

SANTA MARGARITA Groundwater Agency

GROUNDWATER SUSTAINABILITY PLAN SUMMARY



SCOTTS VALLEY
WATER DISTRICT
svwd.org  svwater



mount**hermon**



PRIVATE
WELL
OWNERS

What is the Santa Margarita Groundwater Agency?

The **Santa Margarita Groundwater Agency (SMGWA)** is a joint powers authority established in response to the Sustainable Groundwater Management Act (SGMA). The Agency is comprised of the San Lorenzo Valley Water District, Scotts Valley Water District and the County of Santa Cruz, to oversee groundwater management activities in the Santa Margarita Groundwater Basin (Basin) located in Santa Cruz County, California. The Board of Directors of the SMGWA includes two board members from each of the member agencies listed above, one from the City of Scotts Valley, one from the City of Santa Cruz, one from the Mount Hermon Association Community Water System and two well owner representatives.



What are the SMGWA's Mission and Goals for Groundwater Sustainability?

The SMGWA's mission is to ensure a safe and reliable water supply is available for everyone who relies on groundwater from the Basin, now and in the future. Together with input from community members, qualified experts, and groundwater scientists, the SMGWA developed a Groundwater Sustainability Plan (Plan) based on locally-driven policy goals. The science-based Plan lays out a roadmap to achieve groundwater sustainability by 2042 per state requirements, taking into consideration endangered species and groundwater-dependent ecosystems (GDEs).

SMGWA'S GOALS



- Provide a safe and reliable groundwater supply that meets the current and future needs of beneficial users
- Support groundwater sustainability measures which enhance groundwater supply in the Basin, utilizing integrated water management principles
- Provide for operational flexibility within the Basin through a drought reserve that considers future climate change
- Oversee planning and implementation of cost-effective projects and activities to achieve sustainability

Where Does Local Water Come From?

All water used in the Santa Margarita Basin originates as rain falling within the San Lorenzo River watershed. Groundwater is water stored within cracks and spaces in sand and rock below the ground surface that originated as rainfall. Approximately 29,000 people and a diverse ecosystem of plants and animals live within the Basin. The majority of Basin residents are supplied water from local water agencies and the rest rely at least in part on groundwater pumped by private domestic or small water system wells. All Basin residents rely on groundwater for at least a portion of their water supply. The San Lorenzo Valley Water District supplies customers from both groundwater and surface water sources. Although the City of Santa Cruz does not pump groundwater in the Basin, it is an indirect user of groundwater in the Basin, because water it diverts from the San Lorenzo River partially comprises baseflows supported by Basin groundwater discharge to creeks.

What are the Basin's Groundwater Issues?

SGMA requires the Plan to address the following unsustainable groundwater conditions:



Chronic Lowering of Groundwater Levels

Groundwater over-pumping in the area stretching from Mount Hermon, across Hansen Quarry to south Scotts Valley started in the mid-1980s in response to increased population and industrial water demand. Increased pumping led to declines in groundwater levels. Huge strides have been made to stop the decline and to raise groundwater levels through management actions and more efficient use of water by customers, but it has not yet been enough to fully recover Basin groundwater levels.



Reduction of Groundwater in Storage

With declining groundwater levels, the amount of groundwater stored in the Basin's aquifers is reduced. In particular, the Mount Hermon to south Scotts Valley area has experienced a reduction of groundwater in storage linked to falling groundwater levels. The amount of groundwater recharge (from rainfall and streams) and groundwater leaving the Basin (mostly from pumping and baseflows to creeks) needs to be balanced so there are no long-term groundwater in storage declines and there is enough stored water to support Basin water use, and to provide for a drought reserve when rainfall is below normal.



Degraded Groundwater Quality

Groundwater quality in the Basin is generally good. During Plan implementation, projects and management actions are not allowed to cause groundwater quality to degrade in a way that adversely affects Basin water users.



Depletion of Streamflow Connected to Groundwater

Groundwater pumping is not allowed to deplete streamflow to the point of harming ecosystems that rely on groundwater for all or part of the year. Most streams in the Basin receive some of their flow from groundwater. Summer and fall baseflow is particularly important to support sensitive aquatic species when there is no rainfall. Without groundwater baseflows, these waterways may not be able to support aquatic plants and animals.

What Groundwater Sustainability Looks Like for the Basin

- Prevent groundwater levels from long-term declines that materially impair groundwater supply or negatively impact beneficial uses.
- Maintain Basin groundwater pumping at levels considered sustainable because they do not cause long-term groundwater level declines and loss of groundwater in storage, or reduced groundwater contributions to stream flow.
- Maintain groundwater quality so that State drinking water standards are not exceeded, with the exception of nitrate which must be less than half the regulatory standard.
- Ensure groundwater use does not adversely impact the sustainability of GDEs and selected priority species or cause undue financial burden to beneficial users of surface water.

