Community Perspectives on SGMA Implementation

Challenges and opportunities for integrating small and rural drinking water stakeholders and interests

By Kristin Dobbin, Jessica Mendoza and Michael Kuo

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Executive Summary

The Sustainable Groundwater Management Act (SGMA) of 2014 represents a historic opportunity to achieve long-term sustainable groundwater management and protect the drinking water supplies of hundreds of small and rural low-income communities that rely on this shared resource, especially in the San Joaquin Valley. Prior research, however, indicates that few of these communities are represented in the Groundwater Sustainability Agencies (GSAs) formed to implement the new law. This raises questions about other forms of community involvement, and concerns about the extent to which small and rural drinking-water interests are being incorporated into the process.

This report details the results of twenty-three interviews with thirty-one representatives of small, low-income communities who rely on groundwater for their drinking-water supplies. The findings suggest community stakeholders are highly interested in SGMA and desire to be involved in its implementation, which many deemed indispensable for the future of their communities. Many are actively participating or following the process, including by serving on boards and committees, attending meetings and workshops, and monitoring meeting minutes and agendas.

The experience of small and rural communities with SGMA is predictably diverse. Some interviewees have had very positive experiences thus far and are hopeful about the ways SGMA could benefit their communities and regions in the future. Others have felt overlooked or intentionally excluded. Yet many similarities also arose across the interviews including six common challenges and concerns about SGMA implementation:

1. ***Resource constraints to participation:*** Lack of staff, small budgets, in-house experts and an inability to pay for outside services/support limited communities' formal participation in GSA governance and attendance and involvement in SGMA meetings.
2. ***Accessibility:*** Additional factors limiting the accessibility of the SGMA process included day-time meetings, language barriers, the proliferation of board and committee meetings, and irregular and unclear meeting schedules and notices.
3. ***Transparency:*** A lack of transparency in GSA decision-making as well as limited access to the data and information being used to develop Groundwater Sustainability Plans (GSPs) were common concerns for interviewees.
4. ***Lack of formal representation:*** The relegation of communities to advisory, rather than decision-making, roles in the SGMA process was also a common concern.
5. ***Limited opportunities to provide meaningful input and feedback:*** Whether participating as a decision-maker, committee member or as a member of the public attending meetings, many

were frustrated at the lack of opportunities to provide meaningful input into decisions or on draft documents due to short turnaround times, not being provided necessary background or materials, and limited opportunities for public comment and open discussion.

6. ***Lack of addressing drinking water interests and priorities:*** Overwhelmingly, interviewees reported that drinking water interests, especially water quality and domestic wells, were not part of their local SGMA conversations, leading many to be skeptical that SGMA would have drinking-water benefits.

Best practices detailed by interviewees with particularly positive experiences and suggestions and recommendations from all of the interviewees, however, demonstrate ample opportunities to address these issues and increase the integration of drinking-water stakeholders and interests into sustainable groundwater management. Targeted efforts to reduce barriers to participation, improve communication and transparency, and promote diverse representation could go a long way to ensuring the "consideration" and "active involvement" of this important, historically marginalized, stakeholder group. For example, communities can educate their GSA about drinking-water priorities and the variety of regulations and requirements public water systems must comply with and coordinate with other small and rural communities to elevate and advocate for drinking water needs. GSAs should incorporate available public data into Groundwater Sustainability Plans (GSPs) while developing plans to fill data gaps, provide ample time for feedback on staggered and sequential GSP sections and streamline and increase interaction with stakeholders in meetings. State agencies should consider requiring or incentivizing collaborative community projects be included in GSPs, and community representation in GSP development and implementation as well as provide funding to support meaningful community involvement in all phases of SGMA implementation.

Introduction

The 2014 Sustainable Groundwater Management Act (SGMA), marks a historic turning point for groundwater management in California, mandating a transition to sustainable groundwater management, defined by the avoidance of six undesirable results, within the next twenty years. To do this, local water and land use agencies formed more than 260 Groundwater Sustainability Agencies (GSAs) across the state's 127 high- and medium-priority groundwater basins. Many of these GSAs are now in the final stages of developing mandated Groundwater Sustainability Plans (GSPs) due in January 2020 or 2022, depending on their groundwater basin's condition of overdraft. After submitting GSPs to the California Department of Water Resources (DWR) for review, GSAs will have twenty years to implement their plans, with annual reporting and 5-year revisions and updates to keep them on track towards sustainability.

