



Madera County Groundwater Sustainability Agencies Summary of Rules

2025



DISCLAIMER

The following is a summary of rules pertaining to the Madera County Groundwater Sustainability Agencies (Madera County GSAs). It is essential to note that this summary is intended for informational purposes only. The information provided here is a consolidation of existing resolutions and guidelines, compiled into a single accessible resource for the convenience of the readers.

This summary is not intended to create or establish any new policies, regulations, or rules for the Madera County GSAs. All the rules and guidelines mentioned in this summary are already approved by the Board of Directors Groundwater Sustainability Agencies and in effect as per the relevant resolutions. The details mentioned here can be cross-referenced with the official resolutions of the Madera County GSAs. The complete resolutions can be found at maderacountywater.com.



TABLE OF CONTENTS

Glossary.....1

Madera County Groundwater Sustainability Agencies.....2

 Madera County GSAs Map.....2

 What are the Madera County GSAs?.....2

Farm Unit3

 What is a Farm Unit?.....3

 What are the restrictions for farm units?.....3

Allocations and Penalties.....4

 How were allocations determined?.....4

 What are the allocations?.....4

 What are the penalties?.....4

 What is the Annual Opt-In Opportunity for Never-Irrigated Lands?.....4

 Madera, Chowchilla and Delta-Mendota Subbasin Allocation Tables.....5

Finances.....6

 What are the Madera County GSA Fees (Admin Fees)?.....6

 What are other sources of Madera County GSAs Funds?.....6

 What does future funding look like for groundwater management?.....6

 How are the Madera County GSAs funds managed?7

Land Repurposing.....8

 What is the Multibenefit Land Repurposing Program?.....8

 Current Multibenefit Land Uses.....8

Recharge.....9

 What is going on with recharge?.....9

Measurement.....10

 How is my water measured?.....10

 Key considerations for measurement choices.....10

Private Meters.....11

 What are the requirements for using private meters?.....11

Appeals.....11

 Using a meter to appeal satellite data.....11

Resolutions.....12

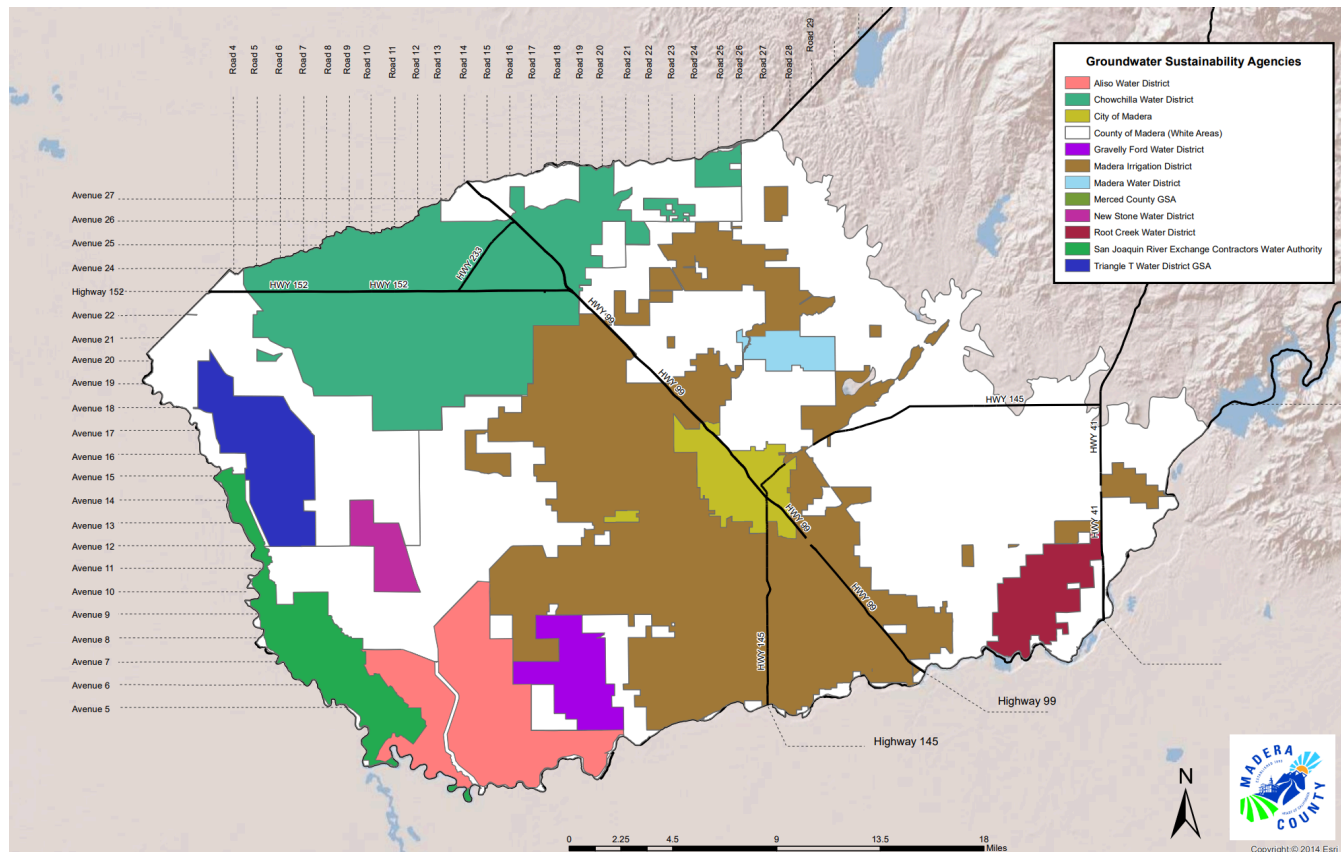


GLOSSARY

Allocation	A water budget made available to agricultural water users within the Madera County Groundwater Sustainability Agencies (GSAs). Over time, the allocated water budget will decrease to sustainable levels.