Planning for long-term sustainability takes climate change into account.

Which Projects and Management Actions (PMAs) are Being Considered to Improve Groundwater Conditions?

The Plan describes current and potential activities and projects that may be implemented to achieve the Basin's sustainability goal. Projects are grouped based on where water sourced and the type of water:

Current

- Baseline Projects and Management Actions (PMAs) (Group 1)

Potential

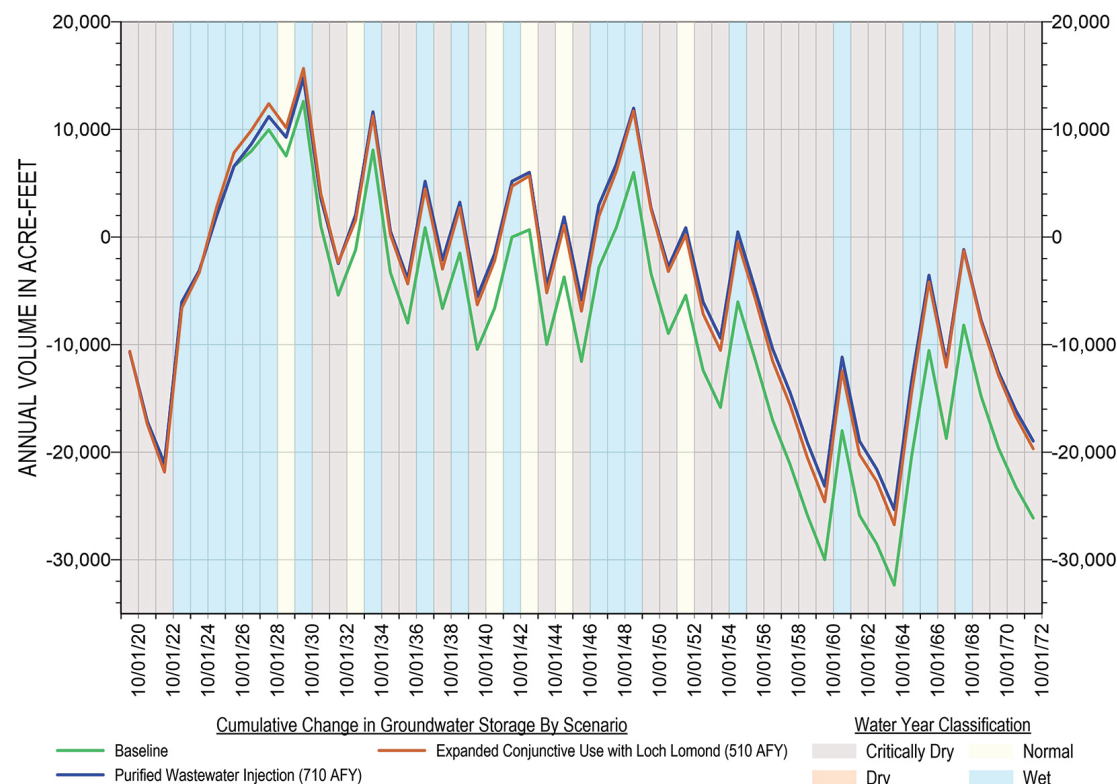
- PMAs using existing water sources within the Basin (Group 2, Tier 1)
- PMAs using surface water sources outside the Basin (Group 2, Tier 2)
- PMAs using purified wastewater sources (Group 2, Tier 3)
- PMAs requiring future evaluation (Group 3)

Not all PMAs are needed to attain sustainability but they provide possible options in the event that backup projects are needed. Implementation of projects will be led by cooperating agencies who will work in coordination with one another.

