



Maintaining Groundwater Sustainability in the Solano Subbasin

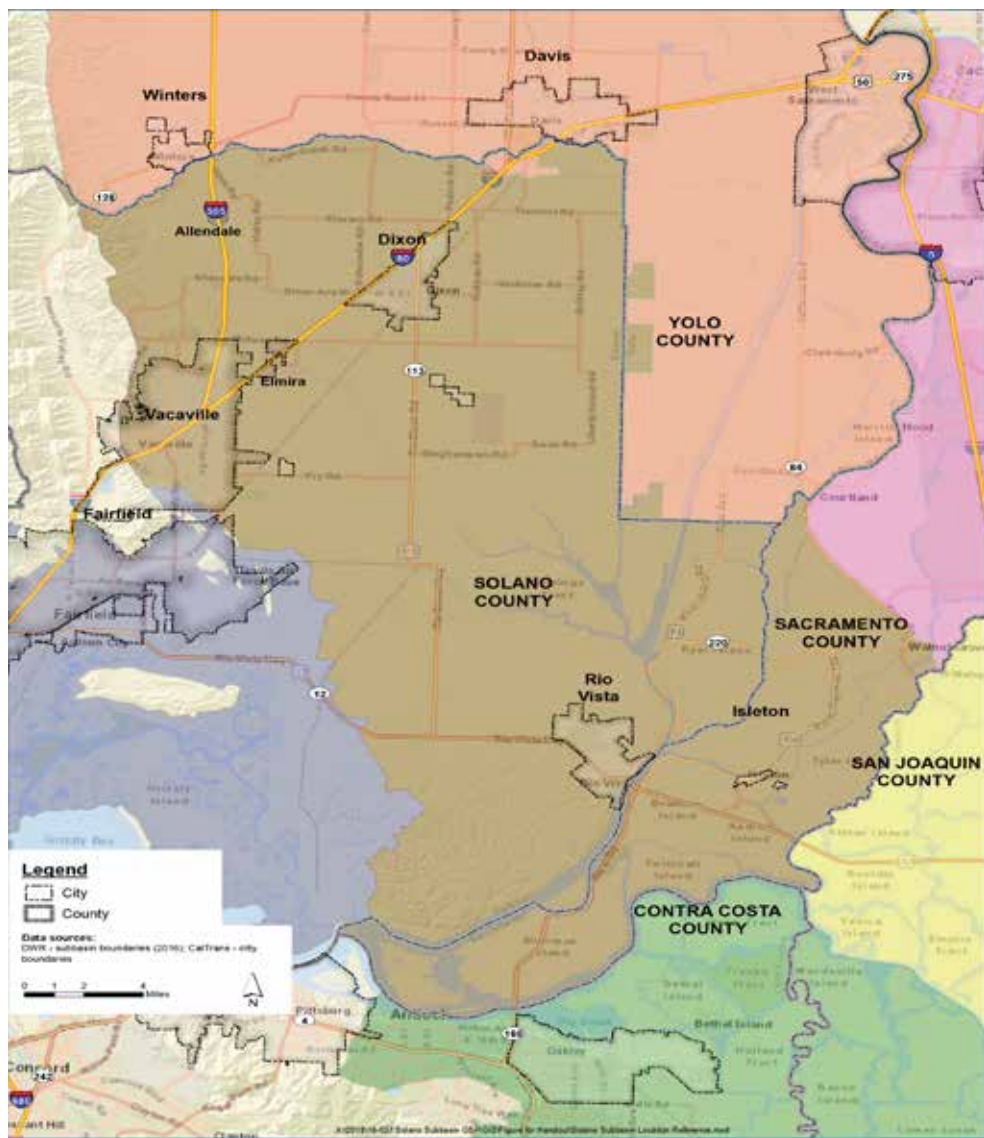
Sustainable Groundwater Management Act (SGMA)

Effective January 1, 2015, for the first time in California's history, the Sustainable Groundwater Management Act (SGMA) established a robust framework for the sustainable management of groundwater resources. Groundwater is a critical component of the state's water supply portfolio, and when effectively managed, this resource helps protect communities, farms, and the environment against the impacts of prolonged dry periods and climate change. SGMA recognizes that management is most effective when done at the local level by local agencies with adequate information, tools, resources, and authorities.