Applied Water	The volume of water delivered through an irrigation system, which can be utilized for various purposes, including irrigation and evapotranspiration, deep percolation, and runoff, depending on the efficiency of the irrigation process. The measurement of applied water is done using meters that track the quantity of water used during irrigation.
Assessor's Parcel Number (APN)	A unique identifier assigned to a particular piece of land, helping to track and manage property ownership, assessments, and other property-related information.
Consumptive Water Use	The amount of water that is utilized by plants through evaporation and transpiration (commonly known as evapotranspiration).
Evapotranspiration (ET)	The sum of evaporation and transpiration.
Evapotranspiration of Applied Water (ETAW)	The volume of applied water that is transpired by plants and evaporated from the soil, which is also known as consumptive use. It is calculated by subtracting the consumption of rainfall from the total evapotranspiration. This value is typically less than the total applied water, as it represents the portion of water that is utilized by plants and lost through evaporation from the soil.
Farm Unit	A set of linked parcels owned or managed by the same entity within the same farm unit zone, a specific geographic area.
Penalty	A charge for water use that is above the allocation.
Sustainable Yield (SY)	The amount of natural groundwater present in the subbasins through seepage and percolation.
Transitional Water (TW)	Excess groundwater being pumped from the subbasins; decreases over time.



MADERA COUNTY GROUNDWATER SUSTAINABILITY AGENCIES



What are the Madera County GSAs?

The Madera County Groundwater Sustainability Agencies (GSAs) are located in the Madera, Chowchilla, and Delta-Mendota Subbasins. These agencies were formed under the requirements of the California Sustainable Groundwater Management Act (SGMA). The areas that fell under the Madera County GSA responsibility during GSA formation are the lands that were not within existing irrigation or water districts that chose to form their own GSAs.

Under the California SGMA, the GSAs have the authority to limit extractions from groundwater wells, establish groundwater allocations, and adopt rules and regulations with the Madera County Board of Supervisors acting as the Board of Directors for the Madera County GSAs.

