GROUNDWATER STORAGE

What It Means and Why It Matters

Abundant, well-managed groundwater is essential for everyone. The Vina Groundwater Sustainability Agency's (GSA) main 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 Vina GSA's 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 GSP for each monitoring well:

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).

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.

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 for active recharging during wet years when water is plentiful, proactively refilling 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. It also helps the aquifer recharge during wet years when more water is available.

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 findings in the GSA's Annual Reports and Groundwater Sustainability Plan Periodic Evaluation (next evaluation due in 2027).

Vina 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 local water quality reports and community discussions.

Get Involved
Visit *www.vinagsa.org* to learn more and help protect Vina's groundwater!