

Sustainable Groundwater Management Act Implementation in the Tulare Lake Basin

The Sustainable Groundwater Management Act of 2014 (SGMA) is comprehensive legislation that governs the management and use of groundwater in the state. SGMA's intent is to provide for sustainable management of groundwater basins and to locally manage groundwater basins while minimizing state intervention to only when necessary. The preservation of local management of the region's groundwater is a fundamental principle for implementing SGMA in the Tulare Lake Basin. SGMA defines sustainable

groundwater management as the management and use of groundwater in a manner that does not cause undesirable results including:

- Chronic lowering of groundwater levels
- Reductions in groundwater storage
- Seawater intrusion
- Degraded water quality
- Land subsidence
- Surface water depletions that have adverse impacts on beneficial uses

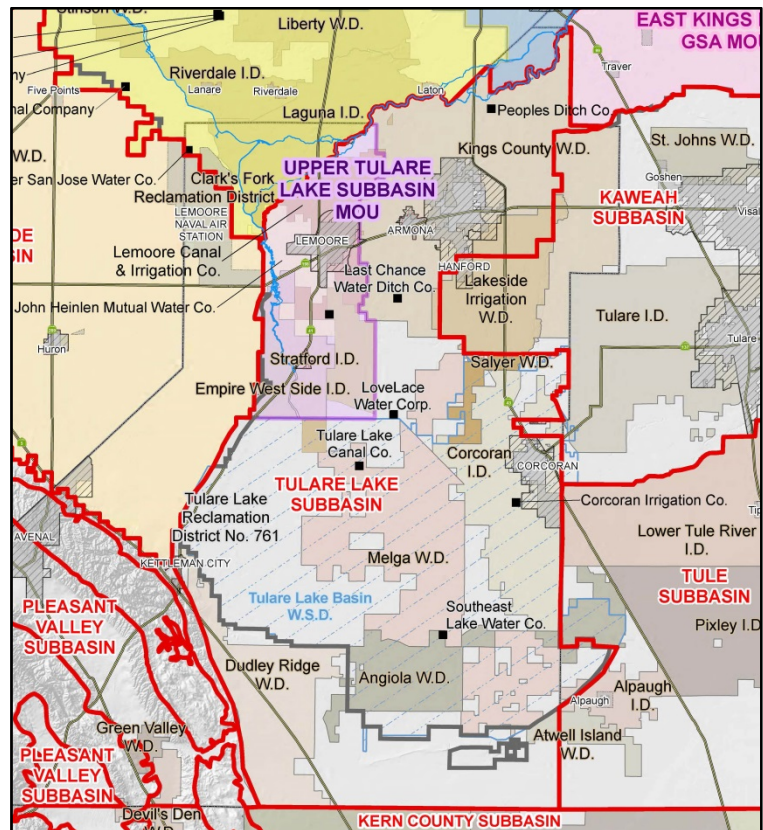
Tulare Lake Basin Groundwater Conditions

There are 515 groundwater basins and subbasins in California. These basins contribute close to 40 percent of the California's annual water supply in an average year and as much as 45 percent in dry years. During extensive dry or drought years, groundwater can provide close to 60 percent of the water supply. Of California's 515 groundwater basins and subbasins, 127 have been designated by the state as High and Medium priority meaning they are not in a sustainable condition. The Tulare Lake Basin is one of those 127 basins.

The Tulare Lake Basin is bounded on the south by the Kings-Kern county line, on the west by the California Aqueduct, the eastern boundary of Westside Groundwater Subbasin, and Tertiary marine sediments of the Kettleman Hills. It is bounded on the north by the southern boundary of the Kings Groundwater Subbasin, and on the east by the westerly boundaries of the Kaweah and Tule Groundwater Subbasins. The southern half of the Tulare Lake Subbasin consists of lands in the former Tulare Lake bed in Kings County. Average annual precipitation is seven inches throughout most of the basin and nine inches at the northern margin.

DWR measurements show that groundwater supplies are declining within the Tulare Lake Basin. This condition, considered generally as overdraft, is created when more water is pumped out of the ground than is replenished by rainfall, runoff or recharge.

The Department of Water Resources estimates that total Tulare Lake Basin groundwater in storage is about 37 million acre-feet to a depth of more than 1,000 feet. DWR measurements estimate that on average the Tulare Lake Basin water level has declined nearly 17 feet from 1970 through 2000. (An acre foot equals 325,900 gallons, or enough water to cover a football field to a depth of one foot.)



Steps for Implementation of SGMA

SGMA lays out a process and procedures on how sustainability will be achieved. For those agencies that will be responsible for its implementation, the requirements and objectives of SGMA are significant and will take years to accomplish.

The first step for local agencies is the formation of a Groundwater Sustainability Agency or Agencies (GSA). Formation of a GSA will likely take up to two years. GSAs are given both the mandate and broad array of tools to regulate groundwater in their basin. Those tools will include the ability to limit extractions and to impose fees related to groundwater use. Some of the eligible agencies in the basin include irrigation districts, cities, counties, and community service and public utility districts.

The second step in SGMA implementation is the development of a Groundwater Sustainability Plan (GSP) by the basin's GSA(s). Developing a GSP will be a significant and costly undertaking that will likely take two to three years. The GSP must include measurable objectives, as well as interim milestones to achieve the sustainability goal for the basin. The GSP will physically describe the basin including groundwater levels, quality, subsidence; include a water budget; have a planning and implementation horizon; include monitoring and management of the basin; and mitigation of overdraft. It is important to note that GSPs will not establish or determine groundwater rights. The final step for SGMA is the implementation of the GSP to achieve basin sustainability over a 20-year timeframe.

While all of these efforts will be conducted locally, the State Water Resources Control Board may intervene if the local agencies do not form a GSA before the deadline and/or fail to adopt or implement a GSP.

SGMA Implementation Timeline

Deadline	Action
6/30/2017	Formation of Tulare Lake Basin GSAs
1/31/2020	Completion and adoption of GSPs in Tulare Lake Basin
1/31/2040	Tulare Lake Basin achieves sustainability

Current Implementation Activities in the Tulare Lake Basin

Much work and planning is required over the next several years to meet the requirements of SGMA within the deadlines set out in the law. Many Tulare Lake Basin agencies have begun to meet and discuss how SGMA implementation will be accomplished. Some of the first discussions and tasks include:

- Reaching out to local public agencies and stakeholders
- Identifying possible adjustments to the Tulare Lake Basin boundaries
- Considering different governance options for GSA formation

It is important that the many diverse stakeholders participate in the process to achieve the best possible outcome for the region. For more information on how you can become involved, contact Cristel Tufenkjian, Kings River Conservation District Manager of Community & Public Relations at ctufenkjian@krcd.org or at 237.5567, ext. 118.