FARM UNIT

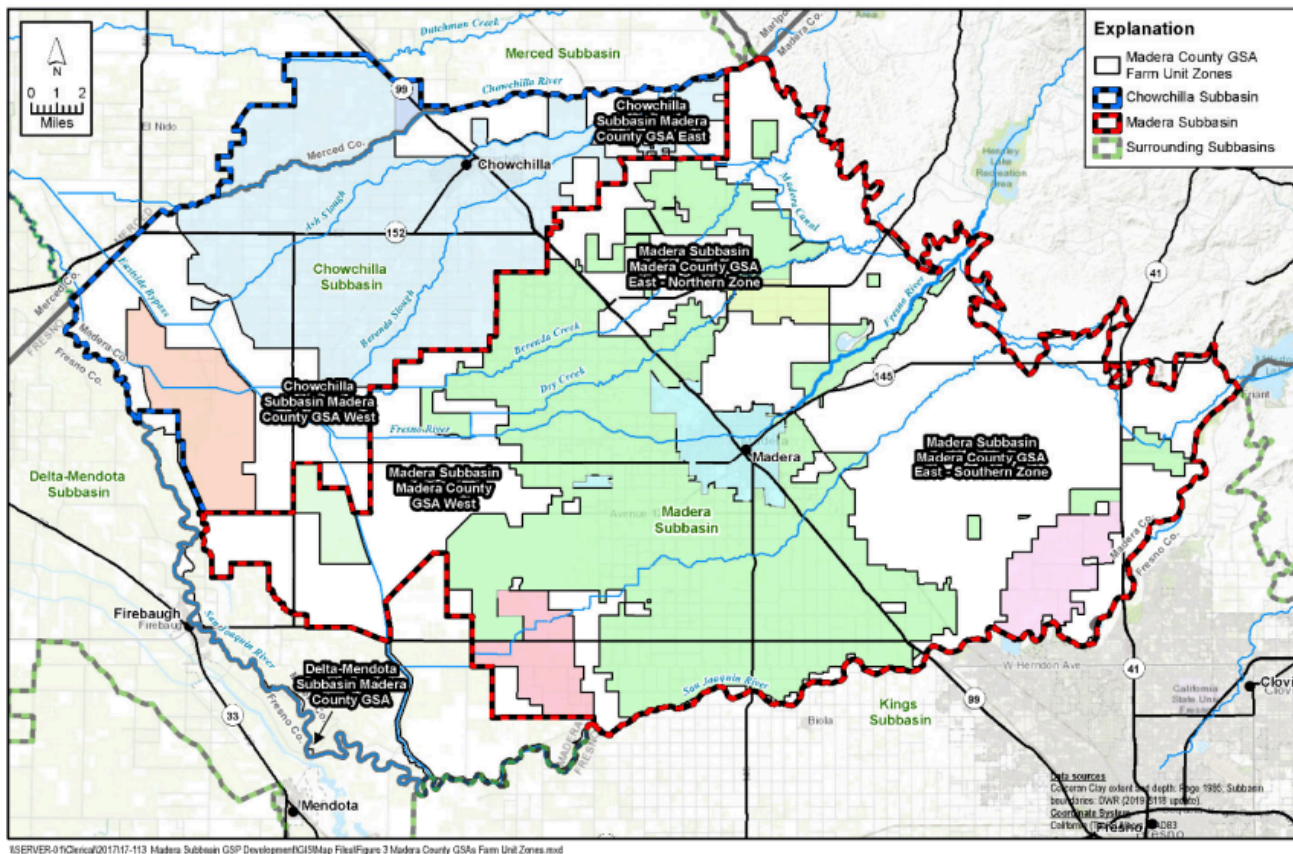
What is a farm unit?

To allow for both flexibility and to mimic real-world farming conditions in which resources are shared among owned or commonly managed lands, the Madera County GSAs' per-acre, parcel-based allocations will be allowed to be shared within designated "farm units".

For the purpose of sharing water allocations, more than one parcel can be grouped together to form a farm unit. In order for the grouping to exist, the parcels would need to be owned or managed by the same family, company, or organizations.

What are restrictions for farm units?

1. Farm units must be managed or owned by the same entity.
2. Farm units must be within the same farm unit zones.
3. Farm units must stay the same for the calendar year.



ALLOCATIONS AND PENALTIES

How were allocations determined?

The Madera County Groundwater Sustainability Agencies (GSAs) have implemented resolutions that define the rules governing groundwater allocations. These resolutions serve as official rules and provide clarity on the allocation process. They outline the procedures, approaches, and criteria for determining the amount of groundwater that will be allocated to irrigated acres. By adopting these resolutions, the Madera County GSAs aim to establish a transparent and consistent framework for managing groundwater allocations for the Madera County GSAs.



What is the Annual Opt-In Opportunity for Never-Irrigated Lands?

Growers with parcels that have never been irrigated for agricultural purposes have the option to opt in once per year to access groundwater. This opt-in process must occur between November 1 and November 30, and, if approved, allows access to sustainable yield (SY) only. These parcels are not eligible for transitional water (TW) and must demonstrate that the water will be used for reasonable and beneficial agricultural purposes. Once enrolled, they are subject to all applicable Madera County GSA monitoring, reporting, and the GSA Admin fee requirements. Opt-In parcels can not share water with existing parcels.

What are the penalties?

