Groundwater Sustainability Plan

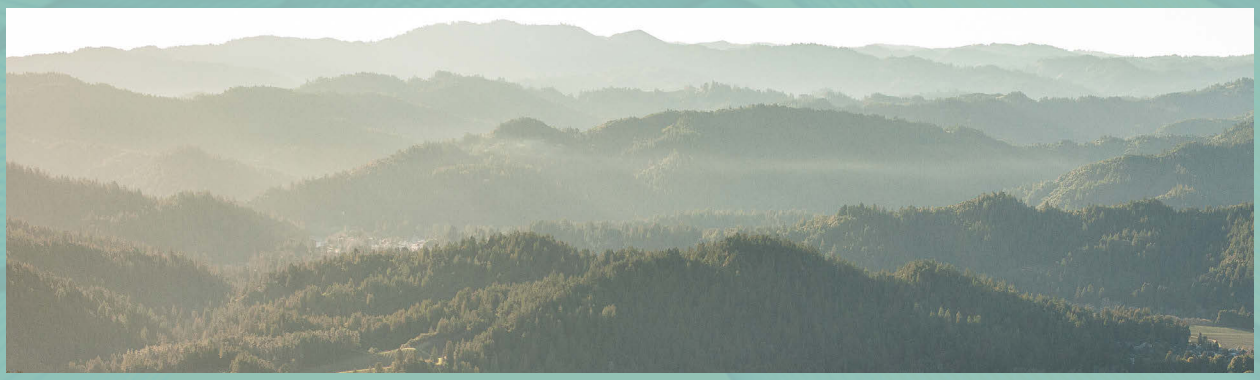
Frequently Asked Questions

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) was enacted at the height of the drought, when groundwater was being depleted in many parts of California. The purpose of SGMA is to ensure the quality and reliability of critical groundwater resources throughout the state.

SGMA requires that groundwater basins designated as medium- or high-priority form Groundwater Sustainability Agencies (GSAs), which have the responsibility to manage groundwater in the basin. The GSAs, formed in 2017, must now work with well-owners, farmers, businesses, and other interested parties to develop Groundwater Sustainability Plans (GSPs).

GSPs are the heart of SGMA, and are 20-year plans to make basins sustainable for current and future groundwater users. In Sonoma County, GSPs are being developed in the three medium priority basins: Petaluma Valley, Santa Rosa Plain, and Sonoma Valley.



SGMA in Sonoma County

In Sonoma County, three medium-priority groundwater basins were required to comply with SGMA. In the Petaluma Valley, Santa Rosa Plain, and Sonoma Valley groundwater basins, local agencies engaged with basin stakeholders and the public to form GSAs. Now, these new agencies are beginning the work of developing GSPs.

Learn more about Sonoma County groundwater

This fact sheet has been created to answer questions about Groundwater Sustainability Plans. To learn about other facets of groundwater management in Sonoma County, go to sonomacountygroundwater.org/resources. For further information regarding GSPs and GSA meetings, background information, news, and more, please visit sonomacountygroundwater.org.

Para documentos en español, visite sonomacountygroundwater.org/espanol

What is a Groundwater Sustainability Plan?

A Groundwater Sustainability Plan (GSP) is a 20-year plan to ensure that groundwater will be used sustainability in a groundwater basin. The newly-formed Groundwater Sustainability Agencies (GSAs) in Sonoma County – Petaluma Valley, Santa Rosa Plain, and Sonoma Valley – are required by state law to develop GSPs by 2022. Each GSP is required to describe the basin conditions, such as the geology of the basin and the groundwater levels within it. In addition, each GSP must establish what "sustainable management" will look like in that particular basin and demonstrate that if the GSP is implemented correctly over the following 20 years, the defined "sustainable management" will be achieved by 2042.

What is the goal of a GSP?

GSPs are required by a state law known as the Sustainable Groundwater Management Act (SGMA). The goal of each GSP is to establish a standard for "sustainability" of groundwater management and use, and to determine how the basin will achieve this standard. For basins facing significant groundwater challenges, this will take a lot of time and effort; however, basins that already use groundwater sustainably will simply have to demonstrate that sustainable use will continue in the future. Each medium-priority basin in Sonoma County must demonstrate in its GSP that its groundwater use will be sustainable by 2042. This deadline provides ample time for GSP implementation, as some projects and solutions may take decades to replenish groundwater levels.

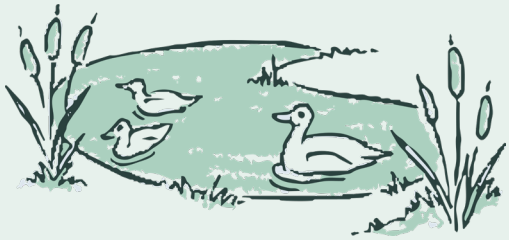
Why is the GSP important?

