

SONOMA VALLEY GROUNDWATER BASIN INFORMATION

Over the past several decades, the Sonoma Valley has experienced significant population growth and land use changes, including increases in irrigated agriculture, primarily vineyards. These increases in population and irrigated agriculture have increased demands on water and groundwater resources, and groundwater levels are falling in portions of the valley.

GROUNDWATER STATUS IN SONOMA VALLEY

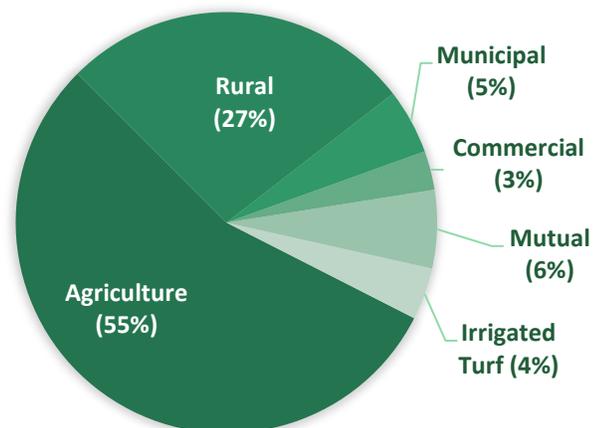


Groundwater levels within Sonoma Valley's shallow aquifers are generally steady, although localized declining trends have been observed in the El Verano/Fowler Creek area. However, in deep zone aquifers of southern Sonoma Valley, well monitoring has indicated that groundwater levels have declined over the past decade or more, and do not recover during relatively wet years. These chronic declines indicate that groundwater withdrawals are occurring at a higher rate than recharge or replenishment.

Groundwater quality is generally good within Sonoma Valley. However, wells in southern Sonoma Valley (generally south of Highway 116) have been affected by brackish or salty groundwater. The continued declining trends of groundwater levels to the north could draw the brackish water further north, potentially affecting more northern wells and rendering groundwater unusable.

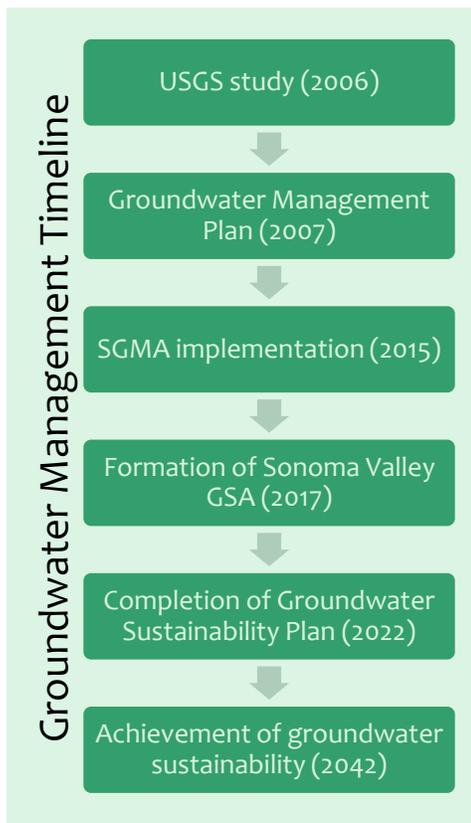
GROUNDWATER SOURCES AND USAGE

Covering 166 square miles, the Sonoma Valley groundwater basin contains approximately 2,000 domestic, agricultural, and public supply wells. In 2012, it was estimated that 5.83 billion gallons of water was used in the Sonoma Valley. Nearly 60% of the valley's water supply comes from groundwater. The remainder comes from the Russian River, other local surface water, and recycled water.



Estimated Groundwater Use:
3.42 billion gallons (2012)

GROUNDWATER ACTIONS



Sonoma Valley Groundwater Management Program

The current trend in declining groundwater levels was recognized in a study completed in 2006 by the U.S. Geological Survey, which was funded by the Sonoma County Water Agency. Using data and information from this study, the Sonoma Valley Groundwater Management Program (GMP) and Plan were developed by the Basin Advisory Panel.

Key information, tools and outcomes from these previous groundwater management planning activities include

- Technical information on the basin hydrology, hydrogeologic framework, water chemistry and source, surface water and groundwater interaction monitoring, and records of groundwater levels, including historical trends and documentation of two depressions in southern Sonoma Valley.
- Development of a groundwater flow model of surface water and groundwater systems in the basin and the contributing watershed area. The model has been used to simulate the water budget for the basin and to run preliminary future scenarios that will be needed for the Groundwater Sustainability Plan.
- Initial identification of a range of water management options including groundwater recharge, groundwater banking, increased conservation, and greater use of recycled water to help balance water demand with water supply. Engagement of local stakeholders in local groundwater planning and management.

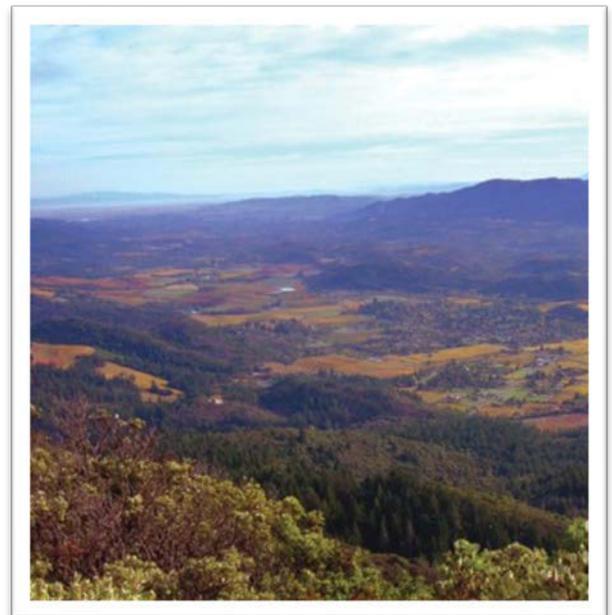
What's next?

The Sustainable Groundwater Management Act (SGMA) went into effect in 2015, giving local agencies (cities, counties, and water districts) powers to sustainably manage groundwater over the long term. The Sonoma Valley groundwater subbasin (as defined in DWR's Bulletin 118) is immediately subject to SGMA.

Under SGMA, the Sonoma Valley Groundwater Sustainability Agency (GSA) will create and implement a Groundwater Sustainability Plan (GSP). The technical information, monitoring data, and modeling tools developed through the pre-existing GMP represent a strong technical foundation for the community to address the new SGMA requirements.

How will this affect me?

As the Sonoma Valley GSA develops its GSP, several steps will be taken to gather data. New monitoring wells may be drilled to assess groundwater levels. Communal and agricultural wells may be metered to determine how water is currently being used. Some water-related programs and projects may pay fees to the GSA to assist in this process. However, most residents are unlikely to experience any changes in the immediate future. All of the measures taken are important steps toward our goal – to ensure that we have access to groundwater now and in the future.



More Information

For more information on SGMA and groundwater in Sonoma Valley, visit www.sonomacountygroundwater.org/sv/