SGMA is at least partly a response to California's recent historic drought (2012-2016), which saw widespread social, ecological and economic impacts including thousands of domestic well failures and significant challenges for many of the state's hundreds of small public water systems, especially in the San Joaquin Valley.[1] As the drought clearly demonstrated, high reliance on one or few water sources makes small and rural communities, many of which are low-income "Disadvantaged Communities" or "DACs", highly vulnerable to changing groundwater conditions. Thus, the introduction of SGMA was heralded as an opportunity to stabilize drinking water access. SGMA includes specific requirements for the "consideration of beneficial users and uses of groundwater" including specifically "Disadvantaged communities, including, but not limited to, those served by private domestic wells or small community water systems"[2] as well as more general provisions for encouraging active public involvement, recognized to be critical for the successful management of shared resources.[3]

While important, such requirements lack specificity, and how GSAs are approaching these standards varies across the state. Previous research indicates that of the 243 small DACs

impacted by SGMA, 17% are formally represented in GSA governance and only 55% were listed on GSA interested parties lists submitted to the state, despite a requirement to do so.[4,5] To better understand the form, extent and variation of community involvement with SGMA implementation including both formal (decision-making authority) and informal (advisory or public) participation, this study employs qualitative interviews with small, low-income community representatives about the SGMA process asking: How and why are communities involved with SGMA or not? And what challenges and opportunities exist for increasing community involvement with SGMA implementation?

Methods

Interviews were conducted with representatives from twenty-three communities between October 2018 and May 2019. All interviews were conducted in the San Joaquin and Tulare Lake hydrologic regions, which together are home to half of all the small low-income communities' subject to SGMA. Communities were selected using a combination of purposive and convenience sampling, with the aim of achieving a diverse sample with adequate representation of key differences (e.g. incorporated versus unincorporated communities, population size, public water systems versus domestic wells etc.). For each community, outreach targeted staff and elected officials from the local public water system, domestic well owners or community leaders.

Thirty-one people total participated in the interviews. The twenty-three communities included small cities as well as unincorporated communities, communities with public water systems run by a public special district (e.g. community services district or county water district), public water systems run by private, mutual water companies as well as communities with external drinking water providers and communities reliant on private domestic wells. All communities met the state definition of DAC (< 80% of the state's Median Household Income) and "small" (< 10,000 people). All participating communities were completely or partially reliant on groundwater for their drinking water supply. The interviews were transcribed and analyzed using the qualitative data analysis platform Dedoose™. Included quotes have been edited for clarity and to maintain anonymity.

A staff member and science network volunteer from Union of Concerned Scientists run through a water budget exercise at a Groundwater Sustainability Plan workshop in Fresno, CA.

Findings

While the interviewees' experiences with, and perspectives on, SGMA were as diverse as the twenty-three communities from which they come, clear themes emerged from the analysis of the interview transcripts. These themes are the focus of this particular report and are presented below subdivided into three sections: Similarities and differences in community involvement with and outlook on SGMA, common challenges and concerns, and opportunities and recommendations.

Similarities and differences in community involvement with, and outlook on, SGMA

A little over half of the twenty-three communities are significantly involved in SGMA implementation, attending meetings regularly or semi-regularly. Nine have formal representation on their GSA governing board, a significantly higher proportion than such communities statewide or even regionally.[6] Five of those nine plus another four are participating on GSA committees. The remaining communities are involved more indirectly, for example by attending workshops or tracking the process remotely.

