

The challenge and opportunity of collaborative water governance for environmental justice and implications for the human right to water

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Abstract

Two important trends in U.S. environmental policy are the devolution of decision-making towards regional, collaborative governance and environmental justice. In California, these trends have collided in the implementation of statewide groundwater reform, known as the Sustainable Groundwater Management Act (SGMA). Using in-depth, semi-structured interviews with representatives from small (population < 10,000), low-income communities in Central California, this paper provides an important window into the experiences and perspectives of environmental justice communities participating in collaborative governance. While lack of access, influence and recognition characterize the majorities' experience, signaling a continuation of historic marginalization, new patterns and possibilities also emerge, underscoring the disruptive potential of institutional reform. This "janus-face" of collaborative governance highlights the challenges and opportunities of devolved management for the environmental justice agenda and the complicated role of regional planning and institutions in achieving the state's commitment of safe water for all.

Keywords: Collaborative Governance, Environmental Justice, Equity, Groundwater, Human Right to Water, Institutions, Water Resources Management

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Introduction

Two key trends in environmental policy today are environmental justice and devolved, collaborative natural resource governance. These trends have been especially pronounced in the water sector. Water as a human right has propelled local movements to a global scale leading the UN to finally adopt a formal resolution to the effect in 2010 (Gleick, 1998; Sultana & Loftus, 2013). Almost simultaneously, the search for more appropriate scales and methods to pursue effective integrated water resources management has reshaped the discourse and practice of water management globally (Ansell & Gash, 2008; Berkes, 2010).

Their intersection is a place of both opportunities and challenges. Broadly, the human right to water scholarship recognizes an important role for planning and management in achieving and sustaining safe drinking water. In their review of small drinking water system governance, McFarlane and Harris (2018) emphasize that source water planning and protection is an understudied pathway that could improve performance and prevent contamination or supply loss. This perspective is well aligned with the concept of “anticipatory governance” that is also gaining traction (Quay, 2010).

As state water management is replaced with local watershed initiatives, however, new regional management regimes emerge as the foci of responsibility in this arena (Foster, 2002; Harrington, 2017; Patrick, 2009). Collaborative governance seeks to reduce conflict, integrate stakeholder knowledge, and increase legitimacy among other benefits leading to better decisions and increased acceptance/compliance (Ansell & Gash, 2008; Newig & Fritsch, 2009; Pahl-Wostl et al., 2007). Yet the approach has been highly criticized for failing to engage with questions of power and equity (Brisbois & de Loë, 2016; Harrington, 2017; Purdy, 2012) and has the potential to perpetuate or even exacerbate disparate water outcomes (Franks & Cleaver, 2007; Morrison et al., 2017; Purdy & Jones, 2012). The implicit contradiction between centralizing authority for the human right to water and the devolution of water resources management to the local level raises some important questions about the relative compatibility of these two state tenets (Foster, 2002). What are the prospects of an environmental justice, human right to water agenda at this new scale?

Institutions and equity in collaborative water governance

Collaborative governance is part of a broader trend of beyond-the-state governance that has resulted in a proliferation of new local and regional institutions (Swyngedouw, 2005). Spurred by the global economic and the political restructuring of neo-liberalism, the devolution of ‘governance’ to the regional level has been particularly pronounced for water, where the misalignment of political and ecological boundaries makes re-scaling all the more appealing (Foster, 2002). While broadly defined (and often appearing under many pseudonyms) collaborative governance is widely agreed to be characterized by key characteristics such as face-to-face negotiations, information exchange, the inclusion of diverse stakeholders, shared learning and a consensus orientation (Ansell & Gash, 2008; Brisbois & de Loë, 2016; Sabatier et al., 2005).

Despite, or maybe because of, its broad definition, scholarly and political interest in the topic has grown rapidly (Brisbois & de Loë, 2016; Harrington, 2017). Collaborative governance is considered better suited for the complex environmental challenges, including our increasingly

wicked water management needs (Foster, 2002; Harrington, 2017). It accomplishes this by drawing on local knowledge in a specific geographic setting (Foster, 2002; Lukasiewicz & Baldwin, 2017). The result is argued to be not only more effective and efficient policies, but also increased public acceptability and compliance (Ansell & Gash, 2008; Brisbois & de Loë, 2016; Purdy, 2012). A second, equally as touted line of reasoning in support of collaborative governance is normative: democratic legitimacy. Collaborative governance is said to promote broad representation, build trust and empower stakeholders (Brisbois & de Loë, 2016; Foster, 2002; García & Bodin, 2019; Lukasiewicz & Baldwin, 2017; Pahl-Wostl et al., 2007).

