

# STATE OF THE SUBBASIN – WATER YEAR 2024

## COLUSA SUBBASIN GROUNDWATER CONDITIONS

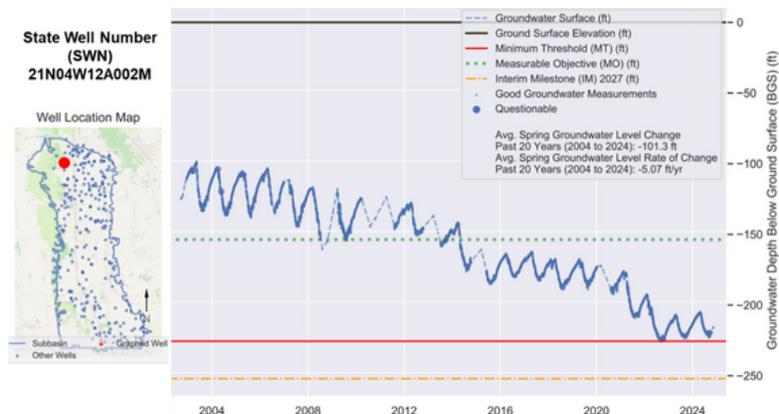
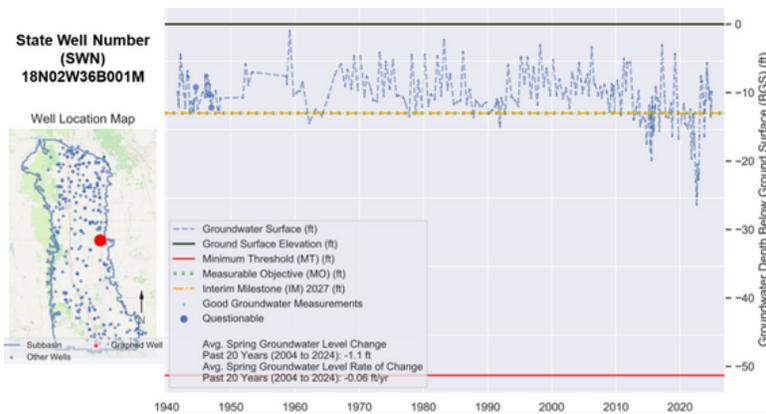
OCTOBER 2023 – SEPTEMBER 2024



Water year 2024 featured above normal hydrologic conditions and full surface water allocations, leading to greater surface water utilization and reduced groundwater reliance in the Colusa Subbasin. Water year 2024 saw higher groundwater levels, increased groundwater storage, and reduced subsidence compared to prior years.

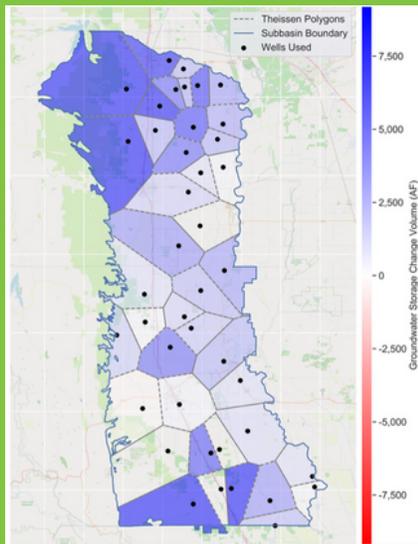
### GROUNDWATER LEVELS

- Full surface water allocations and wet conditions in 2023–2024 helped groundwater levels to recover across much of the Colusa Subbasin, compared to 2020–2022.
- Some wells show groundwater level decline over the past 20 years, especially in the northwestern area.