Currently, there are penalties in place for going over an allocation for the calendar year. The penalties are capped at \$500.00/ AF of water usage over the farm unit allocation in year 2027, and then will continue at \$500.00/ AF of water usage over the farm unit allocation every year after that. If not paid by the penalty invoice date, the penalties will appear on the property tax bills. For 2025, the penalty is \$300.00 per AF of water used over the farm unit allocation. For farm units located in the Chowchilla Subbasin, an additional Chowchilla Overage Fee of \$1,000 will be evenly split across all parcels in penalty within the farm unit for each year groundwater usage occurs over the allocation.





ALLOCATIONS AND PENALTIES

Currently, there are allocations for irrigated acres within the Madera County GSAs. The tables show the allocations for the County GSAs within the Madera, Chowchilla and Delta-Mendota Subbasins. Land that has been irrigated prior to June 8, 2021 (Resolution 2021-069), receives both Sustainable Yield and Transitional Water. Land that comes into production after June 8, 2021, receives only Sustainable Yield.

Madera County GSA: Madera Subbasin		Inches of ETAW	
Year	Sustainable Yield *	Transitional Water	Total
2021	12.7	15.6	28.3
2022	12.7	15.3	28
2023	12.7	15	27.7
2024	12.7	14.7	27.4
2025	12.7	14.4	27.1
* Often rounded to 13			

Madera County GSA: Chowchilla Subbasin		Inches of ETAW	
Year	Sustainable Yield	Transitional Water	Total
2021	7.1	19.6	26.7
2022	7.1	19.2	26.3
2023	7.1	18.8	25.9
2024	7.1	18.4	25.5
2025	7.1	18	25.1

Madera County GSA: Delta-Mendota Subbasin		Inches of ETAW	
Year	Sustainable Yield	Transitional Water	Total
2021	8.6	11.2	19.8
2022	8.6	11	19.6
2023	8.6	10.7	19.3
2024	8.6	10.5	19.1
2025	8.6	10.3	18.9



FINANCES

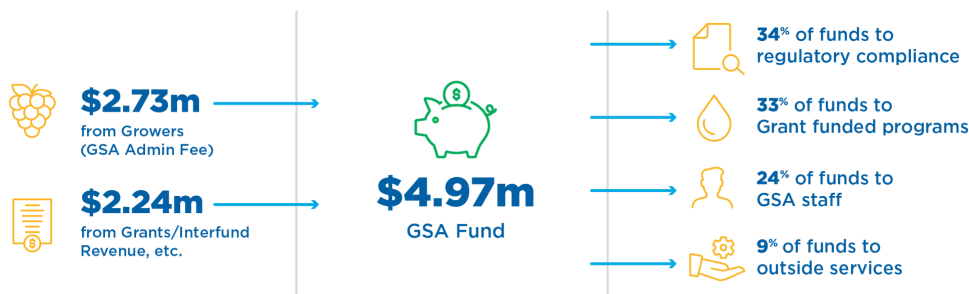
What are the GSA Fees (Admin Fees)?

The GSA Fee (or Admin Fee), covers the following costs carried out by the County GSAs: staff and administrative, regulatory requirements, and outside services. It also supports coordination of annual reports, revisions to the Groundwater Sustainability Plans (GSPs), and grower assistance by addressing questions and concerns. The current GSA Admin fee is approximately \$27 per irrigated acre in the Madera, Chowchilla, and Delta-Mendota Subbasins. It increases annually based on the previous year’s Consumer Price Index (CPI) and appears on property tax bills as 'GSA Fee'.

What are other sources of Madera County GSAs Funds?

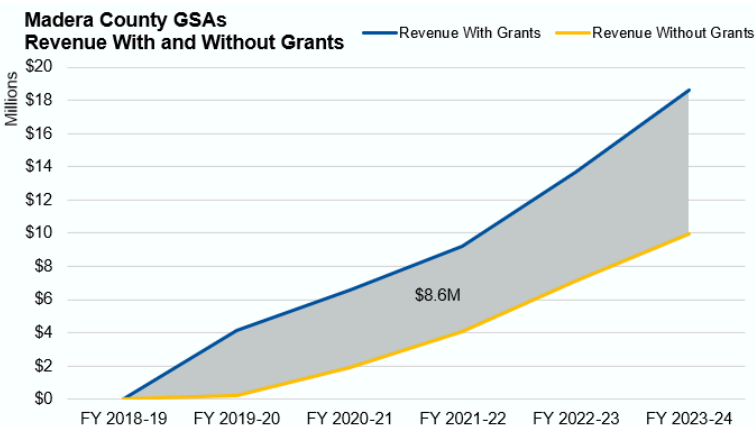
The Admin Fee provides consistent funding for Madera County GSAs to manage the GSP and support grower programs. An additional fee of \$59/ enrolled acre was adopted for the Domestic Well Mitigation Program in the Madera Subbasin. While state grants offer additional funding, they are one-time, unreliable, and often require local matching funds. The graph below shows the Madera County GSAs' sources and uses of funds for FY 2023–2024 (July 1, 2023 to June 30, 2024). On the left, \$2.73 million came from Admin Fees paid by growers, while \$2.24 million (45%) came from state grants. On the right, about one-third of funds supported SGMA compliance and on-the-ground programs, one-quarter covered GSA staff costs, and 9% went to outside technical and legal services.