Although collaborative governance's strengths lie in its expansion of the decision-making table, it is abundantly clear that the table is still a contested one. Swyngedouw (2005, p. 2001) notes that “down-scaling is not socially neutral as new actors emerge and consolidate their position in the process, while others are excluded or become more marginal”. Not only do collaborative institutions remain fundamentally shaped by broader patterns of inclusion and exclusion but the universe within which these lines are drawn is neither uniformly accessible nor even known to all relevant actors (Ansell & Gash, 2008; Purdy, 2012; Swyngedouw, 2005). Further, the consensus orientation of collaborative governance can perversely disincentivize diversity among participants (Foster, 2002). Thus, not only can institutional reform perpetuate the existing advantages and disadvantages various actors, but spatial and political reconfiguration has the potential to exacerbate existing inequalities (Foster, 2002; Harrington, 2017).

“Institutional change and policy reform” Kashwan et al. (2019, p. 23) assert “is fundamentally political”. Choosing and designing institutions is a matter of social justice (Paavola, 2007). To avoid replicating the failures that collaborative governance was intended to solve, recent years have seen several ardent calls to politicize collaborative governance (Brisbois & de Loë, 2016; Garrido & Ingram, 2011; Harrington, 2017). To that end, various authors have put forth conceptual frameworks for articulating and investigating the role and effects of power in these governance settings (Franks & Cleaver, 2007; Morrison et al., 2017; Purdy, 2012) and an increasing number of empirical accounts illustrate the challenge of achieving the normative ideals of representation, participation and empowerment (Brisbois, Morris, & de Loë, 2019; García & Bodin, 2019; Patrick, 2009; Shilling, London, & Liévanos, 2009).

Importantly, such critiques are in no way unique to collaborative water governance or even collaborative governance more generally. The shift to Integrated Water Resources Management (IWRM) of which collaborative governance is a central part has also been critiqued for failing to acknowledge its political nature (Harrington, 2017; Molle, 2008) and continuing the status quo (Lubell & Lippert, 2011). More broadly, institutional analysis literature has paid relatively little attention to the issue of power (Clement, 2010; Kashwan et al., 2019). Thus, combining the diagnostic strength of the Institutional Analysis and Development (IAD) framework with more “power-centered approaches” like political ecology offers an important path forward for institutional research overall, and collaborative governance specifically (Clement, 2010).

While there is nothing inherent about collaborative governance that ensures a more democratic or empowering decision-making process (Foster, 2002), this does not negate the possibility of actualizing these ideals. The Ostrom assertion that citizens can effectively organize to build effective and sustainable institutional arrangements bespeaks opportunity (Kashwan et al., 2019). While the opposite has often been true, collaborative water governance also holds significant emancipatory and democratizing potential (Brisbois & de Loë, 2016; Foster, 2002; Harrington, 2017; Kashwan et al., 2019; Purdy, 2012; Swyngedouw, 2005). This

paper seeks to illustrate and explore this “janus-face” of collaborative governance (Swyngedouw, 2005) and its implications for environmental justice using the case of environmental justice community participation in California’s groundwater reform process, SGMA.

Case Context: The Sustainable Groundwater Management Act and the Human Right to Water in California

California passed the Sustainable Groundwater Management Act (SGMA) in 2014, in the midst of an unprecedented drought which saw thousands of domestic wells go dry and necessitated millions in emergency funding expenditures to support struggling community water systems. The unearthing of these latent drinking water disparities, along with a variety of other social, economic and ecological impacts such as widespread and rapid subsidence finally accomplished what had been illusive in the state for more than a century: mandatory groundwater management (Leahy, 2015). SGMA requires sustainable groundwater management, defined by the avoidance of six “undesirable results”, in all 127 of the state’s high- and medium-priority groundwater basins. To accomplish this, local public water and land-use agencies formed Groundwater Sustainability Agencies (GSAs). These GSAs now must write and implement Groundwater Sustainability Plans (GSPs) by 2020 or 2022 depending on if the area is deemed “critically overdrafted” or not.

