



Cuyama Basin Groundwater Sustainability Agency

Cuyama Basin Groundwater Sustainability Newsletter

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Cuyama Basin Groundwater Sustainability Plan Implementation Groundwater Management Continues

Background

As required by the Sustainable Groundwater Management Act (SGMA), the Cuyama Basin Groundwater Sustainability Agency (CBGSA) was formed in 2017 and submitted its Groundwater Sustainability Plan (GSP) to the California Department of Water Resources (DWR) on January 28, 2020. The GSP was developed by the CBGSA and included input from Cuyama Basin residents, landowners, and growers. DWR staff are reviewing the GSP, which could take up to two years.

While the GSP is under review by DWR, the CBGSA is moving forward with implementation of several specific elements that are outlined herein.

Status of GSP Implementation Activities

With the COVID-19 pandemic, the CBGSA has held its regularly scheduled public meetings (Board of Directors and Stakeholder Advisory Committee) using an online, virtual meeting platform. Decisions from these meetings have allowed the following GSP-related activities to advance:

1. Set **Groundwater Extraction Fees**.
2. Establish the **Groundwater Monitoring Network**.
3. Refine the **Cuyama Basin Groundwater Model**.
4. Delegate **Management Measures in the Central Region Management Area** to Cuyama Basin Water District.

5. Develop information for drilling **new wells** within the CBGSA's jurisdiction.
6. Seek additional **Prop. 68 funds** to assist with GSP implementation actions.
7. Prepare an **Indirect Economic Report** for the Cuyama Basin.

1. Set Groundwater Extraction Fees

Groundwater extraction fees are set by the CBGSA Board of Directors (Board) and are used to implement the plans and actions detailed in the GSP. Fees are collected from extractors—pumpers of groundwater within the Cuyama Basin groundwater basin boundary. Exceptions from the extraction fees include:

- **De minimis users:** wells that produce 1.5 acre-feet or less per year for commercial purposes, or wells that produce 2 acre-feet or less per year for domestic (non-commercial) purposes.
- **State and federal lands:** non-commercial well use on State and federal lands.

The initial 2020 extraction fee of \$19 per acre-foot was set in November 2019 by the CBGSA Board and was based on the CBGSA's budget and modeled water use in 2019 totaling 60,000 acre-feet. However, collections showed only 30,000 acre-feet of reported water use in 2019 resulting in a budget deficit for the CBGSA. Extraction fees effectively funded only the January through June 2020 period.

In August 2020, after reviewing several fee options and conducting a public hearing, the CBGSA Board adopted a supplemental groundwater extraction fee of \$44 per acre-foot based on self-reported water use in 2019 of roughly 30,000 AF. This fee is to cover the Fiscal Year 2020-2021 period (July 1, 2020 through June 30, 2021) and payments were due September 30, 2020.

The CBGSA Board will review the program budget and fee each spring for the upcoming fiscal year.

2. Establish Groundwater Monitoring Network

Groundwater levels will be monitored throughout the Cuyama Basin to track progress towards meeting sustainability criteria. Criteria for groundwater levels were established as minimum thresholds and measurable objectives for the 61 representative wells in the 101-well groundwater level monitoring network. These sustainability criteria help prevent undesirable results which can include:

1. Land subsidence.
2. Chronic lowering of groundwater levels.
3. Reduction in groundwater storage.
4. Degraded water quality.
5. Depletions of interconnected surface water.

Provost & Pritchard was hired to determine monitoring well suitability and perform data collection. The scope of work includes:

- Set up and determine measurement suitability of 101 wells.
- Begin monthly measurement of groundwater levels in wells starting in August 2020.

Additional monitoring network activities include the following:

- Develop a plan for monitoring Groundwater Dependent Ecosystems (habitat that relies on groundwater) by installing piezometers (shallow monitoring wells) in the Fiscal Year 2021-2022 period.
- Set up the groundwater quality monitoring network and perform annual analysis of total dissolved solids (TDS), a measurement of salt content, at the 64 representative wells in the water-quality monitoring network.
- Install two stream gauges in the Cuyama River in the eastern and western portions of the Cuyama Basin under grant funding from DWR in coordination with the U.S. Geological Survey.

- Drill and construct three dedicated monitoring wells as part of DWR's free Technical Support Services program.
- Review and adjust the groundwater level and water quality monitoring networks based on current data, including removal of representative wells if necessary.

3. Refine Groundwater Model

During GSP development, an enhanced groundwater computer model was built. The model helps water users and managers understand the long-term changes to groundwater levels and conditions in the Cuyama Basin. It does this by estimating "water budgets" for historical, current, and future conditions.