Importantly, participation, or lack thereof, in any of these forms was clearly not an indication of interest. Ability to participate, given limited resources and other barriers discussed in the next section, rather than interest or desire, was the primary factor determining the level of any given communities' involvement. The vast majority expressed a strong desire to be part of SGMA. Sentiments such as "we need to be at the table" or "we need to be counted" were common. One notable exception to this was an interviewee whose community had reliable access to surface water. In this case interest in SGMA was limited compared to the others. Even those who disagreed with SGMA as a policy approach emphasized the importance of their participation in implementation. Interestingly, those communities with current or past water supply challenges, including quality violations and drought impacts, seemed to be even more interested and invested in SGMA than those who had not had these experiences.

> "We care about water. I care about water. I care about drinking water. I care about surface water. I care about groundwater. We want to be at the table… I know we are little but we don't want to be left behind. We want to know what's going on."

This high level of interest was motivated both by hopes, and potentially even more so, by fears about how the SGMA process could or would impact small and rural communities. Many hoped that SGMA could be a mechanism for securing rural drinking-water supplies and avoiding the devastating impacts they and their neighbors experienced during the drought. Interviewees pointed out that they use relatively insignificant amounts of groundwater annually, yet they often struggle the most due to their shallow wells and their use of groundwater as a drinking-water source, necessitating higher standards. To the extent that SGMA could create a more equitable and consistent "playing field" for access to groundwater and prevent the further lowering of groundwater tables, the legislation is a welcome change to the status quo that was, for many, indispensable for the future of their communities. Many also mentioned being limited in the "levers" they could pull to support sustainability independently, thus emphasizing the importance of regional collaboration. While very few felt they had the ability to develop projects such as groundwater recharge initiatives on their own, many were hopeful about pursuing such projects with their GSA.

Interviewees' expectations for the SGMA process, however, dovetail more with their fears and concerns than their hopes. A majority of those interviewed were uncertain if SGMA would change groundwater management in the ways that it was intended to. Others were sure that it would not. Only a few were explicitly positive about SGMA's likely future impact.

Most expected to be told what they will have to do to comply with SGMA with little to no say, raising concerns about community autonomy and self-determination. For example, some public water systems worried that they could be told to stop or severely limit pumping, which they noted is not something drinking-water providers can do. If they were forced to pump over their allotment, many worried about excessive fees which could jeopardize their financial stability. Affordability in general was a concern of almost everyone, especially considering that rural drinking water rates are often times already unaffordable for residents and the constraints of Proposition 218. That many did not expect SGMA to adequately address their drinking water needs exacerbated these concerns with several noting that they expected to both pay for SGMA and continue to pay to deepen wells, drill new wells and seek solutions to existing and future quality issues by themselves. As one interviewee put it: "My worry is, what are they going to do to us? We don't have any choice. We don't have a whole lot of power in the whole thing. But how much are they going to charge us for all this? And what do we get?". Many also worried that SGMA would impact inevitable or desired future growth, with several interviewees noting that not only are they already growing but they need to continue to do so to accommodate housing demands.

Notably, a handful of interviewees, namely those with more positive experiences with implementation thus far and some of those with formal representation in their GSA, were optimistic about the long-term impact of SGMA and the prospects of sustainable and equitable groundwater management. Affordability and pumping limits were also a concern for this group but a belief that their GSP would equitably distribute the costs and burden of achieving sustainability made them less pressing.

Common challenges and concerns

1. Resource constraints to participation

Small and rural community participation in SGMA implementation is fundamentally constrained by their limited resources. Interviewees discussed numerous ways in which financial and staffing barriers prevented them from being as involved in SGMA as they would like to be or felt they should be. Many interviewees shared that it was difficult, if not impossible, to attend GSA meetings. For non-water system staff, attending GSA meetings often meant taking

Community water leaders from the San Joaquin Valley meet with Department of Water Resources and State Water Resources Control Board staff for a SGMA roundtable. Photo courtesy of Community Water Center.