In keeping with the state’s Human Right to Water law (AB 685, 2012), SGMA includes specific statutory requirements related to the low-income (called Disadvantaged Communities or DACs) environmental justice communities who were the face of the drought. These provisions include listing local DACs on notices of intent to serve as a GSA and considering the interests of DACs “including, but not limited to, those served by private domestic wells or small community water systems”.¹ Further, GSAs are required to “encourage the active involvement of diverse social, cultural, and economic elements of the population within the groundwater basin”.² Such provisions were deemed critical by environmental justice advocates who argued that low-income communities of color were already bearing a disproportionate burden of the costs of non-regulation (C. L. Balazs, Morello-Frosch, Hubbard, & Ray, 2012; C. Balazs, Morello-Frosch, Hubbard, & Ray, 2011; Feinstein, Phurisamban, Ford, Tyler, & Crawford, 2017).

The equity potential of SGMA has been touted not just by environmental justice advocates but also legislators and state agencies who have consistently messaged SGMA as an opportunity for all stakeholders to collaboratively tackle the challenge of sustainable management (see for example DWR guidance document on stakeholder communication and engagement for SGMA). The reality of this in the law’s implementation is less certain. Prior research shows that only 16% of low-income communities of populations smaller than 10,000 people were formally represented in the governance structure of an overlying GSA, indicating continued marginalization from water management decision-making (Dobbin & Lubell, 2019).

Will SGMA make good on the promise of broad stakeholder engagement? To what extent might SGMA be replicating and/or disrupting the historic exclusion of environmental justice communities? What does SGMA mean for the human right to safe, clean and affordable drinking water? The complicated relationship between environmental justice and collaborative governance is explored in this qualitative case study following the methods.

¹ Ca. Water Code Section 10723.2(f)

² CA Water Code Sec. 10727.8(a)

Research Design

Interviews

The author conducted 27 semi-structured interviews in California's San Joaquin Valley between October 2018 and May 2019. Twenty-three of these interviews were conducted with small (population < 10,000 people), low-income (meeting state's definition of Disadvantaged) community representatives consisting of board members and staff of local drinking-water districts, city staff, domestic well owners and other community leaders. Another four interviews were conducted with representatives from environmental justice organizations and organizations providing state-funded SGMA technical assistance for low-income communities. The majority of interviews were conducted one-on-one, a few were conducted in small groups, always with individuals from the same community. The average length of the interviews was 43 minutes. All interviews except three were recorded. For the three non-recorded interviews, detailed handwritten notes were taken instead. A total of 35 individuals participated in interviews.

Community selection and recruitment

Communities were selected through a combination of purposive and convenience sampling using an initial list of 120 communities in the central and South San Joaquin Valley (Tulare Lake and San Joaquin hydrologic regions). These two regions (of ten) account for 50% of all small, low-income communities subject to SGMA and the vast majority of this area is considered to be critically over-drafted placing local GSAs on the expedited timeline for plan submittal by January 2020. To recruit interviewees from each community, outreach targeted city governments, public drinking water systems and/or community-based organizations. Where it was not possible to locate someone involved with SGMA, either because nobody is involved, or such a person could not be identified by the researcher, individuals involved with other aspects of water management and local drinking-water provision were prioritized. The organizations interviewed were identified using the researcher's contacts and referrals by interviewees. Appendix A provides a tabular summary of the 35 interviewees as well as more information about the selection and recruitment process and a discussion of the study sample.

Data Analysis

All recorded interviews were transcribed. The transcripts, and the typed version of handwritten notes from the non-recorded interviews, were then analyzed using the qualitative research analysis software platform Dedoose. Throughout fieldwork, post-interview memos were prepared in the constant comparative method style to identify and integrate key properties and themes (Glaser, 1965). These memos were used to refine and update the interview protocol and became the basis for developing a code-book and coding protocol. A draft code book was piloted on a small sub-set of transcripts and then refined and finalized. The final code book, which included codes related to both content/topic (structural coding) and themes (thematic coding), was used to code all 27 transcripts. The resulting 1,066 coded excerpts are the basis of analysis here. Included quotes have been edited for clarity and anonymity.

Results

Environmental justice community participation in SGMA implementation

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. (Interview 18)

Half (12 of 23) of the communities represented in the interviews are very involved in SGMA implementation, serving on the governing board of their GSA, GSA committees and/or attending meetings regularly. Another seven are attending meetings more sporadically, including two who were currently on or previously on GSA advisory committees but were unable to attend consistently. The remaining five are more minimally or not involved.