### GROUNDWATER STORAGE

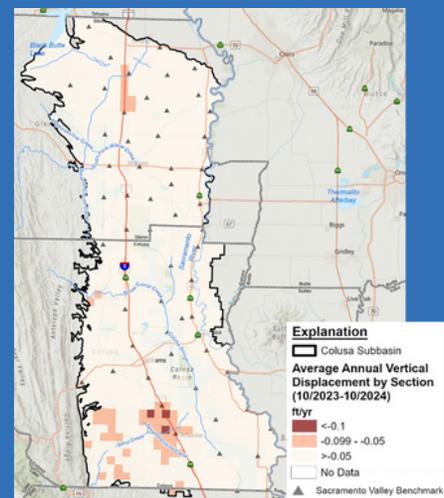
- As groundwater levels change, so does the volume of groundwater stored in the Colusa Subbasin.
- While groundwater storage can increase during wet periods – such as 2023–2024 (+188,000 acre-feet) – recurrent drought conditions and changes in water supplies, irrigation practices, and demand have led to net decline in groundwater storage in recent years (approximately -55,000 acre-feet per year since 2014).



Estimated Groundwater Storage Change (Spring 2023 to Spring 2024)

### SUBSIDENCE

- Land subsidence (negative vertical land displacement) is often tied to – but not solely caused by – declining groundwater levels.
- In water year 2024, land subsidence rates were less than 0.1 feet per year across most of the Subbasin. The highest rates (approximately 0.2 feet per year) occurred over small areas near Arbuckle.
- Land subsidence rates dropped in 2024, compared to 2020–2022, reflecting groundwater level recovery.



Source: DWR, TRE ALTAMIRA InSAR Subsidence Data.



## COLUSA SUBBASIN GROUNDWATER SUSTAINABILITY PLAN IMPLEMENTATION

### WHAT IS THE COLUSA SUBBASIN GROUNDWATER SUSTAINABILITY PLAN?

The Colusa Subbasin Groundwater Sustainability Plan (GSP) is a comprehensive, dynamic plan that is guiding how groundwater in the Colusa Subbasin will be monitored and managed from 2022-2042. The goals of the GSP are to maintain locally-managed sustainable groundwater resources to preserve and enhance the economic viability, social well-being, and culture of all who use groundwater, while also avoiding undesirable results to all users.

The GSP was initially developed by the Colusa Groundwater Authority (CGA) and the Glenn Groundwater Authority (GGA) through an extensive public engagement process, in compliance with the Sustainable Groundwater Management Act. The GSP was revised in 2023-2024 to incorporate newer information on groundwater conditions in the Subbasin and to make stronger commitments to ensuring groundwater sustainability in the Subbasin. The GSP was approved by the Department of Water Resources (DWR) in 2025.

Maintaining groundwater sustainability requires ongoing cooperation and partnership between all who manage, use, and benefit from groundwater in the Colusa Subbasin. Groundwater management must also be adaptive. As conditions change and as we learn more, the GSP will be updated.

### HOW ARE THE CGA AND GGA IMPLEMENTING THE COLUSA SUBBASIN GSP?

- The CGA and GGA are committed to developing and implementing a [domestic well mitigation program](#) by January 2026. The program will resolve drinking water well impacts resulting from declining groundwater levels and subsidence related to GSA management activities during GSP implementation.
- The CGA and GGA are also committed to developing a [demand management program](#) and preparing to implement no later than January 2027 if undesirable results are occurring in the Colusa Subbasin. The program will reduce groundwater demand in the Colusa Subbasin through voluntary measures (e.g., land use changes, water conservation) and mandatory measures (e.g., groundwater allocation). The program will provide a backstop and means of mitigating overdraft and halting subsidence if other projects are unable to sufficiently address groundwater sustainability issues in the Subbasin.
- Both the CGA and GGA have been actively meeting, discussing, and developing both programs since 2024. The GSAs remain on track to develop both programs according to their proposed timelines.
- Meanwhile, the GSAs and other stakeholders in the Colusa Subbasin continue to develop and implement other projects to achieve sustainable groundwater conditions.
- Efforts include [in lieu recharge projects](#) (e.g., Orland-Artois Water District land annexation, surface water incentives and in-basin sales, ongoing and expanded use of available surface water) and [direct recharge projects](#) (e.g., GGA recharge projects, Tehama Colusa Canal Trickle Flow Recharge pilot program).

### WHO DO I CONTACT FOR ADDITIONAL INFORMATION?

Please contact us if you have questions about the Colusa Subbasin GSP or any of these topics.

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