FY 2023-24 Madera County GSA (05950) Cash Flow



What does future funding look like for groundwater management?

While the Madera County GSAs have been successful in securing grant funding for the Groundwater Sustainability Plans (GSPs) and related programs, future grants are not guaranteed. Economic conditions, state and federal budgets, long-term commitment to SGMA implementation, and increasing grant competition all contribute to uncertainty. The figure to the right show how one-time grants have impacted revenues. Since FY 2019–2020, total revenue was \$18.6 million—\$8.6 million more than the \$10 million raised through the GSA Admin Fee alone. If future grants become limited, the GSAs may need to scale back programs, increase grower fees, or both.

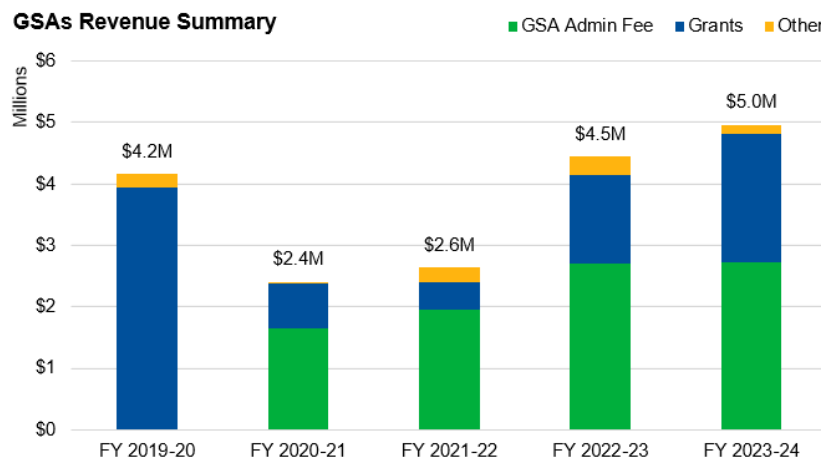




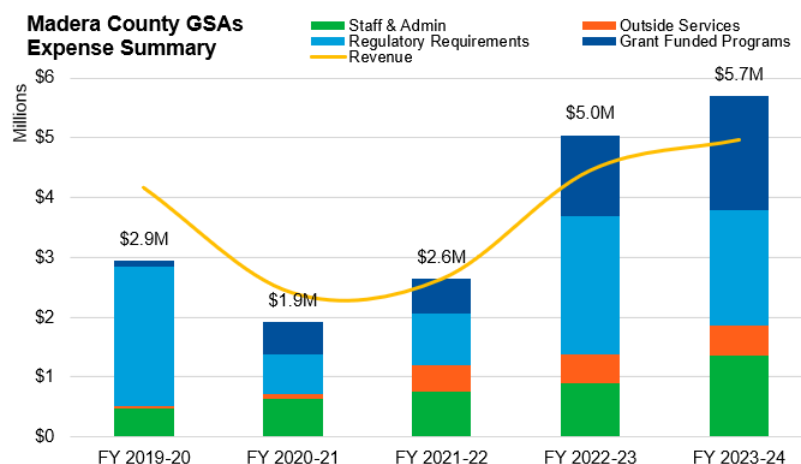
FINANCES

How are the Madera County GSAs funds managed?

The Madera County GSAs operate independently within the County of Madera government financials. The GSA Admin Fee fund is self-sustaining and does not receive support from the County General Fund or other funds. Revenue sources and detailed expenditure tracking are maintained within the County's financial system. The Madera County GSAs Revenue Summary below shows the mix of revenues by year by source: GSA Admin fees, grants, and small amounts of miscellaneous/other revenues.



The Madera County GSAs Expense Summary below illustrates the revenue from the chart above as a line, and the bars represent expenses by category. The expense categories include staff and administrative costs, outside services, regulatory requirements, and grant-funded programs. Reserves are funded in years when the revenue line is above the expense bar, and the GSAs draws on reserves in years when the revenue line is below the expense bar.