Science-Based Approach to Management

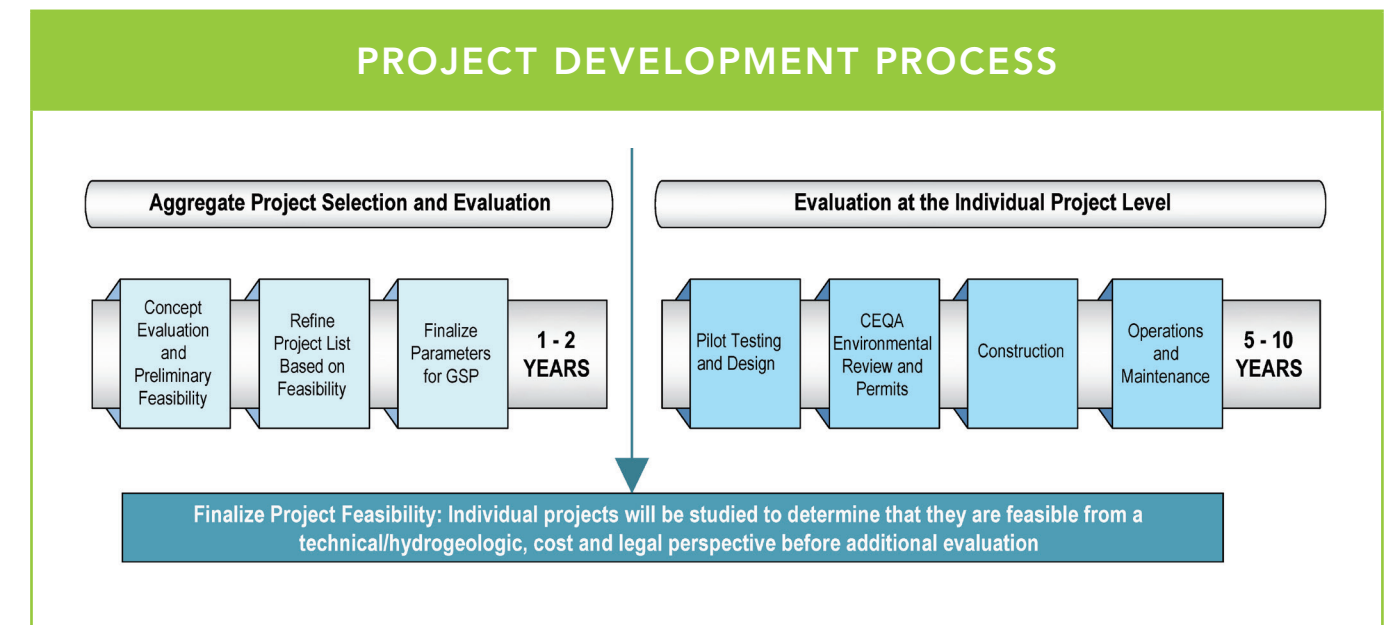
The SMGWA's role outlined in the Plan is to function as an umbrella agency to guide Basin groundwater management towards achieving sustainability by 2042. The SMGWA's cooperating agencies monitor groundwater, surface water, and climatic conditions in the Basin. The data will be used to evaluate improvements from the implementation of future projects and management actions using a science-based approach:

- **Basin Modeling** The SMGWA developed a groundwater flow model, a complex and robust tool, to assess groundwater conditions and provide a means to evaluate project and management actions. The model incorporates climate change and tracks actual climate over time to continuously compare anticipated changes in groundwater level to achieve sustainability.
- **Data Collection** The SMGWA will oversee comprehensive monitoring of Basin groundwater and surface water resources and ensure coordinated data management.
- **Data Evaluation** The SMGWA will prepare and submit annual reports to DWR that assess progress toward Basin sustainability.
- **Adaptive Management** The SMGWA will evaluate Basin sustainability and adapt its management programs as needed. The SMGWA will report any revisions to its management strategies to DWR at least every five years.



Plan Implementation Schedule

The schedule of the SMGWA's near-term Plan implementation covers the next 20 years. This means that by January 2042, the SMGWA must meet the sustainability goals laid out in the Plan. Activities to achieve groundwater sustainability include continuing existing projects and actions to reduce water demand supplemented by additional future projects. Twenty years is a relatively short period of time considering developing a new project from concept to operation takes many years of planning, design and environmental review. Long-term Plan implementation and maintenance of sustainability extends a 30 years beyond 2042 to 2072.



What Happens if the Plan Fails to Produce Results?

If implementation of the Plan does not lead the Basin to sustainability, further projects described in the Plan as Group 2 projects that use water from outside the Basin, may be necessary. The decisions for which actions to take will depend on the scale of the shortfall, regulatory requirements, and the technology available at the time. Considerations will include community input and how fast solutions can be implemented. If the Basin does not reach sustainability by 2042, the State will step in and likely mandate water cutbacks and fees for all parties.

What Does the California Sustainable Groundwater Management Act (SGMA) Require?

SGMA went into effect in 2015 and requires that local water agencies work together to manage Basin groundwater sustainability by developing a Groundwater Sustainability Plan. The completed Plan must include a science-based approach and utilize a comprehensive planning process, and continuous public input. The Plan must outline how to achieve Basin sustainability to support all users and ecosystems dependent on groundwater by 2042.

The Plan for the Santa Margarita Groundwater Basin will be adopted by the SMGWA in November 2021 and submitted to the State by January 31, 2022. To review the full Plan and learn about how you can become involved, **visit smgwa.org**.

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