

# SUSTAINABLE GROUNDWATER MANAGEMENT ACT

A new era for California's groundwater began in September 2014 with the passage of the Sustainable Groundwater Management Act (SGMA). SGMA establishes a path for the sustainable management of groundwater through the formation of locally organized Groundwater Sustainability Agencies (GSAs). The cornerstone of SGMA is the development and implementation of a basin-specific Groundwater Sustainability Plan (GSP) by GSAs that outlines a plan for achieving long-term groundwater sustainability. The ESJ GWA, acting collectively on behalf of their 17 member GSAs, must complete their GSP by January 31, 2020 because the subbasin is classified as critically overdrafted.

## Terminology under SGMA

### Groundwater Hydrology

Groundwater is water held in reservoirs beneath the surface of the ground in permeable material. Aquifers hold and transmit groundwater in a groundwater basin or subbasin. When water extraction from aquifers exceeds water input, it is in groundwater overdraft. The 515 groundwater basins identified by the California Department of Water Resources (DWR) are prioritized by their degree of overdraft. Local agencies can request to adjust basin boundaries through a process called basin boundary modification (BBM).

The Basin Setting chapter of the GSP includes a description of what the GSP seeks to manage in three main subsections:

- Hydrogeologic Conceptual Model (HCM) to describe the geology, subsurface characterization and primary aquifers.
- Measured groundwater conditions such as groundwater elevations, hydraulic gradients and trends.
- A Water Budget to quantify the amount of water moving through the basin.

### Six Sustainability Indicators

- Chronic Lowering of Groundwater Levels
- Reduction in Groundwater Storage
- Degraded Water Quality
- Seawater Intrusion
- Land Subsidence
- Depletion of Interconnected Surface Water

### Sustainable Management Criteria

The legislation establishes six sustainability indicators of groundwater conditions that need to be quantified and managed through the GSP. Adverse conditions for each of these indicators are considered undesirable results. Minimum thresholds represent the threshold above which undesirable results do not occur. Measurable objectives are the management targets for each sustainability indicator. The buffer in between the minimum threshold and the objective is the margin of operational flexibility. Interim milestones are established in between as interim targets.

### Monitoring and Data Management

Progress toward meeting objectives will be charted using a monitoring network. Each network is made up of monitoring points that track conditions that could lead to undesirable results. Each point has a minimum threshold and a measurable objective. Adequate spatial and temporal coverage is required for the subbasin. All data will be stored in a Data Management System (DMS).

## Local Governance

The ESJ GWA is the Eastern San Joaquin Groundwater Authority which formed under a Joint Powers Agreement in 2017 to develop a GSP for the ESJ Subbasin. It is made up of 17 member agencies.

### ESJ GWA Members

CDWA	Central Delta Water Agency
CSJWCD	Central San Joaquin Water Conservation District
Cities of:	Lathrop, Lodi, Manteca, Stockton
Eastside	Eastside San Joaquin GSA
LCWD	Linden County Water District
LCSD	Lockeford Community Services District
NSJWCD	North San Joaquin Water Conservation District
OID	Oakdale Irrigation District
SJC	San Joaquin County
SJC No. 2/	San Joaquin County No.2/
Cal Water	California Water Services Company (Cal Water)
SDWA	South Delta Water Agency
SEWD	Stockton East Water District
SSJ	South San Joaquin GSA
WID	Woodbridge Irrigation District

The ESJ GWA Board receives input from the GWA Advisory Committee and Groundwater Sustainability Workgroup.

### State Regulatory Body

DWR	Department of Water Resources
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### Statewide Datasets

CASGEM	California Statewide Groundwater Elev. Monitoring
CDPH	California Dept. of Public Health
GeoTracker /GAMA	Groundwater Ambient Monitoring and Assessment Program
CV-SALTS	Central Valley Salinity Alternatives for Long-Term Sustainability



**EASTERN SAN JOAQUIN  
GROUNDWATER AUTHORITY**