How Do We Know We're Sustainable?

Wyandotte Creek GROUNDWATER SUSTAINABILITY AGENCY

Understanding Groundwater Sustainability in the Wyandotte Creek Subbasin

The sustainability goal for the Wyandotte Creek Subbasin is to ensure that groundwater is managed to provide a water supply of adequate quantity and quality to support beneficial users of groundwater including but not limited to rural areas and other communities, the agricultural economic base of the region, and environmental resource uses in the Subbasin now and in the future.

What Does Groundwater Sustainability Mean?

Under California's Sustainable Groundwater Management Act (SGMA), the Subbasin 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 the success of groundwater management.

Why Does Monitoring Groundwater Sustainability Matter?

Tracking sustainability is crucial for determining the level of effort required to ensure that groundwater remains reliable and available for all users. The GSA conducted feasibility studies and pilot projects to reduce groundwater demand. This work was funded through the California Department of Water Resources' Sustainable Groundwater Management Grant Program (2024-2026).

Groundwater Health Indicators

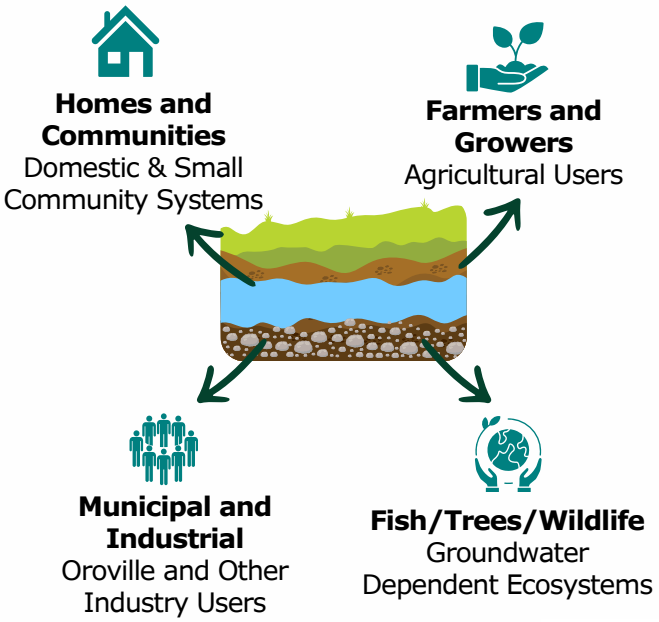
Key indicators are used to measure and demonstrate sustainability. In the Wyandotte Creek Subbasin, the GSA is focused on five indicators:

- **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 Subbasin.

Who Is Protected by Responsible Groundwater Management?

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



More information at wyandottecreekgsa.com

Groundwater Sustainability

How Success Is Measured: Sustainable Management Criteria

For each indicator, the GSA establishes clear benchmarks called Sustainable Management Criteria (SMC):

- **Minimum Thresholds (MTs):** The lowest indicator level that, if surpassed, could result in undesirable conditions.
- **Measurable Objectives (MOs):** 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.

The GSA continuously compares monitoring data against these SMCs to assess if conditions are on track to achieve and maintain sustainability.

What Data Does the GSA Use?

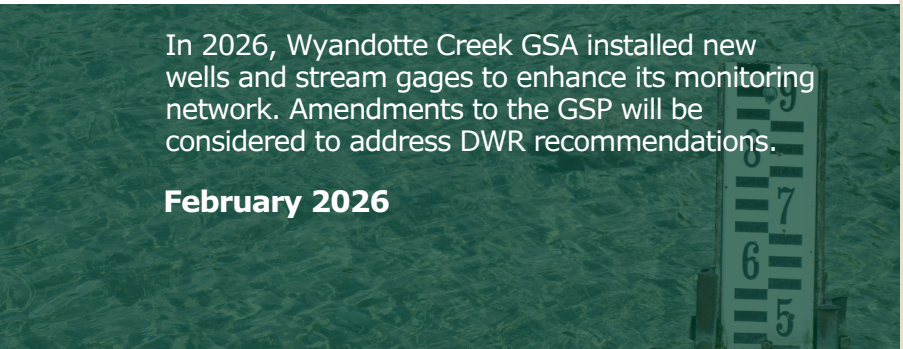
The GSA gathers data from:

- **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

How Often Sustainability Is Evaluated

Groundwater conditions are regularly evaluated to ensure the Subbasin remains sustainable:

- **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. Evaluations are due every five years, starting in 2027.



In 2026, Wyandotte Creek GSA installed new wells and stream gages to enhance its monitoring network. Amendments to the GSP will be considered to address DWR recommendations.

February 2026

Is Wyandotte Creek Sustainable? Progress and Outlook

Historically: The 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 Wyandotte Creek'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 Wyandotte Creek GSP in 2023 but recommended:

Better surface water-groundwater connection monitoring

More monitoring locations to fill data gaps

The 2027 GSP Periodic Evaluation will address the recommendations.

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

Visit www.wyandottecreekgsa.com

Attend upcoming meetings: **www.wyandottecreekgsa.com/calendar**

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