LAND REPURPOSING

What is the Multibenefit Land Repurposing Program?

The Multibenefit Land Repurposing Program (MLRP) is a California Department of Conservation (DOC) grant initiative aimed at improving groundwater sustainability. Madera County is one of eight areas awarded this grant to create a local program. The goal is to help agricultural landowners transition to less water-intensive land uses, supporting groundwater sustainability while providing benefits to rural communities and ecosystems. The voluntary program offers funding for land repurposing projects that address community health, economic growth, water supply, flood risk, habitat, and renewable energy. Each regional program designs its own plan based on local needs and conditions. As of September 2024, Madera County has adopted its own Madera County Multibenefit Agricultural Land Repurposing Plan (MALRP), which outlines specific strategies and actions for implementing land repurposing efforts tailored to the region's unique challenges and opportunities, further supporting its commitment to sustainable agricultural practices and community well-being.

Current Multibenefit Land Uses

Many landowners are already making the transition to multi-benefit land uses, such as growing agave, which offers a sustainable alternative to traditional water-intensive crops. Agave is well-suited for regions facing water scarcity due to its low water requirements, making it an excellent choice for growers looking to conserve groundwater while still maintaining productive agriculture. This hardy, drought-tolerant plant thrives in arid conditions and can provide multiple benefits, including supporting local ecosystems, offering potential for renewable energy production, and promoting soil health. By shifting to agave, landowners are not only saving water but also contributing to the broader goals of environmental sustainability and economic resilience in their communities.



The Specialty Crop Company Agave Farm



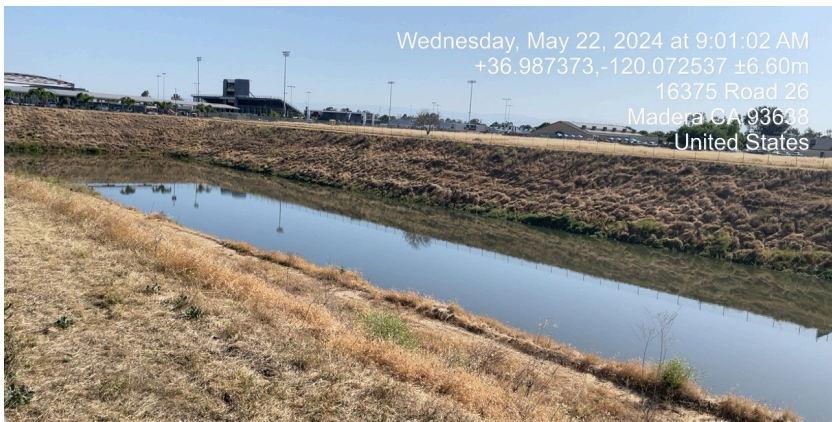
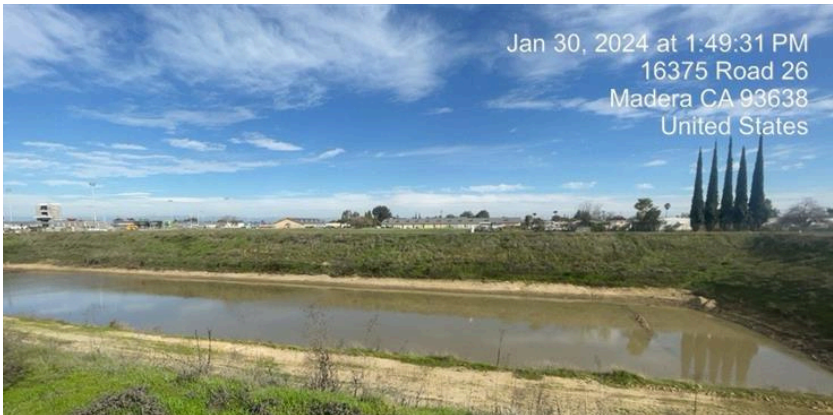
RRR Ranch

In addition to crops like agave, many landowners are turning to plants like sunflowers to create multi-benefit land uses. Sunflowers are an excellent choice for promoting pollinator health, as they attract bees, butterflies, and other essential species. By integrating sunflowers into their fields, landowners can enhance biodiversity while reducing the need for water-intensive crops. These vibrant flowers not only support the pollinators that are crucial for the productivity of surrounding crops, but they also contribute to healthier soil and ecosystems. This transition helps landowners conserve water, promote ecological balance, and strengthen the resilience of their agricultural operations.

RECHARGE

What is going on with recharge?

