline was exacerbated by this increased pumping. In certain areas, groundwater levels declined to a point at which well yields were reduced, and in some cases, wells went dry.

In one Southern California groundwater basin, the reduction in available groundwater storage during this period was compounded by dramatic residential development and the associated increase in demands for water. This resulted in even further declines in groundwater levels.

Within this basin, well owners experienced both falling groundwater levels and degraded water quality (i.e. increased total dissolved solids [TDS]). As a result of these conditions, litigation was initiated between the various parties pumping groundwater from a portion of the basin. The litigation included two water districts, one municipality, a golf course, a major land developer, and other parties with an interest in the basin.

In the lawsuit, it was contended that one major pumper in the basin was responsible for the decline in groundwater levels and degradation in water quality. **Aquilogic** was retained by this party to evaluate the cause of these adverse conditions. As part of our retention, we reviewed the available literature on the basin, a groundwater flow model developed for the basin, water level and pumping data from all groundwater users, historical and current groundwater quality data, the phasing of increased residential development, climatic data (notably precipitation), and upstream surface water diversions.

The litigation is still active and our work on this project is still ongoing.