This variation, however, did not reflect a significant variation in their level of interest in SGMA or the relative importance interviewees placed on it. Overwhelmingly, interviewees were highly interested in the SGMA process and its potential outcomes. Protecting the “future” of their communities and their critical reliance on groundwater for their drinking water supply were regularly mentioned as reasons interviewees care about SGMA. As one put it: “We can't assume that water is going to be available to us. Just experiencing the drought we've had. If nothing comes down that means people are using the groundwater. There are few of us and more of the animals [cows], who do you think is going to get the water?” (Interview 6). Interviewees from two of the twenty-three communities in the interview pool were less directly concerned about their own water supplies, one based on an advantageous hydrogeologic location and the other because their water supplier also has surface water rights, offering some redundancy in supply. Both of the interviewees, however, noted the importance of SGMA for other rural communities in their region and one of the two was actively attending GSA meetings, primarily out of concern for the potential financial implications of the GSP. Notably, as the earlier quote demonstrates, those communities that either were currently dealing with water quality challenges or had dealt with quality or supply impacts in the past, especially during the recent drought, expressed the most interest in, and concern for, SGMA.

While interviewees unanimously agreed that small and rural communities are not “problem” (meaning groundwater overdraft), they overwhelmingly wanted to, or felt responsible to, be part of the solution: “We're part of the solution to the problem of sustainability... even though we are not incorporated, we're part of the solution” (Interview 26) insisted one public water system manager whose district had actively pursued joining a GSA. “We're doing what we can on our end of it” (Interview 1) said another. Nearly a third of community interviews mentioned existing or future conservation measures, with several noting that they have not lifted emergency measures put in place during the drought. Importantly, for tackling groundwater sustainability, 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.

Perhaps even more so than the potential benefits to communities, fears about the ways SGMA could impact their communities was a clear motivation for community participation. In twenty-two of the twenty-seven interviews, affordability and/or money were co-coded with fears/concerns and/or challenges. Many also worried about potential pumping restrictions, and relatedly, what pumping limitations could mean for planned or future growth. Several worried that GSP requirements might not be compatible with their other operating requirements and constraints such as state and federal drinking water regulations.

A key theme that surfaced across the interviews when discussing “why they were participating in SGMA” or “why SGMA mattered to their community” was community autonomy and self-determination. That GSAs were and will continue to make decisions that will affect environmental justice communities was a constant topic of conversation as was a desire to be part of or make decisions for themselves and a desire to ensure decisions that are made adequately account for community needs. “My priority is to be part of it” (Interview 16), “I felt like we needed to be at the table (Interview 18), and “it’s important to have someone there to make sure we are counted into the final decisions” (Interview 9) all represent common assertions in this regard. One interviewee whose community was actively participating in their GSA contrasted their approach to a neighboring community that had forgone an opportunity to join a GSA, opting instead to let their overlaying irrigation district serve as the GSA for the area:

He’s going to have to be part of it anyways, you know. It’s not going away, were both on wells. We have to pump. He’s not going to be part of it and then they will just tell him. I would rather do it on our terms than do it on somebody else’s terms. We’re all part of this already, we’re trying to do something about it. (Interview 17)

New chapter, same story: The long-shadow of California water management

What is your biggest problem? Farming. Who got all the control? Farmers. So good luck fixing the problem. (Interview 8).

That fears about SGMA were more commonly mentioned than hopes by a margin of almost two to one, provides a discouraging summary of the environmental justice perspective on SGMA implementation. Perhaps even more telling are their expectations of SGMA. The majority of interviewees expressed both hopes and fears about SGMA and were uncertain about how the process would play out in the end or believed that it would be a mixed bag. Twenty-five percent of the interviewees, however, were explicitly negative about SGMA, believing no substantive change would come from the law, with those in charge managing to skirt the issue and make only superficial changes, or that SGMA will not benefit their communities or address drinking water needs. Many of those uncertain about SGMA’s impact expressed similar concerns about who the process would benefit, if the law would be complied with/enforced, and even that SGMA could be a net negative for their community, threatening their drinking-water supply and/or financial solvency. The gap between what many interviewees hoped SGMA could do and what they expected it would do can be explained by three primary challenges: Lack of access, lack of influence and lack of attention to drinking water interests and recognition.