unpaid time off of work and incurring personal travel expenses. That they participated as community volunteers while they perceived other attendees to be paid professionals or wealthy landowners was a point that many stressed. For staff, attending meetings could require closing the office or having another staff member available to remain open. For communities working to solve chronic water quality or supply challenges with large capital projects in progress, SGMA meetings were often necessarily relegated to a lower priority. Most of the communities interviewed lacked in-house technical experts that could participate in drafting or even reviewing technical reports. Further, their ability to receive help from outside consultants, be they engineers, hydrologists or even attorneys, was limited by their small budgets. More than a few explained how an inability to shoulder the costs of SGMA implementation meant they were unable to become a GSA, or in some cases, even assume a membership role in a GSA formed by Memorandum of Understanding or Joint Powers Authority. Across the board, communities with public water systems regulated by the Division of Drinking Water stressed that SGMA was just one of many regulations they were dealing with and even prior to SGMA they had been overburdened and under-resourced. Small cities did tend to have more resources to participate in SGMA implementation than unincorporated communities but they too are significantly constrained by limited budgets and staff.

2. Accessibility

Beyond limited community resources, several additional factors can make GSA meetings inaccessible to small and rural drinking water stakeholders. Language barriers prevent many in predominantly Spanish-speaking communities from participating, and can shift the burden onto a smaller number of English-speaking representatives. The timing of meetings was also a chief concern. An inability to attend meetings during the workday led various interviewees and people they knew, to stop participating on GSA boards and committees.

The number of meetings is also a problem. Many interviewees were concerned and frustrated with the number of board, committee, advisory and working group meetings any given GSA might have, let alone subbasin/basin level SGMA meetings. This led some to worry that those with the time and resources to attend every meeting had an advantage over more resource-limited actors. For others, the maze of meetings required them to make difficult and sometimes rather random decisions about what to attend and what not to. Further complicating this scenario, that meetings are commonly canceled or rescheduled makes it even more challenging to plan to attend. Alternatively, others had concerns about too few meetings. Especially where GSAs are operated by other bodies such as irrigation districts or counties, interviewees reported being unsure when on a much longer agenda SGMA would be discussed or how much it would be discussed and therefore whether it merited attendance. For example, a board of supervisors meeting may last less than two hours, or it could carry on all day and some districts simply put "updates on SGMA" as a standing item on their agenda.

> "[They] asked why wasn't there more participation? And I said, well look around here, you guys are city employees, county employees, water district employees, you guys are paid to come here. For a regular person, if you take the day off, you're not going to get paid for that, and to boot then you've got the expense of coming. And so that's what really limits participation."

3. Transparency

Several interviewees explicitly shared that they did not feel that their local SGMA process is transparent and even more reported problems with transparency and access to information. In some areas, interviewees noted feeling as if decisions in meetings were pre-determined among

a select few or in other coordination meetings, others questioned where decision-making was actually taking place given that the meetings they were attending seemed to only consist of business items like bill-paying and general updates. More than one interviewee noted that "real" or important business seemed to happen in closed board sessions or between staff and consultants.

Another concern for many related to the accessibility of data and information in the process. Concerns that various actors were not being forthcoming about, or were hesitant to reveal, their groundwater use surfaced in various interviews. Many hoped, but did not expect, that metering would improve the accuracy and reliability of this data in the future. That communities did not have access to all of the information they would need or want to fully participate was also a common complaint. In some areas, board packets or accompanying reports or documents are not shared with non-board members.

While several interviewees reported having provided data about their groundwater pumping to their GSAs, others had not been asked for or provided anything, leading one interviewee to hopefully speculate that their GSA was obtaining this information from the state, where they noted it was publicly available. Concerns about transparency were often related to concerns about the trustworthiness and reliability of future modeling results and GSPs. As one interviewee noted, a sentiment shared by others, "you can make a model spit out whatever you want it to say… that's another one of my concerns."

4. Lack of formal representation

Who is represented on their GSA board and who would be making final decisions about their GSP were both important topics of discussion in nearly every interview and a significant concern for many interviewees. That many communities lack formal representation in the SGMA process was a common challenge and a point of frustration for many but not all unrepresented communities. In addition to not being able to afford GSA membership as was already discussed, many interviewees reported not being included in discussions about structuring their GSA, often because those conversations proceeded their involvement or

> "I see certain boards and it's like, okay, he's interested because he's a developer and he's the big farmer and he's the other big farmer so I see why these guys are in it because they have a concern, that's going to be the priority. Who's representing the small people or the city or what not?"

even notification about local SGMA efforts, but in a few cases because those conversations were reported to have happened behind closed doors or that alternative options were simply not explored. Those with GSAs composed of a diverse cross-section of agencies and interests were generally more optimistic about SGMA implementation meeting their drinking-water needs than those with a singular agency retaining control or where a single stakeholder interest dominated decision-making.

