



How Do We Know We're Sustainable?

Understanding Groundwater Sustainability in the Vina Subbasin

The sustainability goal for the Vina Subbasin 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.

What Does Groundwater Sustainability Mean?

Under California's Sustainable Groundwater Management Act (SGMA), we must avoid six specific problems known as "undesirable results" to achieve and maintain sustainability. Observed groundwater conditions, through monitoring and data collection, are used to gauge success of groundwater management.






Why Does Monitoring Groundwater Sustainability Matter?



Tracking sustainability is essential for understanding the level of effort needed to ensure that groundwater remains reliable and available for all users. Everyone in the community has a role to play in protecting this shared resource. Vina GSA's groundwater sustainability projects are funded through the California Department of Water Resources' SGM Grant Program.

Groundwater Health Indicators

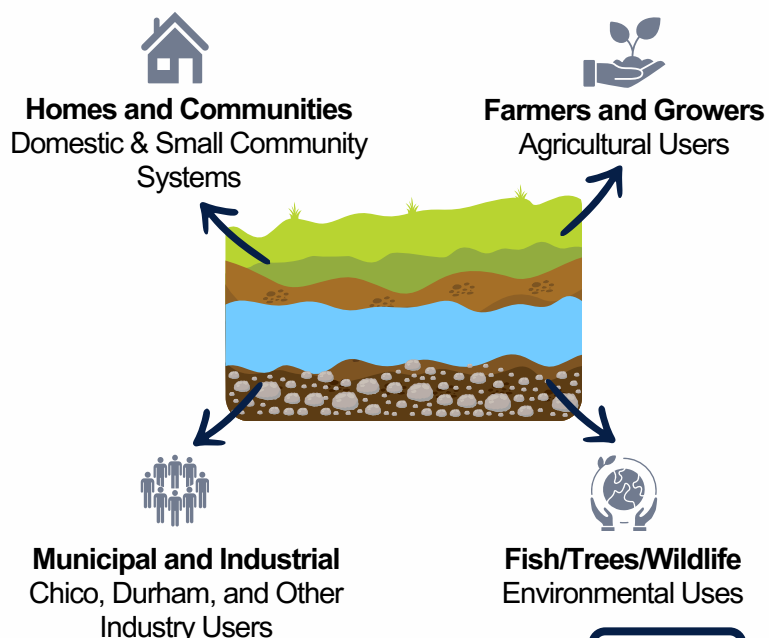
Key indicators are used to measure and demonstrate sustainability. In the Vina Subbasin, we are focused on five indicators:

-  **Groundwater Levels:** Monitoring the depth of water underground.
-  **Water Quality:** Ensuring the water is safe and suitable for its intended uses.
-  **Land Subsidence:** Preventing the land surface from sinking due to excessive groundwater pumping.
-  **Groundwater Storage:** Monitoring the amount of water held within the underground basin.
-  **Interconnected Surface Water:** Protecting the connection between groundwater and rivers or streams.

Seawater intrusion—where seawater seeps into and contaminates groundwater—is another indicator but not relevant to the Vina Subbasin.

Who Is Protected By Responsible Groundwater Management?

Groundwater in the Vina Subbasin supports a diverse range of important uses:



Groundwater Sustainability

Cheat Sheet



How We Measure Progress: Sustainable Management Criteria

For each indicator, we establish clear benchmarks called Sustainable Management Criteria (SMC):

- **Minimum Thresholds (MTs):** The lowest acceptable condition for an indicator before it signals a problem.
- **Measurable Objectives (MOs):** Our long-term goals for a healthy and sustainable basin.
- **Undesirable Results (URs):** Occur if conditions fall below the Minimum Thresholds at too many locations, indicating a significant problem.
- **Interim Milestones (IMs):** Five-year check-in targets that help us track progress towards our Measurable Objectives and overall sustainability goals over time.

We continuously compare monitoring data against these SMCs to assess if we are on track to achieve and maintain sustainability.

What Data Do We Use?

We gather data from:

- **Monitoring wells** to track groundwater levels
- **Stream gages** to analyze stream flow
- **Water quality tests** from wells and other programs
- **Land elevation data** to analyze subsidence
- **Well user observations** to track quality and levels

Keeping Watch: How Often Sustainability is Evaluated

Groundwater conditions are regularly evaluated to ensure we stay on track:

- **Ongoing Monitoring:** Continuous well and stream gage monitoring, data is available online at cdec.water.ca.gov/.
- **Annual Reports:** Required SGMA reports are submitted to the DWR each year.
- **Five-Year Periodic Evaluation:** A formal assessment of progress toward sustainability, where the groundwater sustainability plan may be updated if needed. Five-year evaluations are due every five years, starting in 2027.

Where are we now?

Vina GSA is actively installing new wells and stream gages to enhance our monitoring network. Amendments to the Plan will be considered to address DWR recommendations.

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Is Vina Sustainable? Our Progress and Outlook



Historically: The Vina Subbasin has not experienced undesirable results.



Currently: The Subbasin is considered sustainable under SGMA criteria.



Looking Ahead: The Subbasin is working through monitoring and projects to ensure continued sustainability. The California Department of Water Resources (DWR) approved Vina's Groundwater Sustainability Plan (GSP) in 2023, acknowledging it is likely to achieve the sustainability goal by 2042.

Recommendations from DWR

The DWR approved the Vina GSP in 2023 but recommended:



Better surface water-groundwater connection monitoring



More monitoring locations to fill data gaps

We're addressing these recommendations.

Understanding Sustainable Yield

Sustainable yield is the maximum amount of groundwater that can be withdrawn annually without causing any "undesirable results." It helps us balance the water flowing into and out of the basin.



Learn More and Get Involved



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Attend upcoming meetings and workshops: www.vinagsa.org/calendar



Stay informed. Stay engaged. Help us manage groundwater for the future!

