PETALUMA VALLEY
GROUNDWATER
SUSTAINABILITY AGENCY

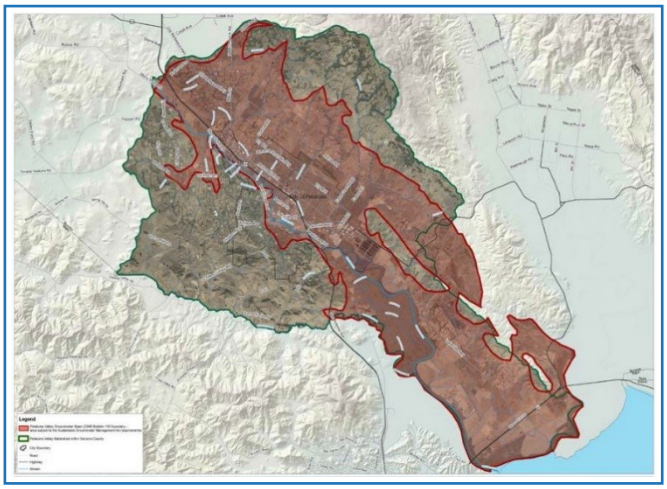
PETALUMA VALLEY
GROUNDWATER BASIN INFORMATION

Groundwater has long played a significant role in the development, growth and sustainability of the Petaluma Valley. Groundwater is relied upon to varying degrees by rural and urban residents, agricultural users, golf courses and other businesses and also support the rich ecosystems present in Petaluma Valley. Assuring sustainable groundwater supplies in the Petaluma Valley is critical to the environmental health and economic vitality of the basin.

GROUNDWATER STATUS IN THE PETALUMA VALLEY

GROUNDWATER LEVELS

Groundwater information in Petaluma is currently very limited. A study underway by the U.S. Geological Survey (USGS) will provide detailed, up-to-date data. However, the available groundwater elevation data suggest that groundwater elevations are relatively stable in many areas of Petaluma Valley, but in some areas groundwater levels have exhibited long-term declines.

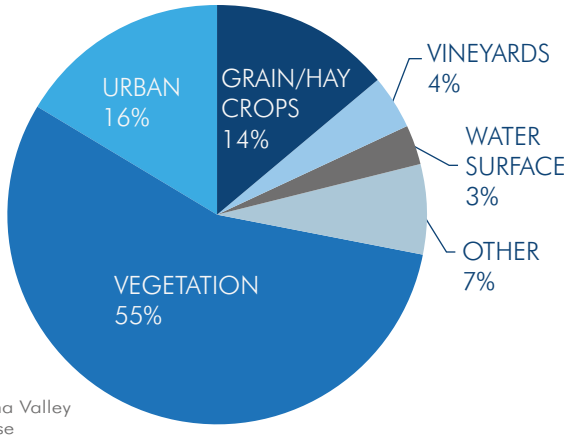


GROUNDWATER QUALITY

Elevated levels of nitrate have been identified in groundwater within the western portions of the Petaluma Valley due to past land use practices. The California Department of Water Resources in 1982 found that saltwater intrusion from the tidally influenced portion of the Petaluma River affected shallow aquifers prior to 1962, but that there had been no further incursions after that time. DWR attributed the lack of further saltwater intrusion to the substitution of groundwater with surface water. The risk of saltwater intrusion due to changes in land use and pumping patterns that have occurred since 1982 is unknown.

GROUNDWATER SOURCES AND USAGE

The 46,000-acre Petaluma Valley Groundwater Basin is located within the larger 93,440-acre Petaluma Valley watershed. The city of Petaluma currently relies on local groundwater to supplement imported water supplies. Other groundwater users within the Petaluma Valley include rural residents, agriculture, mutual water companies, and commercial users. Estimates of total groundwater use in Petaluma Valley, along with the water budget are not available, but will be developed as part of a USGS study (see reverse for more information).



Petaluma Valley
Land Use

GROUNDWATER ACTIONS

PETALUMA VALLEY USGS STUDY

In 2014, the Sonoma County Water Agency and City of Petaluma partnered with the U.S. Geological Survey to conduct a groundwater study of the Petaluma Valley. The results of the study are anticipated to be released in 2018. The study will analyze current groundwater levels and water quality. Information provided in the study will serve as a foundation for the Groundwater Sustainability Plan (GSP) that is required by the Sustainable Groundwater Management Act.

GROUNDWATER MANAGEMENT TIMELINE

- THREE YEAR USGS STUDY BEGINS (2014)
- SGMA IMPLEMENTATION (2015)
- FORMATION OF PETALUMA VALLEY GSA (2017)
- COMPLETION OF GROUNDWATER SUSTAINABILITY PLAN (2022)
- ACHIEVEMENT OF GROUNDWATER SUSTAINABILITY (2042)

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 Petaluma Valley groundwater basin (as defined in DWR's Bulletin 118) is immediately subject to SGMA.

Under SGMA, the Petaluma Valley Groundwater Sustainability Agency (GSA) will create and implement a 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 Petaluma 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 groundwater is available now and in the future.

LEARN MORE

For information about SGMA and groundwater in the Petaluma Valley, visit www.petalumavalleygroundwater.org

Program contact: Molly Oshun, Programs Specialist II, Sonoma Water: 707.524.1164 | molly.oshun@scwa.ca.gov