Interestingly, however, formal presentation did not always relate to interviewees having a more positive outlook on the SGMA process. Some unrepresented communities were pleased with SGMA implementation in their area, the ways they were able to participate and hopeful about the outcomes. Some represented communities, on the other hand, felt overlooked despite their formal governing role and expressed little hope of having any influence on decisions and significant worries about future GSA decisions.

5. Limited opportunities to provide meaningful input and feedback

Nine communities participated on some type of advisory board or stakeholder committee. While quite a few reported positive experiences with committee participation, many were also wary that these forums were strictly advisory and that there is no guarantee that their recommendations, or even concerns or questions, will be taken up or even heard by the GSA board. Two interviewees

noted that their GSA governing board meets more frequently than their advisory committee, leading them to question how meaningful the committee's role really was. Others reported that committee meetings felt more like they were being "talked at" with the GSA staff or consultants giving updates rather than the committee being a place where important decisions or considerations were deliberated. This problem was not unique to committee meetings. As was already mentioned, in both board and committee meetings, several interviewees noted that substantive conversations about policy rarely occurred.

Even when the opportunity arose in board or committee meetings, many found it challenging to provide meaningful feedback in these settings. For some, meetings were intimidating to attend, either because of the preponderance of professionals in the room and/or because the conversation was dominated by a single stakeholder interest or perspective. It was not uncommon for interviewees to express a certain degree of self-imposed reticence, reluctant to talk or provide feedback in meetings. This was especially true for those attending meetings without a formal role but also arose among board and committee members.

The technical nature of many GSA meetings, and a failure to make the conversation accessible to "regular people" was also a significant barrier. Many felt like they needed more training or experience to participate meaningfully. Notably, while everyone agreed SGMA had a steep learning curve, not all interviewees felt that the "technicality" prevented them from participating, highlighting the importance of structuring meetings and presenting information in accessible ways. Several interviewees also pointed to the challenge of not being provided all the relevant supporting materials for trying to give input or of receiving materials at the meeting and being asked to digest the information and provide feedback immediately.

6. Lack of addressing drinking water interests and priorities

Related to the limited formal representation of small and rural communities in the SGMA process, that drinking water was not a significant consideration, or even considered at all, was mentioned by almost all interviewees. This is especially true of degraded water quality, which interviewees unanimously felt was being excluded, and as a result, believed would not be addressed by GSPs. Similarly, that their GSA did not know or understand community interests in groundwater management was a common refrain. This led to significant concerns that GSPs could unintentionally, as well as intentionally, adversely affect public water systems and domestic wells. For many, this was simply an extension of the status quo, noting that communities have long been left out of planning and management efforts, yet the regulatory nature of SGMA made the impact of SGMA potentially more consequential.

Opportunities and recommendations

Interviewees had many recommendations and suggestions for better integrating small and rural drinking water interests into the SGMA process. These ideas, along with examples of best practices that arose in the interviews, are presented in this section divided by primary responsible party (as assigned by the authors). Note that while all of the included recommendations and best practices were supported explicitly or implicitly by at least a few interviewees, and in many cases a majority, not all of these recommendations would be unanimously endorsed by all of the interviewees.

Recommendations and best practices for small and rural communities:

- Especially where a community has no formal representation on the GSA, establish a Memorandum of Understanding or Agreement (MOU/MOA) with your local GSA (note that this is most applicable to those communities with centralized public water systems).
- Attend GSAs meetings as much as possible; when not possible, monitor meeting agendas and other materials and consider providing written comments and questions.
- Coordinate with other small and rural communities to elevate and advocate for drinking-water priorities.

- Educate your local GSA about drinking-water priorities and the variety of regulations and requirements public drinking water systems must comply with.
- Reach out to your GSA to share your contact information, preferred communication methods and how you would like to be involved in the SGMA process.

