



WATER QUALITY

What It Means and Why It Matters

Clean, safe groundwater is essential for everyone: it's what families drink, what local farms use for crops, and what keeps the natural environment healthy. 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.

Here's how the Vina Groundwater Sustainability Agency (GSA) ensures groundwater remains a high-quality resource for generations.

What Is Groundwater Quality, and Why Does Salinity Matter?

A primary indicator of potential water quality degradation in the Vina Subbasin is salinity—how salty the water is. Too much salt can:

- Make drinking water taste unpleasant and potentially affect an individual's health.
- Require costly treatment for homes and businesses to make water usable.
- Harm crops, impacting local agriculture and food production.

Human activities, such as large volumes of deep groundwater pumping, can pull salty water that is naturally deep in the subbasin into shallower zones of the aquifer and affect the salinity of groundwater for other users.



Other Water Quality Programs

The GSA coordinates with other water quality regulatory programs, including:

- Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS)
- Irrigated Lands Regulatory Program (ILRP)
- Department of Toxic Substances Control (DTSC)

The GSA works to ensure that groundwater pumping does not degrade water quality. By coordinating with existing state programs and local groundwater users, the GSA avoids duplication of regulatory efforts and helps reduce costs for the community.



How Vina Stays Sustainable

Monitoring and managing groundwater quality directly supports the overarching goal to provide a reliable and safe water supply for homes, farms, and the environment. By actively tracking salinity, the GSA ensures this vital resource remains high-quality and available when you need it.

How Salinity Is Measured

The GSA tests the groundwater for saltiness each year in the summer time. It does this using a measurement called "specific conductance," which shows how well the water conducts electricity—the more salt, the more electricity it carries. The GSA tracks these salt levels in special monitoring wells located throughout the subbasin. Water quality goals and limits include:

Warning Level: Minimum Threshold

This level is based on state standards for taste and appearance. It is the highest salt level that, if surpassed, could result in undesirable conditions.

Problem Point: Undesirable Result

Undesirable if two monitoring wells exceed the minimum threshold two years in a row (except during drought).

Check-ins: Interim Milestones

The GSA conducts five-year check-ins to ensure it's on track to meet long-term goals and protect the supply.

Target: Measurable Objective

The target salt level to stay within safe and acceptable conditions.

What Vina GSA Is Doing To Protect Your Water Quality



Tracking Salt Levels: Annually monitoring salinity in its monitoring wells.



Partnering for Protection: Working closely with state and local water quality programs.



Building on History: Leveraging Butte County's and other agencies' long history of water quality testing.



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



Vina GSA's water quality work is funded through the California Department of Water Resources' Sustainable Groundwater Management Grant Program (2024 - 2026).



Help Protect Vina's Groundwater



Test Wells

Test private well water each year to understand its quality.



Stay Informed

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



Smart Practices

Properly maintain septic systems and reduce chemical use.



Get Involved

Visit vinagsa.org to learn more.

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