

Managing Groundwater with Small Farms in Mind:

Risks, Barriers, and Opportunities of the Sustainable Groundwater Management Act

Based on three years of statewide outreach, surveys, and document review conducted with small-scale farmers across California's priority basins by UC ANR and CAFF.

This summary document contains key takeaways for California communities from the report Managing Groundwater with Small Farms in Mind. There are also summaries written for State Agencies and GSAs. Review [the full report linked here](#). Contact sgma@caff.org and sgma@ucanr.edu to get in touch with us about this report and ongoing groundwater work.



[Read the full report here](#)

What's at Stake for Our Communities

Summary

Since 2014, California has taken important steps to protect its groundwater for the future, and these changes are reshaping agriculture across the state. Small farms in some regions use only a small share of groundwater, but they must navigate the same rules as larger users. It is critical to evaluate the role of small farms because these businesses support rural economies, provide local produce to California communities, produce culturally important food crops, and tend to care for land with a long-term perspective. This report highlights a growing concern that small farms face disproportionate challenges in understanding and adapting to new groundwater regulations. In an already difficult farming environment, these challenges could unintentionally put many small farms at risk of going out of business. This report outlines opportunities to address this risk by recognizing the vulnerability of small farms and providing targeted support. By taking action, California can protect its groundwater while sustaining the communities that depend on it.

“

Sustainable groundwater management should not come at the expense of the very communities it is meant to serve.”

— Farmer in the San Joaquin Valley



Dulce Organic Farms, Santa Cruz County

THE LAW

Taking Steps to Manage Groundwater Resources

California's 2014 Sustainable Groundwater Management Act (SGMA) requires local water agencies to bring groundwater use into balance. For decades, too much water has been pumped from underground, causing wells to run dry and land to sink. Under SGMA, local agencies are in charge of creating and carrying out plans to fix this. Their work includes setting limits on how much water can be pumped, keeping track of water use, and collecting fees to support these efforts.

69%

of surveyed California farms are fewer than 50 acres – agriculture is dominated by smaller operations

>50%

of small-scale farmers reached through outreach had not heard of SGMA before they met a SGMA Outreach Specialist

3 out of 4

Surveyed small-scale farmers fear they may have to shut down their operations.



THE PROBLEM

Small Farms Are at Risk

SGMA applies the same rules to farms of all sizes, but the rules do not affect everyone equally. Small farms are held to the same requirements as large industrial operations, including rates, reporting, and pumping limits, even though they use less water. At the same time, small-scale farmers often have fewer resources to adapt to new rules. They may not have the cash flow to absorb new costs, drill deeper wells, or switch to other water sources. For many, even small increases in operating expenses, such as new water use bills, can put their operation at risk. As a result, one unintended result of SGMA is that small farms are more likely to go out of business, meaning those who contributed the least to the problem may face the greatest impact.

~40%

of groundwater users in some basins account for just 1% of total groundwater use

~50%

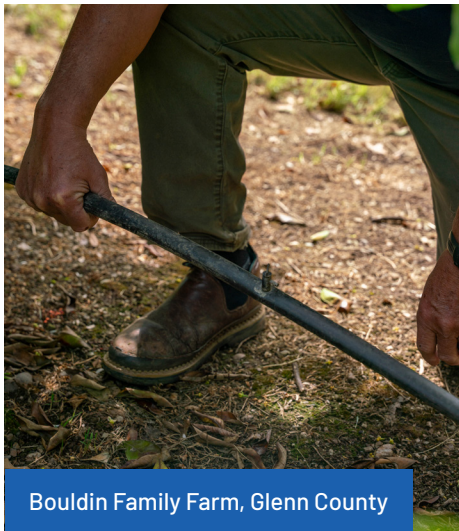
of surveyed small-scale farmers lease their land and are often invisible to water agencies who communicate with land owners



Thao's Fruit Stand, Merced County

Small Farms Provide More Than Food

Small-scale farmers provide critical benefits to their local communities.



Bouldin Family Farm, Glenn County



Cali-Dad Farm, Monterey County



Pine Creek Flowers, Butte County

Small farms use **minimal groundwater** because they likely:

- Farm small acreage
- Grow crops with low water use in conjunction with conservation practices
- As a regional group, pump a small percentage of groundwater compared to neighboring farms

Small farms provide **value to their communities** because they likely:

- Support local food economies and access
- Contribute to food security and sovereignty
- Sponsor and host local activities

Small farms are **vulnerable to losing their livelihood** due to SGMA implementation because they may:

- Depend on shallow groundwater
- Lack adaptive capacity
- Be from a socially disadvantaged group



Land Stewardship

Farmers who live directly or close to the land they farm have incentives to manage soil, water, and ecosystems with a long-term care perspective.



Rural Economies

Small farms generate local employment and purchasing power, and provide pathways for farmworkers to become farm owners.



Food Sovereignty

Small farms grow culturally significant crops for local markets that allow immigrant and rural communities to maintain healthy diets and food traditions.

A Path Forward

The widespread loss of small farms is not inevitable; it is a **potential** policy failure, and one that is still avoidable.

1

Identify who is most vulnerable

Local groundwater agencies should create a clear process for identifying small-scale farmers who use very little water but risk shutting down their business. Recognizing the difference between a 5-acre family vegetable farm and a 5,000-acre operation is the essential first step toward equitable policy.

2

Coordinate and act to keep small-scale farmers in business

State agencies, local groundwater agencies, and farmers themselves each have a role. By working together – through dedicated funding, better outreach, and inclusive decision-making – they can prevent small farms from being pushed out by rules appropriate for much larger operations.

3

Implement actions that support small-scale farmers in groundwater management decisions

Fifty concrete recommendations detailed in the full report – covering outreach, fees, water monitoring, and governance – can protect small farms while keeping them engaged as partners in sustainable groundwater management.

4

Support equitable transition pathways

Target SGMA-related land repurposing to reduce groundwater demand while expanding access for small-scale farmers by prioritizing transitions of large, water-intensive acreage. Invest in technical assistance, funding, and workforce development, and establish a coordinated Equitable Transition Initiative to support farmers and farmworkers with a focus on equity and regional coordination.



Vision for the Future: Small Farms as Part of the SGMA Solution



Groundwater basins are sustainable and small farms are thriving with access to reliable water supplies; local food remains accessible, and rural drinking water is protected.



GSAs are funded through tiered fee structures ensuring that the costs of groundwater management do not fall disproportionately on those who pump the least.



Large-scale acreage currently in water-intensive crops slated for fallowing is transitioned to lower water use, diversified crops preserving working lands and economic opportunity rather than leaving land bare, and opening doors for small-scale farmers to expand access to affordable farmland.



Retention ponds across dozens of small farms allow conjunctive use of pond water with groundwater to irrigate and passively recharge the aquifer during the winter - turning small farms into active partners in basin sustainability.



Farmer liaison staff work collaboratively with local small farms ensuring they understand demand management actions and are able to actively adapt to and participate in SGMA implementation.

Conclusion

Groundwater management is about more than water. In California, it affects the future of farming communities, local food systems, and rural economies. Small farms play a critical role in these systems, yet they face the greatest risk under new rules. With thoughtful policies, better outreach, and coordinated support, California can protect its water resources without losing the small farms and communities that depend on them. The choices made now will shape not just how water is managed, but who remains part of California agriculture. **The future success of SGMA will be measured not only by hydrologic indicators, but by whether California's agricultural communities remain viable, diverse, and resilient.**



Jelly's Ferry Ranch, Solano County

You can learn more about our programs at ucanr.edu/program/uc-small-farms-network and caff.org.