Recommendations and best practices for GSAs:

- Improve and maintain regular communication with drinking water stakeholders. Make contact with all public water systems in the GSA area, attempting various means if necessary, and then work with each water system to establish an effective line of communication and establish clear junctures for feedback such as draft plan review. For domestic well owners, work with community organizations and seek other means to achieve personal contact with residents. Do not rely on community attendance at meetings.
- Account for drinking-water interests by thoroughly including drinking-water consumption and vulnerabilities in all aspects of the GSP.
- Utilize available data and develop plans to fill data gaps.
- Provide ample time for review and feedback of all GSP related documents or policies on a staggered schedule. Do not expect comments on multiple chapters or an entire plan all at once.
- Work with community representatives to develop collaborative, multi-benefit projects for inclusion in the GSA.
- Provide meeting agendas, materials and presentations prior to meetings to all board and committee members and post the materials publicly in advance. Provide physical copies to all meeting attendees who desire them, not just board members.
- Attend, present, and solicit feedback at community meetings where residents are already gathering.
- Ensure a diversity of interests and perspectives are represented on boards and committees. Even if minority interests are represented, having a dominant interest group could suppress their full involvement.
- Provide interpretation in meetings and translate materials, including draft GSP chapters.
- Develop fee or assessment structures that are aligned with current and historic groundwater use and maintain (or at least do not exacerbate) drinking water affordability.
- Find ways to make meetings less rigid and more interactive while maintaining transparency and complying with public meeting laws. Allow for open discussion in meetings and encourage participation by and questions from members of the public.
- Ensure diverse stakeholder representation on GSA boards and committees. Use facilitation techniques to prevent one or a few individuals or interest groups from dominating meetings.
- Include low-income small and rural community representatives in formal decision-making roles without requiring a financial contribution.
- Critically consider how many separate meetings are necessary for your GSA to

"The state has resources for outreach for this process. It needs to be spent for this purpose. So communities are represented. If nothing else they should all have an agreement to where they are factored into the GSP and part of its implementation process. Without it, there's no guarantee they're represented and have a water supply."

effectively and efficiently conduct business. Consider holding meetings with similar attendees back to back to reduce travel. Clearly distinguish between and communicate the specific functions of each meeting to avoid duplication and help stakeholders make informed decisions about which meetings to attend.

- Hold evening meetings and workshops.
- Prioritize using accessible language, engaging "non-experts" and building stakeholder capacity around groundwater management. Hire consultants with demonstrated expertise in doing this.
- Use stakeholder committees and advisory boards to deliberate on key issues, develop policy alternatives and make recommendations. Establish clear lines of communication between boards/committees and decision-makers.
- Strictly adhere to the Brown Act. Ensure that meeting agendas contain sufficient information about meeting content. Where SGMA is not the only item on the agenda, schedule the SGMA agenda item(s) for a specific time.
- Clarify and articulate the GSAs decision-making process. Highlight and provide timelines for key decisions.

Recommendations and best practices for state agencies:

- Require or incentivize that community and drinking-water oriented projects are included in GSPs.
- Require or incentivize formal representation for small and rural low-income communities in GSAs.
- Prioritize the protection of the human right to water (AB 685) in GSP review.
- Enforce the provisions and intent of SGMA including the consideration of disadvantaged and drinking-water stakeholders in GSPs and integrating of water quality.
- Provide more guidance to local actors regarding the SGMA implementation process including public participation.
- Provide grant funding for community participation in SGMA including meeting stipends and funding for external support for initial GSP submittal as well as for plan revision and updating.
- Fund training and capacity building efforts for small and rural drinking-water stakeholders to support increased participation and representation.
- Fund community water conservation programs and the installation of water meters.

Community representatives and Technical Assistance providers discuss protecting community drinking water needs in water markets at the Groundwater Market Exchange Symposium at Fresno State. Photo courtesy of Community Water Center.

Table 1. Study recommendations organized by challenge and actor.

