Let's Talk About Groundwater

Catch me up - What's going on with groundwater in Sonoma County?

Last June, three new Groundwater Sustainability Agencies, a.k.a. "GSAs," were created to manage groundwater in Sonoma County. The work these agencies are doing is important, because groundwater is a big source of water in the county. The GSAs will be working over the coming years to protect our groundwater resources and make sure our use of groundwater is sustainable. Also, the GSAs are required by the State of California because of the Sustainable Groundwater Management Act, which became law in 2015. To learn more about this whole process and how we got to this point, try these resources: SGMA in Sonoma Valley, SGMA in Petaluma Valley, SGMA in Santa Rosa Plain, or SGMA in California.

Am I affected by this?

Everyone is affected by groundwater in some way! It's a big part of what makes our county the beautiful place it is, and everyone should want to preserve it. But if you're wondering whether you're in the groundwater basins the GSAs are managing, you can find out by using this tool.

Why do we need the GSAs? What if we just let the State manage our groundwater instead?

If the GSAs weren't set up, or if they don't meet the requirements of SGMA, the State will manage our groundwater for us. That might sound easier, but it is most likely a more expensive, more intrusive option. If the State has to intervene, there will be added fees on top of the cost of managing our groundwater to make sure the requirements are met. And maybe most important: the State won't take into account local knowledge and experience. You can learn more about these fees and the intervention process from resources the State Water Resources Control Board posted online, here and here.

What have the GSAs done so far?

As new agencies, the GSAs began with some administrative start-up work – things like adopting bylaws and charters, creating budgets, and planning the work they'll be doing over the coming years. The GSAs have secured \$3 million (\$1 million for each basin) in Proposition 1 grant funding through a competitive application process from the State Department of Water Resources for developing Groundwater Sustainability Plans (GSPs), which are the next required step in complying with SGMA. They have also been working on community engagement plans to make sure everyone affected will know what's going on, looking into different options for how the GSAs can be funded, and starting the work of figuring out what needs to be done to make sure groundwater is used sustainably in Sonoma County. While working on these different tasks,

the GSAs also hosted community workshops to get feedback from members of the communities about different funding options. The three workshops had a total of more than 325 people in attendance!

Okay, that all sounds fine - but how much am I going to have to pay?

The GSAs are still figuring this piece out. They need to be funded somehow, and are working hard to find the most fair and transparent possible way to do this. The GSA Boards will decide on fees based on input from their communities, the GSA Advisory Committees, GSA staff, financial consultants, and legal consultants. All of these people are working to find a fair, legal way to raise the money the GSA needs to do the work it has to do. To find out more about the GSA Boards and Advisory Committees, visit the GSA websites: Sonoma Valley GSA, Petaluma Valley GSA, or Santa Rosa Plain GSA.

I don't know how much groundwater I use! How do you know how much to charge me?

The GSAs may not charge fees based on groundwater use, but if they do, there are a few ways the GSAs can figure that out. Most cities and water districts use meters to know much groundwater they pump. For vineyards, farms, dairies, and other agriculture, the amount of water needed can be estimated based on crop types, how much land is used, and other factors. For residential well owners, water use may be estimated based on how much land they own, how many people live on the land, or information from scientific studies about rural water use.

Am I going to have to reduce my water pumping?

The GSPs will be carried out starting in 2022 – and will likely include a lot of different strategies, depending on whether there are problems in the basin. One possible strategy could be regulation of how much groundwater can be used, including the amount individual well owners can pump. Other strategies for keeping groundwater basins healthy could include providing incentives for well owners to conserve more, groundwater recharge or recycled water use.

For the next few years, the GSAs will be working on developing Groundwater Sustainability Plans (GSPs) to come up with ways of keeping our groundwater basins healthy. The GSPs will be carried out starting in 2022, which is when the plans are due to the State. The GSP will define the sustainability goals for each basin and include projects and actions needed to achieve and/or maintain sustainable groundwater use. The types of projects and actions may vary for each basin depending on local conditions and will be selected with the help of advisory committees and the community through a public process. GSAs are granted the authority to regulate how much groundwater can be used, including the amount individual well owners can pump. However, many other strategies available in the region for keeping groundwater basins healthy will be evaluated, such as conservation incentives, groundwater recharge or recycled water use.