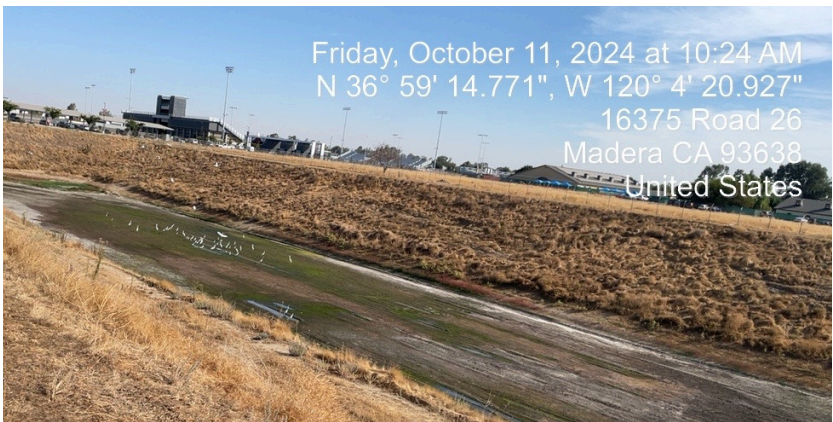
In March 2024, the Board of Supervisors adopted the Recharge Credit Policy (Resolution 2024-030) for the Madera County Groundwater Sustainability Agencies (GSAs).



The Recharge policy addresses two separate types of water credits: one for purchased water from a water right or contract and another from water diverted from an approved flood event. It applies to agricultural lands with farm units within the Madera County GSAs and is retroactive to January 1, 2023.

Recharge credits are subject to a floor of 75% and a ceiling of 90%, with additional documentation required for higher credits.

The policy limits water extraction to the aquifer where recharge occurred, and allows credits to be carried over from one year to the next. Notably, dairy lands are not subject to any additional burdens beyond existing laws.



Ellis Recharge Basin

MEASUREMENT

How is my water measured in 2025?

The County GSAs measure water used by irrigated agriculture within the County GSAs. In the beginning of 2023, the County GSAs began to offer three methods for growers to choose from for measurement:

1. **Hydrosat (IrriWatch)** is a remote sensing measurement method that uses satellite data algorithms to measure evapotranspiration (total ET). Hydrosat (IrriWatch) offers access to an online portal with personalized logins that allows growers to monitor data in real time.
2. **Land IQ** is a satellite measurement method option that combines the use of ground-based stations for estimating ET. Paper reports are available 45-60 days after the end of each month.
3. **Private meters** with paper reports mailed and e-mailed monthly.



Photo credit: Davids Engineering, Inc.



Key Considerations for Measurement Choices

Growers can choose to change their measurement method at the start of each year. Once a method is selected, it must be followed for the entire year. If a grower wishes to keep the same measurement method, no action is needed.

If a landowner does not specify a preferred measurement method to the County GSAs, a satellite measurement method (currently Land IQ) will be automatically designated as the default method.

If a landowner opts to use private groundwater flow meters but does not meet the standards outlined in the resolutions, a satellite measurement method (currently Land IQ) will be assigned as the method instead.

To learn more about Hydrosat (IrriWatch), Land IQ, or private meters, please visit maderacountywater.com/measurement/.

In May of 2025, the County GSAs began a public process of reviewing measurement.



PRIVATE METERS

What are the requirements for using private meters?

Establishing Approval

To use your meter(s) as the primary method for tracking water usage, they must first be approved. Meters cannot be selected as the primary measurement method until approval is granted. Here are the requirements:

1. Provide a map showing the precise location of your groundwater well(s), the corresponding parcel(s) and field(s) that are served by those well(s).
2. Submit photographs and a meter installation report from an approved vendor for the well(s) that supply water to the parcel(s).
3. Ensure that the meter(s) comply with calibration standards by providing a calibration report from an approved vendor certified by the County GSA every two years.*
4. Confirm that the designated well(s) exclusively serve the identified parcel(s) or field(s).*
5. Provide a signed attestation verifying that all the information submitted accurately represents the current conditions for the well(s).*

Summary of Requirements for Monthly Meter Reading Reporting: (Meter Rule Refinement) **

1. Monthly meter readings must be submitted via the County GSA web form between the 1st–10th of each month (12 months/year).
2. If reporting issues occur, notify your assigned water resource specialist promptly. A grace period is allowed from the 11th–20th.
3. Data submitted after the 20th is considered missing and won't be included in allocation reports.
4. If a meter or meter sticker is replaced, lost, or tampered with, a new meter sticker must be issued. Readings must be taken before removal and after reinstallation.
5. Malfunctioning meters must be repaired or replaced within 10 business days. Submit new readings after repair. A new meter sticker must be installed if the meter was replaced.
6. Farm units must have separate meters for groundwater and surface water.
7. Meters must be calibrated every two years. Calibration can occur any time within the due calendar year, including off-season.
8. Two months of unreported or unusable data within one calendar year (consecutive or not) will result in automatic conversion to satellite measurement method (currently Land IQ).