	Communities	GSAs	State Agencies
Resource constraints	Attend GSAs meetings as much as possible, when not possible, monitor/review meeting agendas and other materials and consider providing written comments and questions.	Improve and maintain regular communication with drinking water stakeholders without relying exclusively on community attendance at meetings; Consider holding meetings with similar attendees back-to-back to reduce travel; Allow for community participation in decision-making role without requiring financial contribution.	Provide grant funding for community participation in all phases of SGMA implementation.
Accessibility	Reach out to your GSA to share contact information, preferred communication methods and how you would like to be involved in the SGMA process.	Provide interpretation in meetings and translate materials; Critically consider how many separate meetings are necessary for your GSA to effectively and efficiently conduct business; Clearly communicate the specific functions of each meeting; Hold evening meetings and workshops; Ensure that meeting agendas contain sufficient information about meeting content; Where SGMA is not the only item on the agenda, schedule SGMA agenda items for a specific time; Attend, present and solicit feedback at community meetings where residents are already gathering.	
Transparency		Provide and post all materials prior to meetings; Provide physical copies to meeting attendees who desire them; Strictly adhere to the Brown Act; Clarify and articulate GSAs decision-making process; Highlight and provide timelines for key decisions.	Provide more guidance to local actors regarding the SGMA implementation process including regarding public participation.
Lack of formal representation	Establish a Memorandum of Understanding or Agreement (MOU/MOA) with your local GSA.	Include community and drinking-water stakeholders in formal decision-making roles; Ensure diverse stakeholder representation on GSA boards.	Require or incentivize formal representation for small and rural low-income communities in GSAs.
Limited opportunities to provide feedback		Provide time for review/feedback of all GSP-related documents or policies on a staggered schedule; Make meetings less formal while maintaining transparency and complying with public meeting laws; Allow for open discussion in meetings to encourage participation and questions by members of the public; Ensure a diversity of interests and perspectives are represented on committees and use facilitation techniques to prevent individuals or interest groups from dominating meetings; Provide agendas, materials and presentations prior to meetings; Prioritize accessible language, engaging "non-experts" and building stakeholder capacity, and hire consultants w. demonstrated expertise in doing this; Use stakeholder committees and advisory boards to deliberate on key issues, develop policy alternatives and make recommendations; Establish clear lines of communication between boards/committees and decision-makers.	Fund training and capacity building efforts for small and rural drinking-water stakeholders.
Lack of addressing drinking water	Coordinate w. other small/rural communities to advocate for drinking-water priorities; Educate your local GSA about drinking-water priorities and the regulations and requirements for public drinking water systems.	Account for drinking-water interests by thoroughly including drinking-water consumption and vulnerabilities in the GSP; Utilize available data and work to fill data gaps; Work with community representatives to develop collaborative, multi-benefit projects for inclusion in the GSP; Develop fee or assessment structures aligned with current and historic groundwater use and support drinking water affordability.	Require or incentivize that community and drinking-water oriented projects are included in GSPs; Prioritize protection of the human right to water (AB 685) in GSP review; Enforce provisions and intent of SGMA; Fund community water conservation programs and installation of household meters.

Conclusion

Small and rural low-income communities in the San Joaquin are not only highly interested in, but many are also significantly involved with, sustainable groundwater management. Best practices highlight the potential of SGMA to help improve the participation of small and rural low-income communities in regional water management. That many have struggled to participate or have been excluded, however, highlights ongoing challenges to ensuring the diverse representation of community stakeholders in these venues. Importantly, significant opportunities exist to improve upon the findings from this report. The extent to which state, regional and local actors can work together to find and implement inclusive solutions will determine the degree to which SGMA ultimately accomplishes its stated goal to "protect communities, farms, and the environment against prolonged dry periods and climate change, preserving water supplies for existing and potential beneficial use".[7]

References

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About the Authors

Kristin Dobbin is a PhD student in the Graduate Group in Ecology housed in the Center for Environmental Policy and Behavior at the University of California Davis. Jessica Mendoza and Michael Kuo are undergraduate research assistants in the Center for Environmental Policy and Behavior. **For more information contact: Kristin Dobbin,** *kbdobbin@ucdavis.edu*