Cosumnes Groundwater Authority

Your local groundwater sustainability hub

Groundwater Sustainability Plan Amendment Overview

Executive Summary – GSP Document Page 18 - 34

What's Changed?

Chronic Lowering of Groundwater Levels Undesirable Results (UR) Definition	Land Subsidence Sustainable Management Criteria & Monitoring Network	Project & Management Actions Tiered Approach

CHRONIC LOWERING OF GROUNDWATER LEVELS – UNDESIRABLE RESULTS (UR) DEFINITION

GSP Document: Page 263 - 266 (Undesirable Results), Page 278 – 284 (Minimum Thresholds), Page 300 – 302 (Measurable Objectives)

Recommended Corrective Action 2: Revise the UR definition to be based on impacts due to lowering of groundwater levels (i.e., the number of wells that the GSAs deem acceptable to be impacted).

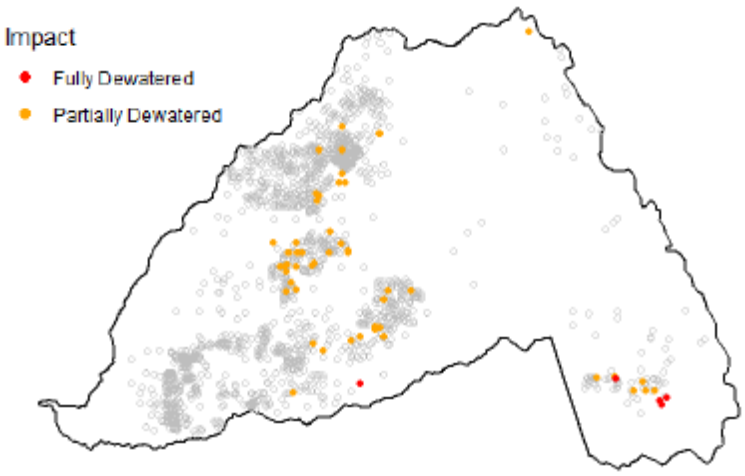
Undesirable Results would be experienced when a chronic decline in groundwater levels in the Principal Aquifer negatively affects the long-term viable access to groundwater for urban, domestic, agricultural, industrial, and other beneficial users and uses within the Basin.

Significant and Unreasonable effects associated with Undesirable Results occur when the number of completely dewatered domestic wells exceeds the assumed natural well replacement rate projected to occur over the 20-year implementation horizon a domestic well registered with the GSA is independently verified to have been dewatered because of GSP implementation and is left unmitigated by the GSA.

2026 Revised Domestic Well Analysis Impact Results – Modeled Predicted Data

Well Impact Condition	Number of Wells	% of Total Domestic Wells
Partially Dewatered	43	2.0%
Fully Dewatered	8	0.4%

Model/Predicted data about potentially dewatered wells



LAND SUBSIDENCE– SUSTAINABLE MANAGEMENT CRITERIA

GSP Document: Page 270 – 272 (Undesirable Results), Page 289 – 292 (Minimum Thresholds), Page 302 – 303 (Measurable Objectives)

Recommended Corrective Action 4: Establish SMCs for land subsidence based on direct measurements of land elevation changes.

Minimum Threshold (MT):

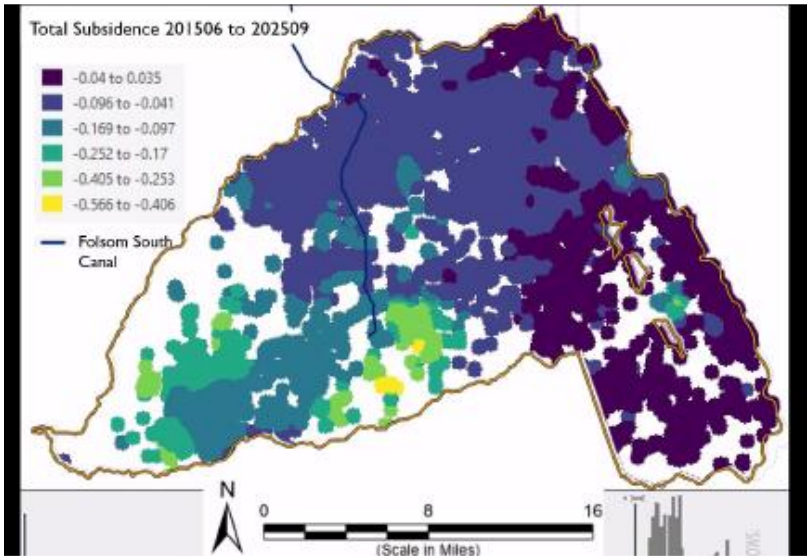
- No more than 0.1 foot per year of land elevation decline.
- No more than 0.5 foot of total land elevation decline in any 5-year period.
- No more than 2 feet of total land subsidence by 2042.

Measurable Objective (MO): No subsidence.

Sustainable Management Criteria (SMCs): Established across the entire Basin, and basin-wide InSAR data, along with the GPS station, will be used to evaluate conditions relative to the SMCs rather than relying on the six individual monitoring sites.

Total Subsidence (in feet) based on InSAR

(2015 to 2025)



Undesirable Results for Land Subsidence

Undesirable Results would be experienced when land subsidence due to groundwater level declines in the Principal Aquifer negatively affects existing surface land uses, including the ability to use existing critical or non-critical infrastructure within the Basin.

Criteria Used to Define Undesirable Results

Undesirable Results occur when the annual MT rate and the total extent of subsidence over any five-year period are exceeded at more than 10% of the available monitoring data (i.e., InSAR) across the Basin or within 330 feet (width of an InSAR data cell) of the Folsom South Canal, as a result of GSP implementation.