Will you make me report my water use?

The GSAs can require meters for people who use more than 2 acre-feet of water per year (about 1,780 gallons per day) and who use their groundwater to make money (for example, growing crops to sell or using water to manufacture something). It is possible that those people may end up having to meter their wells and report their water use. However, if you just use water for your day-to-day needs, you probably don't use that much water, so you won't be required to install a meter or report your water use.

Okay, but now I actually want to know how much water I do use. How can I find out? I want to make sure I'm conserving and using a safe amount.

If you want to monitor your own groundwater use, there are ways to do that! There are a number of different devices and vendors available to well owners. Contact your local well driller or pump company to get more information on specific options. There is also a cool online calculator that can help you estimate your water use without actually measuring it. Voluntary programs for providing groundwater-level measurements are also available in some areas. Contact Marcus Trotta at mtrotta@scwa.ca.gov if you are interested in more information on this.

Isn't the most important thing to start encouraging better conservation?

Conservation is really important. But conserving water may not be enough to keep our groundwater supply healthy, so in addition to promoting conservation, the GSAs need to go forward with the Groundwater Sustainability Plans to figure out if other kinds of projects or programs are needed.

People using water to make money should be the ones paying for this — not people just using water for homes and gardens!

The GSAs are putting a lot of effort into making sure whatever funding options they choose are as fair and equitable as possible. Whatever they choose, it also has to be legal and reasonable (of course!).

But why should families and residential users who hardly use any water have to pay?

Residential users may not use much water individually, but collectively, they amount to a lot, as Sonoma County has one of the highest densities of residential domestic wells in the State!

Another thing to think about is that no matter how much groundwater you use, you don't want your well to run dry. If the GSA charges you a fee, remember – you're not paying for the water you're using, you're paying so that the GSA can make sure that you and your family will always have groundwater available to use – now, in 20 years, and even in 100 years. That's what sustainability means.

Hmm.... I guess that sounds like a good thing, but I still don't want to pay. Can I get some kind of discount for conserving water?

Like I said, conserving water is a really important part of groundwater sustainability (actually, *any* kind of water sustainability)! It would be great if there was a financial incentive for folks to conserve. However, this is more complicated than it seems at first. Many wells don't have meters on them, and it's tough to know how much water people actually use and how much they save. For now, the GSAs probably will not be able to take this into account, but as they keep working, they may be able to find a way to give credit to people to conserve.

What about the people who recharge the aquifers, putting water back into the ground? Shouldn't they get a discount?

That's a good question! But it's harder than you might think to figure out how *much* water is going back into the ground on a particular piece of property. To answer this question, it's important to gather as much information as possible, which will take time and money. For example, not all groundwater is equal; the water going into the ground may not sink as far as your well reaches, or might go into a different aquifer. The geology of different areas can be complex, so it's not always easy to tell how and where recharge is occurring. The GSAs will be gathering more information about this as part of creating the Groundwater Sustainability Plan, so stay tuned! This is one of many areas where we just need more information.

That's not totally satisfying to me, but I guess it makes sense. I want to make sure I keep up with everything going on with groundwater. How can I learn more and stay up-to-date?

There are a ton of resources available for you to learn more about what's going on with groundwater! One of the best ways to find out what's going on is to go to GSA meetings in your basin. You can also visit the Sonoma Valley GSA, Petaluma Valley GSA, or Santa Rosa Plain GSA websites, where there are tons of fact sheets, information about the GSAs, and more. You can also visit the SGMA pages of the Department of Water Resources website or the State Water Resources Control Board website. If you have a specific question or comment, you can send a message to the GSAs through the "contact us" forms on the websites, and someone will write back as soon as possible to address your message. And if you're reading this, you've already taken steps to stay informed – thank you so much for signing up for our monthly email update! Feel free to send this to your friends and neighbors so they can learn more about groundwater in Sonoma County – they can sign up by visiting the websites linked above and clicking "Email Updates."