After a long and painful drought, most Californians are aware of the need to conserve water. Groundwater accounts for a significant portion of Sonoma County's water supply, and we must make sure that it is available for human and ecosystem uses for decades to come. In some areas of the county, this will involve intensive measures to protect the water quality and ensure groundwater levels are maintained or increased, while in other areas actions could simply involve consistent monitoring in order to ensure that current conditions are maintained. Avoiding what SGMA refers to as "undesirable results" of unsustainable groundwater use is essential to ensuring that our county continues to have a clean, reliable, plentiful source of water in years to come, and that groundwater is available for use during future droughts.

What is considered "sustainable" groundwater management?

The definition of sustainable groundwater management will be developed and stated in each basin's GSP, and may vary from basin to basin. However, the sustainability criteria must ensure that each basin avoids "undesirable results" defined by SGMA as follows:

- Chronic lowering of groundwater levels
- Reduction of the amount of storage available for groundwater
- Seawater seeping into a basin, contaminating fresh water
- Degraded water quality
- Land subsidence (sinking)
- Depletion of surface water as a result of overuse of groundwater



The GSA will consider scientific data and stakeholder input to create a GSP that demonstrably avoids these undesirable results. When the GSP is submitted, the California Department of Water Resources will determine whether the GSP successfully accounts for all of these issues.

What options does SGMA present other than the development of a GSP, and why was the decision made to create GSPs for the three Sonoma County basins?

SGMA allowed for basins to submit an alternative plan, rather than forming a GSA and developing a GSP. The deadline for alternative plans was January 1, 2017. Alternative plans were required to include a report and data demonstrating that the basin's groundwater use has been sustainable for a period of at least ten years. The three medium-priority basins in Sonoma County would not have been able to comply with the requirements of an alternative plan, and as such, chose to form GSAs and develop GSPs.

What are some strategies a GSP might use to achieve its goals?

State law provides GSPs several tools to achieve its goals. Not all the tools will be needed, and the GSA has the discretion to choose what will work best to achieve sustainability in the community. Strategies could include the following:

- Metering commercial and agricultural wells to measure actual groundwater use (note that GSAs cannot require metering of small wells used only for domestic purposes)
- Monitoring wells to determine whether groundwater levels are stable, declining or recharging
- Storing surface water collected during wet winters in aquifers for recharge and for future use through groundwater recharge and groundwater banking projects
- Encouraging water conservation and water-use efficiency programs to reduce groundwater use
- Substituting recycled water for groundwater for irrigating farmland, parks, and landscaping
- Limiting groundwater pumping

How will the GSP and its development affect me?

The impacts of the GSP on residents of Sonoma County will vary, depending on where you live and how much groundwater you use. In areas where there are significant problems with groundwater levels or water quality the GSP could deploy more aggressive strategies, such as metering and groundwater banking, to create a healthy aquifer. Well owners living in areas with minimal groundwater concerns might be encouraged to monitor their well and to use water more efficiently.

Landowners in the three basins might be required to pay a fee to ensure that groundwater is sustainable now and for future users. Each GSA is conducting a fee and rate study to determine options for funding the day-to-day operations of the GSA and the development of the GSP. Robust public outreach will be conducted if fees are to be implemented. To find out whether you live in one of the three affected basins, visit sonomacountygroundwater.org/basin, where you will find instructions on how to use DWR's property locating tool.

Who determines whether the GSPs created by the GSAs are sufficient?

Once completed, the GSPs will be submitted to the California Department of Water Resources (DWR) for review and evaluation. There will be a 60-day public comment period during this time. DWR will determine whether each GSP meets the requirements of SGMA and whether it is likely to achieve the basin's sustainability goal.

What will happen if a sufficient GSP is not developed by the deadline?

If the GSP passes basic initial criteria, but is determined by DWR to be incomplete, the GSA may be able to correct and resubmit the GSP. If DWR determines that a GSP is inadequate, the State Water Resources Control Board (SWRCB) may intervene in that basin's groundwater management. This intervention may include fees to support the implementation of an interim plan, and will ultimately still result in the implementation of a GSP, but will most likely cost the basin more time and resources.

How can I share my concerns regarding the development of the GSP?

SGMA places tremendous importance on community engagement throughout the process of creating GSPs. The GSAs want input from people who live or work in the basin, who own wells in the basin, who rely on groundwater for their livelihood, and who care about the basin's plants and animals. In other words, if you care about groundwater, the GSAs want to hear from you. There are several different ways for you to share your thoughts, ideas, and concerns:

- Communicate with the Advisory Committee members in your area. The Advisory Committees meet regularly and include representatives from well-owners, agriculture, business, environmental interests, disadvantaged communities, tribes, resource conservation districts, the cities and water districts.
- Communicate with the GSA Board in your area. The Boards meet every other month and include representatives from government agencies and special districts.
- Sign up for the email list so that you will receive monthly updates on GSA activities and fee studies. Go to sonomacountygroundwater.org/email/ to sign up.

For GSA Board and Advisory Committee information, visit your basin's page at sonomacountygroundwater.org.