*For a full list of County GSA approved vendors, attestation forms, and checklists, please visit maderacountywater.com/measurement/.

**For the full Groundwater Flow Meter Rule Refinement for Madera County GSAs, please visit www.maderacountywater.com/resolutions/

APPEALS

Using a Private Meter to Appeal Satellite Data

If you wish to dispute the satellite data used for measurement, you have the option to submit your own data for review by a third party at the end of the calendar year. The decision made by the third party will be final. Guidelines for using meters for the appeals process follow the same approval process as using meters for your measurement method. For a complete guideline of how to appeal satellite data, please refer to Resolution 2024-121 found on maderacountywater.com/resolutions/.



RESOLUTIONS

The Madera County GSAs have collectively taken the significant step of formally adopting resolutions. These resolutions serve as comprehensive documents that carefully define the guiding principles, rules, and regulations of the County GSAs. Below is a list of the resolutions referenced in this booklet for more details. For more information, please refer to the official resolutions of the Madera County GSAs. The complete resolutions can be accessed on the Madera County Water and Natural Resources website at maderacountywater.com.

Allocations

Resolution No. 2020-166 — Adopts a groundwater allocation approach

Resolution No. 2021-069 — Establishes groundwater allocation amounts for 2021-2025 and farm unit documentation

Resolution No. 2021-113 — Establishes groundwater allocation refinements

Appeals

Resolution No. 2024-121 — Revises rules for appealing Satellite Data

Farm Unit

Resolution No. 2021-069 — Establishes groundwater allocation amounts for 2021-2025 and farm unit documentation

Fees

Resolution No. 2019-172 — Approves a GSA Administrative fee for the Madera, Chowchilla, and Delta-Mendota Subbasins

Resolution No. 2022-086 — Adopts a GSP fee for the Madera Subbasin

Resolution No. 2022-087 — Adopts a GSP fee for the Delta-Mendota Subbasin

Resolution No. 2025-067 — Adopts a Domestic Well Mitigation fee for the Madera Subbasin

Land Repurposing

Resolution No. 2022-193 — Adopts the Voluntary Land Repurposing Program and program rules for the Delta-Mendota Subbasin

Resolution No. 2022-194 — Adopts the Voluntary Land Repurposing Program and program rules for the Madera Subbasin

Resolution No. 2023-056 — Adopts State rules for the Targeted Land Repurposing Program (LandFlex)

Measurement

Resolution No. 2022-192 — Adopts measurement methods for the Madera, Chowchilla, and Delta-Mendota Subbasins

Resolution No. 2022-143 — See paragraph 2 explaining the private meter pre-approval process

Resolution No. 2022-144 — See paragraph 2 explaining the private meter pre-approval process

Resolution No. 2022-145 — See paragraph 2 explaining the private meter pre-approval process

Resolution No. 2025-044 — Adopts Groundwater Flow Meter Rule Refinements for a Measurement Method

Penalties

Resolution No. 2022-145 — Establishes penalties in the Madera Subbasin

Resolution No. 2022-143 — Establishes penalties in the Chowchilla Subbasin

Resolution No. 2022-144 — Establishes penalties in the Delta-Mendota Subbasin

Recharge

Resolution No. 2024-030 — Adopts Recharge Credit Policies for the Madera, Chowchilla, and Delta-Mendota Subbasins



**200 W. 4th Street, Suite 3100
Madera, CA 93637**



(559) 662-8015



maderacountywater.com

The GSA Committee meets on the first Tuesday of each month. Items discussed are submitted for approval by the Board of Directors on the second Tuesday of the month.

If you would like to stay updated on what is happening with the Madera County GSAs, please join our interested parties list at www.maderacountywater.com/join-list/

If you would like to learn more about previous meetings, webinars, or trainings, please explore the Madera County Water Website (www.maderacountywater.com) for links to video recordings or PDFs of previous presentations.

If you would like to meet with our team or assigned Water Resources Specialists for any Madera County GSA related questions, give us a call or schedule an appointment at www.maderacountywater.com/appointments/.