

Self Help Enterprises SGMA Implementation and Impacts

SHE Technical Committee – September 5, 2025







SGMA Review:

- Sustainable Groundwater Management Act passed in 2014
- Critically Overdrafted Basin Timeline (entire south SJV):
- Groundwater Sustainability Agencies were required to be formed by 2017
 - Only Public Agencies allowed to be part of GSA's
 - Exception for GSA formed by acts of legislation
 - Default responsibility for GSA falls to County if no GSA formed
- Groundwater Sustainability Plans (GSP) had to be Submitted and Implemented by 2020





These "undesirable results" are defined as "significant and unreasonable" effects caused by groundwater conditions. They are:

1 Chronic Lowering of Groundwater Levels:

This refers to a long-term decline in water levels that indicates a significant and unreasonable depletion of the groundwater supply.

2 Reduction of Groundwater Storage:

This is the loss of the aquifer's capacity to hold water, often caused by the permanent compaction of soil and rock due to excessive pumping.

3 Seawater Intrusion:

This occurs in coastal aquifers when the freshwater is over-pumped, allowing saltwater from the ocean to move in and contaminate the freshwater supply.

4 Degraded Water Quality:

This includes the migration of contaminant plumes or other forms of water quality degradation that impair water supplies for drinking, agricultural, or other beneficial uses.

5 Land subsidence:

This is the sinking of the ground surface caused by the compaction of the aquifer system from groundwater withdrawal. It can damage infrastructure like canals, roads, and wells.

6 Depletions of interconnected surface water:

This is when groundwater pumping significantly and unreasonably reduces the flow of nearby rivers, streams, and wetlands, adversely impacting the environment and other beneficial uses of that surface water.





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SGMA GSP Requirements:

- Administrative Information
- Basin Setting Report :
 - Hydrologic Conceptual Model (HCM) describes Geology and Groundwater Flow
- Sustainable Management Criteria
 - Minimum Thresholds *triggers undesirable results*
 - Measurable Objectives where the GSA should manage to
- Projects and Management Actions
 - Groundwater Allocations
 - Groundwater Pumping Fees and Penalties
 - Well Drilling Restrictions
- Plan Implementation:
 - Schedule, Cost, and Strategy to Implement





SGMA Implementation:

- Outreach Plan Potential Partnership with SHE
- Water Level and Quality Monitoring Networks Potential Partnership with SHE
- Well and Water Quality Mitigation Plans Potential Partnership with SHE
- Subsidence Monitoring
- Projects and Management Actions:
 - Recharge Projects
 - Land Fallowing AKA Multi Benefit Land Repurposing (MLRP)
 - Imported Water Supply
 - Pumping Restrictions and or Pumping Fees
 - Well Drilling Restrictions





SGMA IMPACTS:

- Reduction in Cropland Land Use Changes
 - <u>PPIC Report Future of Agriculture in the SJV</u> estimates 500,000 900,000 Acre reduction
- Increased Air Pollution from Fallowed Fields <u>UC Merced Report</u>
- Reduction in Farm Revenue
 - UC Berkley Dr. Sunding Report -
 - \$1.1 Billion in lost employee income per year
 - https://waterblueprintca.com/information/the-need/
- Increased Poverty in population centers focused on Agriculture

"Our Culture is Agriculture" - Aaron Fukuda