



GROUNDWATER STORAGE

What It Means and Why It Matters

Abundant, well-managed groundwater is essential for everyone. The Vina Subbasin's sustainability goal is to ensure that groundwater is managed to provide a water supply of adequate quantity and quality to support rural areas and communities, the agricultural economic base of the region, and environmental uses now and in the future. Monitoring and managing the Vina Subbasin's groundwater storage is part of the Vina Groundwater Sustainability Agency's (GSA) commitment to that goal.

What Is Groundwater Storage, and Why Does it Matter?

Groundwater storage is the amount of water held within underground aquifers. When more water is pumped out than nature can refill, that stored amount diminishes. Groundwater storage has many direct impacts:

- **Drought Security:** Less stored water means less available water during droughts.
- **Well Reliability:** Less water increases the risk of wells running dry.
- **Community Resilience:** Strong storage levels are necessary to meet water needs in homes, farms, and the environment.
- **Long-Term Future:** Groundwater storage affects the long-term sustainability of the entire water supply.



How Groundwater Storage Is Measured

Groundwater levels are regularly tracked using monitoring wells located throughout the Vina Subbasin. Observed groundwater conditions are used to gauge the success of groundwater management by comparing measured levels to specific targets defined in the 2021 adopted Groundwater Sustainability Plan (GSP) for each monitoring well:

Warning Level: Minimum Threshold

The lowest groundwater level that, if surpassed, could result in undesirable conditions. Minimum Thresholds are set to protect sustainably constructed domestic wells.

Problem Point: Undesirable Result

Occurs when two monitoring wells in a management area fall below the minimum threshold for two consecutive non-dry years (years that are not classified by the state as Dry or Critically Dry).

Check-ins: Interim Milestones

Five-year check-ins to make sure the GSA is on track to manage the subbasin in accordance with established goals.

Target: Measurable Objective

The target groundwater level, based on historical data, reflects the level needed to achieve the sustainability goal of the subbasin.




Staying Sustainable


A sustainable groundwater supply is critical. It allows for the flexibility needed to meet water demands for homes, farms, and the environment. It also allows active recharging during wet years, proactively replenishing water levels. Responsible management enables the GSA to meet its goal of providing a reliable water supply for everyone, every year.


How Tracking Groundwater Storage Helps the GSA Remain Sustainable


Having enough water stored underground gives users a cushion during dry times and ensures a reliable water supply for everyone. Wet years help the aquifer recharge and increase groundwater storage. Overall storage in the subbasin has been relatively stable over the long term.

Protecting Groundwater

 **Monitoring Levels:** Continuously tracking groundwater levels to assess changes in storage.

 **Recharging Levels:** Developing recharge projects to add water back into the aquifer during wet periods.

 **Smart Use:** Promoting water efficiency and conservation to reduce withdrawals.

 **Reporting Progress:** Regularly sharing results in the GSA's Annual Reports and Groundwater Sustainability Plan Periodic Evaluation (next evaluation due in 2027).



The GSA's work to manage groundwater storage is funded by the Department of Water Resources' Sustainable Groundwater Management Grant Program.



Help Protect Vina's Groundwater



Be Water Smart

Use water wisely at home and on personal property, especially when planning for drought years.



Support Projects

Lend support to projects focused on recharging local aquifers and promoting conservation.



Stay Informed

Keep up-to-date on available reports and community discussions.



Get Involved

Visit vinagsa.org to learn more and help protect groundwater!