

Overview: Sustainable Groundwater Management Act Implementation

Dane Mathis, Supervising Engineering Geologist, California Department of Water Resources,
3374 East Shields Avenue, Fresno, CA 93726

Phone (559) 230-3354, dane.mathis@water.ca.gov; www.water.ca.gov

January 10, 2018

Keywords: SGMA, groundwater, sustainable water use, GSA, GSP, overdraft

Just over three years ago, the Sustainable Groundwater Management Act (SGMA) was signed into law. This new law provided a significant change in the way our water resources, not just groundwater, are to be managed. A very important finding of the Act was the recognition that groundwater management in California is best accomplished locally.

Consider three key components of SGMA. First, reaching sustainability within groundwater basins; the mitigation or avoidance of significant and unreasonable undesirable results (i.e., chronic lowering of groundwater levels, land subsidence, and degradation of water quality). Second, the resources are to now be managed with consideration to all beneficial users and beneficial uses of groundwater. Third, to achieve success, significant stakeholder outreach and engagement must be conducted, and perhaps in ways not done prior.

Sustainability was not specifically defined in the Act and it is the responsibility of the locals to determine. Something for the locals to consider can be found within the common definitions of sustainability - *the capacity to endure and be healthy over time and the reconciliation of environmental, social equity, and economic demands*.

Sustainable groundwater management will be implemented through the formation of Groundwater Sustainability Agencies (GSAs) and the development of Groundwater Sustainability Plans (GSPs). GSAs were required to form by July 1, 2017, and did so successfully by covering nearly 100 percent of the required high and medium priority groundwater basins. GSPs are required to be developed for each basin, and must result in the avoidance or mitigation of significant and unreasonable undesirable results within a 20-year time frame. For basins identified as being subject to critical conditions of overdraft, GSPs must be submitted to the Department of Water Resources (Department) for review and approval by January 31, 2020; the remaining high and medium priority basins have until January 31, 2022 to complete and submit their GSPs.

The Department is responsible for providing planning, technical, and financial assistance to facilitate the development and implementation of GSPs. For planning assistance, the Department implemented a Regional Coordination program and identified key staff for primary engagement and communication with the GSAs and stakeholders. Via a Facilitation Support Services program, the Department funds professional facilitators; the initial phase supported GSA formation and the current phase is supporting basin-scale coordination and outreach. In addition to the Regional Coordinators, the Department has also identified key points of contact for each basin – a dedicated DWR staff to be a liaison with the GSA(s) during development of the GSP and can provide assistance as needed to address the needs and concerns within the basin. The Department's technical assistance has included the development of Best Management Practices (BMP), Guidance Documents, and a technical report on Water Available for Replenishment.

The latest and forthcoming BMP is for the establishment of Sustainable Management Criteria (SMC). The SMC BMP explores the activities, practices, and procedures for defining sustainable management criteria as required for GSPs, and characterizes the relationship between sustainability goal, undesirable results, minimum thresholds, and measurable objectives. The Department's technical assistance also includes the development of statewide datasets and tools. These include interactive maps such as the Water Management Planning Tool, a Disadvantaged Communities Mapping Tool, and a Basin Boundary Assessment Tool. Additionally, the Department developed and released interactive maps to display and share land use data and well completion reports. Technical support is also available for a few existing hydrologic modeling codes and applications, as well as guidance to assist with incorporation of climate change into GSPs. Furthermore, the Department developed an online clearinghouse for SGMA information related to public notification, reporting, and comment. The SGMA Portal includes information on GSA formation and status, Adjudicated basin reporting, Alternative plan submittals, Basin Boundary Modifications, GSP initial notification, and will later also include GSP reporting functionally (www.water.ca.gov/groundwater/sgm).

The current phase of SGMA implementation will focus on local GSAs developing GSPs and the Department will be providing technical assistance, as requested, to aid the local effort. Technical support services will focus on building capacity within basins for basin-wide coordination. Technical services will likely include installation of groundwater monitoring wells and providing support for hydrologic modeling activity. In the near term, the Department will also be completing review of Alternative plans, releasing draft basin reassessment (priority) results, and conducting a second round of basin boundary modifications.

Proposition 1 provided \$100M in grant funding for the Sustainable Groundwater Planning Grant Program. In March 2016, about \$6.7M was awarded to counties with stressed basins to complete various projects related to GSA formation and/or addressing data needs for GSPs. A solicitation for the balance of the available grant funds (about \$86.3M) closed December 2017. Proposed projects include those that directly benefit a Severely Disadvantaged Community and/or support development of GSPs. The Department expects to announce final funding awards in Spring 2018.

Although much has been accomplished the last three years by both the Department and the locals, the next few years will likely be challenging times for all as we progress toward full development and implementation of sustainable groundwater management. The Department looks forward to the success of local GSAs with development of GSPs and achieving sustainability.