Lack of access

Many interviewees made a direct connection between decision-making authority in their local GSA and financial resources. Most, but not all, of the communities with formal governing representation financially contributed to the GSA for that authority. In numerous cases, the decision of how to participate was explicitly linked back to a desire or need to minimize costs. For example, several interviewees reported that forming their own GSA was not financially viable, leading them to either join up with a collaborative regional effort or cede authority to one or more other local agencies. For one community, the choice to take a non-voting role in the GSA rather than a voting one saved the local drinking-water district \$8,000. Their decision to

take a non-voting role was also informed by a concern that they had neither staff nor a board member that would be able to consistently attend the GSA meetings.

Lack of board and staff capacity is a significant barrier among communities. Those community drinking-water districts with staff participate more actively than those without. An absence of anyone being directly responsible for representing the community in water management poses an even larger hurdle for those communities without public water systems. Even where a community did have drinking-water staff, in several instances staff noted that other water priorities, like large capital projects for addressing quality challenges, left them little or no time to engage with longer-term regional planning efforts. Several interviewees reported that they or someone they knew had to resign or had been threatened to be removed from a GSA board or committee position due to challenges attending meetings.

Language barriers, transportation, obtaining time off work, the timing of meetings (which are primarily held during the work day) and an inability to tap in-house expertise or hire consultants all were also raised as significant challenges, particularly for those who were not participating or were participating less than they would like to be. One interviewee recounted being asked why more low-income communities didn't participate:

[L]ook 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. (Interview 2)

Having several monthly SGMA meetings, and in one case seven, greatly compounds this issue and multiple interviewees felt that not attending all of the board and committee meetings put communities at a distinct disadvantage.

Even when they can get to the meetings interviewees reported feeling less prepared than their counterparts. "There's times where I'm just trying to catch up on the agenda when somebody else might have already reviewed it for a few days, you know" (Interview 4). "Farmers have time to read up on issues, get into the technical language and so they dominant the conversation... everyday people from community have jobs, they don't have time to do that." (Interview 5).

Relatedly, that SGMA was a "highly technical" process was cited regularly as a reasons communities struggled to get and stay involved. At best, the complexity of GSA meetings is a challenging but welcome learning opportunity for residents, at worst it is a frustrating and disempowering. Several either had stopped participating because they felt like they had nothing to offer or knew someone who had. That meetings and presentations are often rushed exacerbates this challenge: "They'll rush through these three graphs and be like any questions? And I'm like, what did you say?" (Interview 25).

Last minute canceling and rescheduling of meetings, non-Brown act compliant (California's public meeting law) committee meetings and closed sessions were all reported as concerns about the relative "openness" of the SGMA process. In meetings, several interviewees expressed additional concerns about transparency. In many instances, meetings felt less like a forum for open-discussion and collaboration and more like a space for standardized GSA business like bill-paying and announcements, raising the question, where is the actual water management decision-making happening? "It's just that this cloak of non-transparency. In all those SGMA meetings there was always a meeting after the meeting [where the big districts] sort things out" (Interview 27). Various interviewees related this lack of transparency to what they

deemed the relative inexperience of the primarily agricultural-oriented water districts with public outreach and involvement.

[T]heir public meetings just don't seem to be as... how do I put it? They're posted, they're disclosed, they're published in the newspaper and all that stuff but compared to what we do, tend to do, with stuff like that or the county does, it doesn't seem as welcoming or well known that those meetings are being held (Interview 12).

Several interviewees remarked that they lacked communication and information about the process. While many communities were outreached to by other local water agencies, the county or technical assistance providers, many were informed about SGMA after GSAs had already been formed and one had received their first notice in 2018, three years after SGMA took effect. Several appealed for more communication from GSAs. When asked how SGMA could work better for small communities one interviewee responded “we get treated equally to the big companies. Granted we don't have the money like them, but we should have the information they do and when they get it” (Interview 14).

Related to this was a common concern about lack of access to the data and information being used to develop GSPs. Not being provided materials ahead of meetings, and in some cases even at the meetings, limited opportunities to provide feedback. Multiple people actively involved in GSA meetings reported having seen none or very limited portions of the data being relied on.

There is no doubt in my mind there's a separation between the people who are in the JPA [voting members] and the people who are not. Like they all know that... know something that I don't. Like they walked into the meeting having an idea of what the consultants are doing, what the models are showing. I think you asked is it a transparent process? I would say no. Like the data stuff, I have no clue but I'm sure they know. The members know (Interview 8).

Many were also skeptical of the quality of the data being employed and the validity of modeling results. That you can make a model “say anything you wanted it to” was a popular refrain.