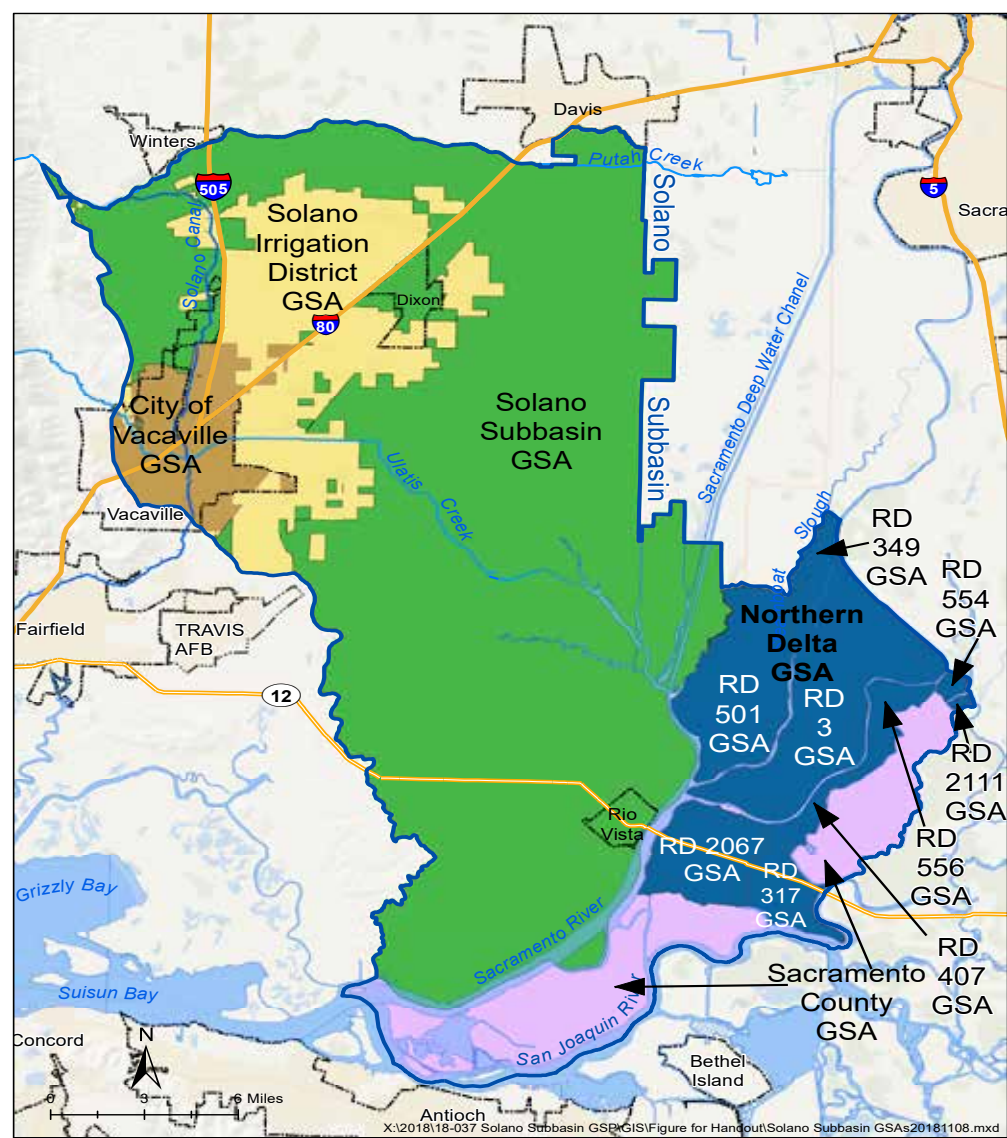
Groundwater Sustainability Agencies (GSAs)

A GSA is one or more local agencies that must develop, implement and enforce the subbasin's GSP. A local agency is any local public agency that has water supply, water management, or land use responsibilities within a groundwater basin.

Solano Groundwater Subbasin



Solano Subbasin GSAs



Sustainable Groundwater Management

"Management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results."

"Undesirable results" consist of the following sustainability indicators:

- Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply
- Significant and unreasonable reduction of groundwater storage
- Significant and unreasonable seawater intrusion
- Significant and unreasonable degraded water quality
- Significant and unreasonable land subsidence
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water

What GSAs Do

Coordination: GSAs need to coordinate with other local and regional agencies in their basin and neighboring basins.

Public Outreach & Stakeholder Engagement: A GSA is required to engage with interested stakeholders during GSP development and implementation.

GSP Development: Every medium and high priority basin is required to develop and implement one or more GSPs. If multiple GSPs are developed for the same basin, a coordination agreement will be required.

Monitoring & Reporting: Monitoring of groundwater levels and water quality is needed to track progress toward meeting the sustainability objectives of the GSP.

GSP Implementation: The GSP for the Solano Subbasin is due by January 31, 2022 and the subbasin should achieve groundwater sustainability by 2042.

Enforcement: The GSAs will need to enforce the provisions adopted in its GSP. It is up to the local GSAs with the input of the local groundwater users and stakeholders to determine what particular authorities and tools will be used to successfully achieve the GSP objectives.

Groundwater Sustainability Plans (GSPs)

Under SGMA, GSAs are required to develop and implement GSPs with the following:

- Basin setting and description of groundwater conditions
- Hydrogeologic conceptual model (how the aquifers react to stresses in the basin over time and the interaction of surface water and groundwater systems)
- Determine data gaps and uncertainties
- Water budget that accounts for surface water and groundwater inflows and outflows
- Baseline conditions for supply, demand, hydrology and surface water supply reliability
- Sustainable management criteria
- Establish minimum thresholds and measurable objectives for each sustainability indicator
- Establish monitoring network and protocols for each sustainability indicator
- Identify projects and management actions to achieve or maintain sustainability
- Public communication and engagement