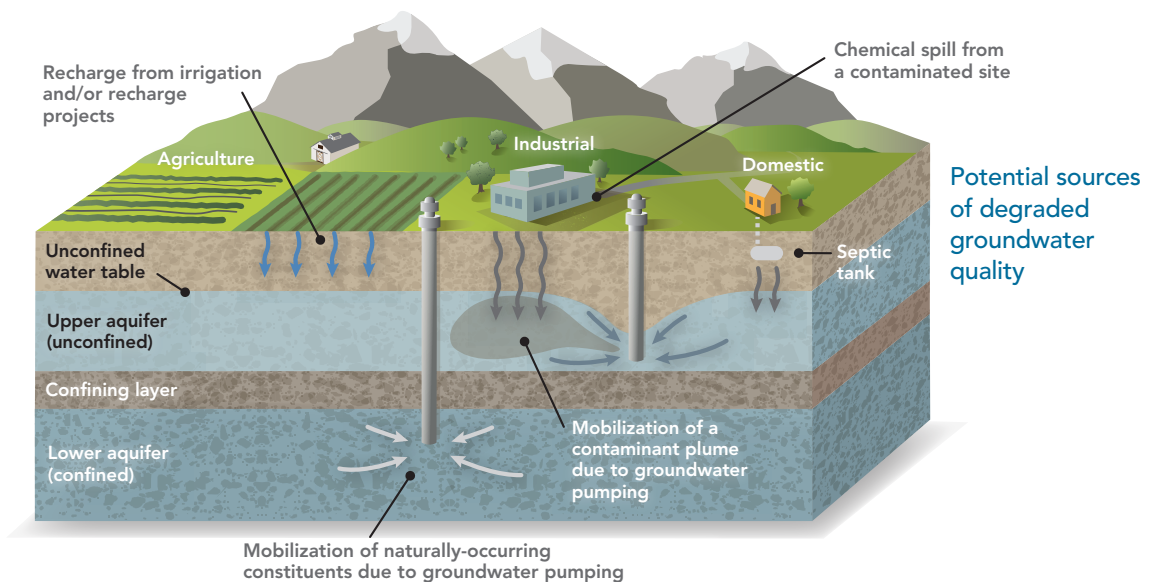


Degraded Water Quality

The importance of protecting groundwater quality.

Managing groundwater quality is critical to ensure that all beneficial users have access to safe and reliable groundwater supply that meets current and future demands. SGMA requires that Groundwater Sustainability Plans (GSPs) set forth actions to avoid or mitigate degradation of groundwater quality as a result of projects or management actions implemented as part of the GSP.



How can groundwater quality be degraded?

Groundwater quality can be impacted by naturally-occurring constituents that can be present in rocks and sediments in an aquifer like arsenic, iron, and manganese. Groundwater quality can also be impacted by industrial and urban activities, including leaking storage tanks and chemical spills. In addition, agricultural practices and domestic septic systems can increase concentrations of nitrate, salts, and other constituents in groundwater.

Will degradation of groundwater quality affect me and my community?

The rock and sediments that make up the aquifer play a large part in determining whether and how pollutants can migrate through the aquifer system and potentially impact wells. Groundwater contamination issues are often localized and may only affect some wells in a basin; once groundwater quality is degraded at a well, costly expenditures may be required, including wellhead water treatment, mixing pumped water with other non-degraded sources of water, or drilling a new well. The GSP will address whether such impacts are significant, unreasonable, and/or occurring throughout the basin.

How can groundwater pumping and recharge affect groundwater quality?

Why does groundwater quality matter?

What is the role of my GSA in protecting groundwater quality?

What is the GSA's role in protecting water quality?

As the main steward of the groundwater basin, the Groundwater Sustainability Agency (GSA) is required to monitor groundwater quality throughout the basin and may act as a proactive "facilitator" to involve existing regulatory agencies and move forward on processes that protect groundwater quality. SGMA requires that projects or management actions implemented as part of the GSP avoid or mitigate degradation of groundwater quality. Importantly, SGMA does not supersede existing regulations set forth by other regulatory agencies, like the State and Regional Control Boards.