Lack of influence

Representation and an ability to influence, directly or indirectly, GSA decisions constitutes the second shared challenge among communities. While technically many of the interviewed communities had eligible local agencies authorized under the act to become or join a GSA, in reality, as has already been noted, representation was often financially, managerially or politically infeasible. Communities on private domestic wells, served by public water systems connected to nearby cities or managed by regional surrogates such as a county were disadvantaged by the statutory language of SGMA delegating the authority to become GSA to local water or land use agencies. But even where a community benefited from having such an agency and desired to participate, representation was often not forthcoming. Various community drinking water districts and even small cities reported either not being informed of GSA negotiations until after they had taken place and been resolved, or participating in those negotiations but not feeling like their membership was an option. Notably several communities found themselves split among multiple GSAs through this process, doubling or even tripling the effort and coordination they would need to expend on SGMA.

One interviewee remarked “none of the DAC's have any representation at the voting level. We can go as our voice but not vote... I doubt we'll ever see actual representation” (Interview 2). For some, like that interviewee, minimal to no representation was at least

defensible, if not acceptable, based on their negligible impact to groundwater pumping. The same individual continued “but like I said, we don’t even amount to anything so... I mean a guy turns his well on and turns it right off, he is using more water than some communities use in a year... We’re like a flea on the tail. We don’t even help wag the tail or anything”. Others disagreed, either arguing that the GSA had no legitimacy to interfere with the operations of an independent public water system providing domestic water and/or that the environmental justice communities had potentially the most to lose if SGMA implementation failed or was inadequate. The irony of paying someone to tell you what you can and cannot do was noted by more than one person.

Overall, those with formal representation were not, however, necessarily more likely to feel influential. Many were uncertain, or pessimistic, about how much of a difference one vote would make, especially where a community represented the only dissenting voice. As one interviewee put it: “majority rules”. The reality of being a non-powerful actor, even with a vote is well-articulated in a quote from another interviewee discussing their community voting seat on the GSA “it’s kind of weird because like we’re a part of it but whoever’s attending, the board doesn’t really ask you know, so it’s kind of... we’re a part of it but were not a part of it per se” (Interview 17).

Who is represented, both at the board and committee level was equally as frustrating for many. The preponderance of “farmer” and “agricultural” interests in many GSAs on both was remarked by many. Concern over special interests driving GSA and GSP decisions were common:

“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 priority. Who’s representing the small people or the city or what not? So yea, the politics play big time” (Interview 4).

Put another way by another interviewee talking about their local GSA board members “what’s best for them probably is not going to be best for everybody” (Interview 17). One interviewee could not fathom why irrigation districts were controlling the process when they themselves don’t pump groundwater, while groundwater pumping districts like theirs played an advisory role.

The skew in representation sometimes resulted in meetings that felt uncomfortable or even hostile. “I’m afraid to talk because, I’m you know, I feel intimidated” (Interview 18). Multiple interviewees mentioned feeling this way in meetings, often related to the preponderance of the “technical class” (consultants and professionals) as well as other stakeholders with different viewpoints. At least three explicitly mentioned self-censoring their comments while attending GSA meetings.

These findings are related to a broader concern of many that they lacked, either individually or as a community, the expertise to meaningfully contribute to SGMA decision-making. Even where they had board seats or stakeholder/advisory committee positions, many interviewees worried they were unable to leverage those positions effectively:

“Knowledge is problem because when we go to the meeting I don’t quite understand what’s going on. I don’t understand what the GSA is trying to do. So we are not taking full advantage of it” (Interview 16).

Whether or not it affects the meeting atmosphere, however, one thing nearly all interviewees were united on was the relative disparity in power between communities and other stakeholder interests. That “the farmers are really the ones deciding all this” was a common

sentiment. Such feelings led some to question the utility of participating at all. When asked to explain why they don't go regularly to their local GSA meetings one interviewee responded "they're the ones with the most power. I mean, let's face it, they are the motor that's driving this thing. And you know, maybe in other places where they have bigger communities but out here... all these small communities, we really don't have a big impact on it" (Interview 4). This issue of powerlessness raised many of the concerns about autonomy cited previously. "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?" (Interview 20). As is evident in this example, concerns about lack of power are intimately related to community concerns about the distribution of costs and benefits of SGMA.