A "water budget" estimates how much groundwater is available and how much groundwater is used.

To understand long-term changes in groundwater

conditions, past conditions and associated water budgets were analyzed using historical hydrologic and land use data from 1998 through 2017. The model was then used to predict future groundwater levels and water budgets, based on a set of assumptions.

With post-2017 well monitoring data now available, the original model will be updated. Pumping reductions are planned to begin in 2023. The model update will be completed at least six months prior to the start of pumping reductions, to allow more accurate predictions using the most recent data.

The model refinements will include items such as:

- Improved representation of small watersheds located in the Cuyama Basin.
- Updated land use data.
- Refined groundwater pumping estimates.

Once updated, the Cuyama Basin groundwater model will continue to be used to:

- Guide/refine implementation of Management Area pumping reductions.
- Assist with assessment of potential water supply actions identified in GSP.
- Provide water budget reporting for the Annual Report.
- Update water budgets in the 2025 GSP update.

4. Delegate Management Measures of Central Region Management Area

During the development of the GSP, groundwater modeling forecasts identified the central region of the Cuyama Basin as the most critically overdrafted area. Portions of the central Basin and Ventucopa areas were designated as a distinct management area comprised of the lands that the model identified as having the greatest pumping and drawdown based on future condition assumptions. This management area does not include the Cuyama Community Services District (CCSD).

Because these lands are within the Cuyama Basin Water District (CBWD) jurisdiction, in November 2019 the Board approved an agreement between CBGSA and CBWD to consider delegating the administration of projects and management actions in the central basin management area to the CBWD. On August 11, 2020 the CBGSA delegated the following measures to the CBWD, subject to the CBWD's acceptance:

1. Implementation of pumping allocations in central region management area.
2. Development of water use data for individual landowners within the central region management area.

If the CBWD accepts the delegation of these measures, the CBGSA will provide oversight of the implementation of these measures.

5. Develop Information for Those Considering Drilling New Wells

There are four counties with jurisdiction within the Cuyama Basin: Kern, San Luis Obispo, Santa Barbara, and Ventura. The counties retain the right to manage the drilling of new wells within their respective jurisdictions using their existing permit procedures. However, the CBGSA has authority regarding regulation of groundwater pumping and collecting extraction fees. A fact sheet has been developed for new landowners and/or new well owners within the CBGSA boundary to describe the fees and potential pumping restrictions. The fact sheet is available on the CBGSA's website at www.cuyamabasin.org.

6. Seek Additional Prop. 68 Funding

In March 2020, DWR awarded a \$500,000 grant to the CBGSA. This grant will assist with several aspects of groundwater management, including:

- Reimbursement for previously unfunded GSP development work.
- Conducting an indirect economic analysis of the Cuyama Basin.
- Establishing the monitoring network.
- Establishing a groundwater extraction fee structure.

The CBGSA is applying for additional funds that will be available through a new Proposition 68 grant for GSP implementation activities. Applications are due on January 8, 2021.

7. Prepare Indirect Economic Report

To inform development of the CBGSA GSP, a direct economic analysis was performed in 2019. This analyzed potential impacts to Cuyama Basin agriculture resulting from the projects and management actions specified in the GSP.

Now, in response to feedback from stakeholders, and to better understand the economic consequences of the GSP implementation plan, an indirect economic impact analysis is underway that considers the effects of the GSP on related businesses, farmworkers, disadvantaged communities, and the broader regional (four-county) economy. This analysis will quantify the GSP's impact on jobs, employee wages, business sales, taxes, and land values in the Cuyama Basin and surrounding communities.

Results of this analysis will be used to support GSP implementation through more effective policy planning in the Basin. The analysis is funded by state grant funds from Proposition 68 and will be completed in early 2021.

Tentative GSP Implementation Timeline (subject to change)

	2020				2025					2030					2035				2040
Monitoring																			
Initiate																			
New wells																			
Monitoring & reporting																			
Refine water budget & thresholds																			
Pumping Allocation																			
Develop monitoring																			
Initiate allocation																			
Implement and refine																			
Projects																			
Evaluate feasibility																			
Construct small/medium projects																			
Construct larger projects																			
Public outreach & reporting																			
Five-year evaluation & update																			

How to Stay Involved in GSP Implementation

The Cuyama Basin community has been instrumental in the development of the GSP. During implementation, community members are encouraged to follow and comment on GSP implementation activities via CBGSA Board meetings and Standing Advisory Committee (SAC) meetings. To learn about meeting times and agendas, visit www.cuyamabasin.org.

Please feel free to contact Taylor Blakslee with any questions or concerns at (661) 477-3385, or via email at tblakslee@hgcpm.com.