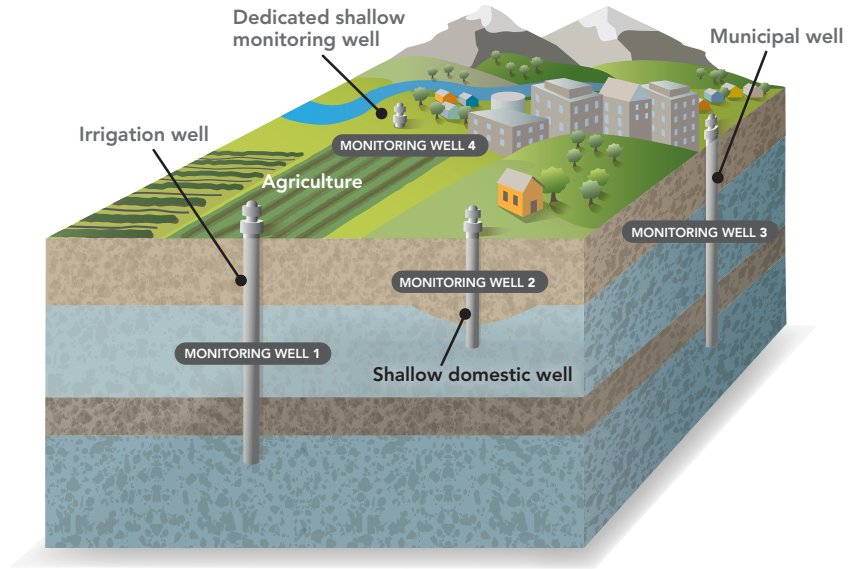
How will the GSA address water quality?

It is important for each GSA to gather historical water quality data to identify constituents of concern. The GSP may establish a monitoring network to assess changes in concentrations of specific constituents of concern over time. The GSP may also identify water quality threshold values for specific constituents to trigger actions to avoid undesirable water quality results.

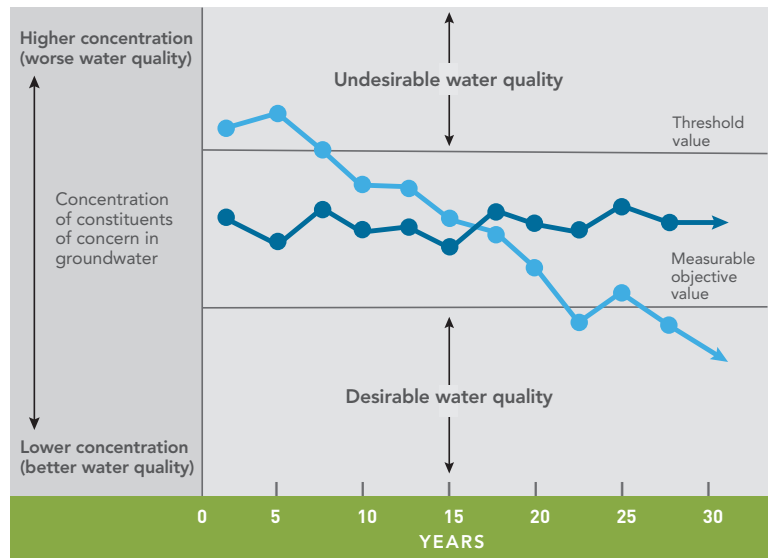
What might I be asked to do?

- Provide water quality data to my GSA
- Allow or participate in water quality monitoring endorsed by my GSA
- Contribute to my GSA to fund annual monitoring and reporting of water quality data.

HYPOTHETICAL GROUNDWATER MONITORING NETWORK



HYPOTHETICAL GROUNDWATER QUALITY TRENDS



The GSP should focus on achieving either of these two water quality trends.

Be involved in your local GSA

SGMA encourages local landowners to work together to develop effective GSPs, and encourages neighboring basins to find common, acceptable solutions. Basins not managed locally, that fail to take corrective action over time, may have plans written and implemented by the State Water Resources Control Board.