Whether intentionally or not, many felt that "local control" had the effect of disadvantaging community water interests in the implementation process. While only a few interviewees went so far as to say they did not want local control, and many supported devolved management, that local control empowered the most powerful local interests was a common observation. A surprising number of interviewees wished that the state had, or suggested that they do, provide more in the way of guidelines, expectations and recommendations for GSAs to facilitate the SGMA process.

Lack of attention to drinking water interests and recognition

Intimately related to the lack of representation for, or influence of, environmental justice communities in GSAs is a broader pattern of failing to acknowledge drinking water stakeholder interests in the SGMA process at all. All interviewees expressed that drinking water considerations, particularly water quality and domestic wells, were either absent from GSA deliberations or a minimal part of the conversation. When asked how drinking water was being dealt with by their GSA, the majority said that it wasn't. "I think it should be prioritized more. I think it should be seen at least equally to farming, right, but that is not the lead discussion. I mean, we're in the valley right? So I wasn't surprised really but I was hoping that these things would be treated equally because that's the way they should be treated" (Interview 3.22.2).

When specifically asked if they felt that their GSA was attuned with or attentive to community groundwater needs, many were either negative or uncertain. Even among those who felt they were, the endorsement was notably tacit. In one case an interviewee who was extremely positive about their GSA and SGMA implementation generally remarked:

"We're not invisible. They mention us and [other small communities] in the area... they are aware that they have a responsibility to the DACs... So I think they're considerate of it. I know they don't spend a lot of time on it. I'm sure they don't, you know, they don't lay asleep at night or lose sleep at night thinking about it, but I do believe they're trying to be considerate of the DACs" (Interview 2).

Several participants noted that when it comes to rural communities, proactive investment to avoid negative impacts was not the norm, with one interviewee comparing the neglect of domestic well-owners to the fact that, in their opinion, "people have to get hit by a car for [the county] to put a stop sign or consider crosswalks or speedbumps or something" (Interview 7). Indeed, historic neglect and disinvestment on the part of counties responsible for the unincorporated communities, and elected officials generally, was a broad theme across the interviews.

Lack of outreach and communication left some feeling like nobody cared if they attended meetings or wanted them there. This sense of being overlooked was not new or unique to SGMA but rather part of a pattern of decades of water management. This relates to an important point by multiple interviewees: SGMA is not the problem. Rather SGMA is simply a demonstration of, or according to some, a funnel for, the broader problems of neglect and systematic exclusion of environmental justice communities. The historic legacy of how SGMA meetings play out was mentioned by several interviewees who drew parallels to racism and disregard in other water and non-water related meetings alike.

Such patterns are an important commentary on California water management broadly but also for SGMA itself. Repeated interviewees raised the point that SGMA was not created by, nor for, environmental justice communities. Rather agricultural interests were behind the crafting of the “local control” design of SGMA in the first place.

“I’m thinking why would the state require us to pull all this together? And I’ve asked that question and I was told because farmers went and said we want local control and so the state gave them local control first under SGMA... We weren’t at the table for that, you know, the little guys weren’t. We weren’t at the table because we didn’t even know about it. We didn’t know about it until it was already adopted” (Interview 18).

Or as another interviewee put it “communities are always playing catch-up, right? You’re working with stakeholders that probably were involved in the drafting of this law, so they know it very intimately, they know it from beginning to end. They got to design it in a way that would minimize the impact to them.” (Interview 19). Notably about an equal number pointed to the Disadvantaged Community stipulations in the law as an indication of their important role in SGMA, with several indicating that these statutes helped elevate their role locally as will be discussed in the next subsection.

Progress at the margins: New stories and emergent possibilities

While the majority of interviews were predominantly ambivalent or negative about SGMA implementation, five were explicitly positive. Three of these communities were formally represented in GSA governance. One of the other two had a separate legal agreement with the GSA to address community concerns and establish a base for a working relationship between the independent public water system pumping groundwater and the local GSA. Among these five, and drawing on aspects of the more neutral cases as well, a counter narrative to the description presented previously emerges.

For several communities, SGMA has increased their sense of autonomy and improved their ability to shape their own future. Those that had pursued and achieved representation were unanimously glad they did so. “We feel empowered, that’s the way we feel that, because now we can make the decision and probably one vote won’t be a lot of difference. But yes, we are interested in making sure that everything is done” (Interview 18). Besides actively pursuing formal governing representation, other communities sought assurances in the form of separate legal agreements. Such agreements were an important expression of self-determination and resistance for otherwise unrepresented communities: “We wanted to to make sure that [we were] there in an agreement to where it could be challenged in court. To make sure we’re counted, you know, because otherwise we were just going to have to assume that they were going to keep us in the loop and we didn’t have any way of knowing that that would be the case.” (Interview 6).