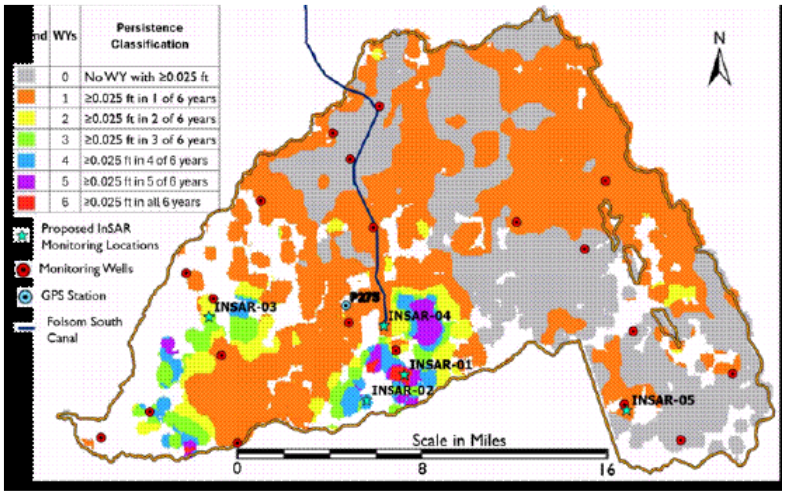
LAND SUBSIDENCE– MONITORING NETWORK

GSP Document: Page 336

Recommended Corrective Action 6: Expand the land subsidence monitoring network. The GSAs may consider the use of additional GPS stations or publicly available remote sensing data (e.g., InSAR).

Monitoring Network: GPS station and InSAR data locations selected for monitoring sites based on:

- Land subsidence occurrence.
- Proximity to representative groundwater monitoring wells.
- Proximity to critical infrastructure (Folsom South Canal).



PROJECT AND MANAGEMENT ACTIONS (PMAS)
TIERED APPROACH

GSP Document: Page 357 - 385

Tier #1 – Primary PMAs

PMAs that are within the CGA's authority or can be directly managed through CGA-led programs, partnerships, funding efforts, monitoring activities, and implementation strategies.

PMAs that represent the primary mechanisms through which the CGA intends to achieve measurable groundwater sustainability benefits and track progress toward sustainability goals.

Tier #2 – Secondary PMAs

PMAs include projects, programs, and activities implemented by external agencies, organizations, landowners, or other stakeholders that have the potential to provide significant benefits to the basin but are outside the direct control of the CGA.

CGA may support, coordinate with, or monitor these efforts, implementation timelines, but funding, operational decisions, and long-term maintenance responsibilities remain with the respective project proponents.

Tier #1 – Primary PMAs

- PMA #1 – Recharge Projects – Page 360 - 363
  - Omochumne-Hartnell Water District (OHWD) Agricultural Flood Managed Aquifer Recharge (Flood-MAR) – Page 361 - 362
    - Current and active PMA in the basin
  - Dry Creek (currently conceptual) – Page 362
    - Proposed project to direct water from Amador County, down Dry Creek, through Folsom South Canal and into Easter San Joaquin basin
  - Rancho Murieta (Currently conceptual) – Page 362 - 363
    - Proposed project includes groundwater recharge and flood-mar efforts in the Rancho Murieta area
- PMA #2 - Recycled Water Projects – Page 363
  - City of Galt – active project for municipal recycled water
- PMA #3 - Voluntary Land Repurposing – Page 363 - 364

    - Voluntary Land Repurposing and Long-Term Sustainability: The Land Repurposing PMA incorporates ongoing market-driven vineyard fallowing and identifies opportunities for long-term land repurposing throughout the Cosumnes Subbasin. The PMA will explore funding opportunities, including the Multibenefit Land Repurposing Program (MLRP), to incentivize permanent or sustained land use transitions and retain associated groundwater demand reductions.
    - Land Use Conversions: The PMA will account for potential conversions of agricultural lands to alternative uses, including solar energy facilities, battery energy storage facilities, industrial development, and other non-agricultural uses, while evaluating the associated impacts on groundwater demand and long-term basin sustainability.
    - Tracking and Accounting for Voluntary Land Fallowing: Recognizing that voluntary land fallowing is actively occurring throughout the Subbasin for various economic, agricultural, and operational reasons, the GSP will incorporate a comprehensive approach to identifying and tracking fallowed acreage. This information will support more accurate annual groundwater demand estimates, improve water budget assessments, and inform ongoing groundwater sustainability planning and implementation.

- PMA #4 - Water Conservation - Page 364 – 367
    - Agricultural Water Conservation: Expand SRCD's Mobile Irrigation Lab and technical assistance programs to improve irrigation efficiency, optimize groundwater use, and promote water-saving technologies. Explore a voluntary sump pump monitoring program to capture on-farm return water usage.
    - Rural Residential and Domestic Well Conservation: Develop a voluntary conservation program providing domestic well users with indoor and outdoor water use assessments, leak detection, irrigation evaluations, and landscape water management recommendations to reduce groundwater demand.
    - Public Outreach and Education: Expand groundwater conservation education through workshops, technical assistance, and online resources, including a centralized Subbasin website providing groundwater conditions, drought information, conservation strategies, and funding opportunities.
- PMA #5 - Domestic Well Mitigation Program – Page 367 - 368
    - Voluntary Well Registration & Mitigation Program includes the development of a domestic well mitigation program that provides efforts to address domestic well impacts of excess groundwater depletion

Tier #2 – Secondary PMAs

- PMA #6 – Sacramento Area Flood Control Agency (SAFCA) Flood-Mar – Page 368 - 369
- PMA #7 – Cosumnes Multi-Benefit Project – Page 369 - 370