GSA with diverse representation were overwhelmingly more approved of by environmental justice stakeholders. When describing why they had no concerns about SGMA implementation a small community water manager explained: “because it’s quite a variety of... quite a lot of different people from different backgrounds working together, it’s not one group with a special idea or agenda of their own that they want to push through” (Interview 3). Similarly, another interviewee compared their more favorable GSA to a neighboring one saying “they care about one person: their farming operation. I can see if you get the right set of circumstances with the board and a manager and stuff and they’ll just forget about everybody but just a select group” (Interview 2). Diversity in representation was also desirable to many at the committee level.

Many communities discussed having attempted, wished they could have or purposefully linking up with other small communities to build power in numbers. Similarly, several pursued GSAs with larger cities, believing they would promote or protect drinking water interests. One interviewee described how they hoped their GSA could leverage its’ status to their benefit:

Nobody pays attention to [our community]. Yeah, unless for election time. That’s just the truth. But belonging to a small GSA, we are less people to go through, less red tape, we go straight to the source and we have a vote. So we have a voice there, and I believe this is going to help us a lot... A small GSA will help us to be able to provide for the needs of the town without having to go to the county or going to the state... Farmers with more land, with more acreage, have more rights than us small ones. It’s always been like that. But if we try to work with GSAs, I think that will empower small groups to have a bigger impact into the SGMA plan (Interview 16).

Even where formal representation was lacking and a clear special interest was driving the SGMA process, examples of progress for including environmental justice stakeholders were still evident. Several interviews provided examples of community participants raising questions or concerns that subsequently shaped future conversations or decisions and being able to add relevant information about drinking water into conversations where it had previously been lacking. Technical Assistance provider participation and advocacy in local meetings was noted as especially useful in this regard. In other cases, existing gaps were reframed as potential solutions for better integrating small and rural communities into the planning process. While the lack of technical knowledge as a barrier was addressed by many, one interviewee turned this challenge on its head, adamantly advocating for capacity building among communities throughout their interview:

“[I]f we prepare ourselves to be able to go there and have a real voice, a real concern, then we will be able to argue our point. Otherwise, we won’t be able to... we need to educate ourselves in order to take advantage of this GSA” (Interview 16).

For some, the benefits of participation were far reaching. Several highlighted how SGMA increased the visibility of their community in their region. “It’s put [our community] on the map. It’s just brought [us] to the attention of these larger water agencies, ‘hey, there really is a place out there and they make drinking water and they care about water’” (Interview 18).

Finally, just as the most pressing challenges for environmental justice communities in SGMA had long histories in California water management, several facilitating factors in the SGMA process also point to broader changes regionally, and perhaps even across the state. Several interviewees noted generational changes in their boards marked a transition from a more passive and isolationist perspective to a more forward looking and collaborative orientation. Changes in county boards of supervisors and staff to being more connected and accountability to

rural communities were also noted as marked (albeit slow) improvements. The need and potential for further improvements in this vein was clear: “We can’t keep relying on other people to take care of us, we have to do what we have to do to get in there to help ourselves. And until we do that we’re going to be stepped on” (Interview 10). The important role that the recent drought, too, had played in underscoring the importance of regional planning and collaboration also, many noted, set the stage for meaningful progress in a way that was definitely new.

Discussion and Conclusion

Those that fare better in these types of processes, are those that have the knowledge, the expertise, the resources and the political will to be part of it. Until we help communities obtain that and are on equal playing fields with other stakeholders, I think it’s always going to be a challenge... we need to think about how to sustain community participation over a long period of time and not put the burden on volunteers to do that, not to say ‘well, figure out how you participate and we’ll just create a process where you can come to meetings if you’re available and maybe what you say will be included or not’ (Interview 19).

The preceding narrative provides a clear parallel to the process of marginalization by collaboration documented by Shilling et al (2009) in the CALFED program. At the core of this “nested marginalization” lies a largely, although not uniformly, undemocratic and inaccessible decision-making process. Together the interviews provide strong evidence of inequitable access to collaborative governance including the pivotal role of resources in constraining participation including explicitly prohibiting communities from taking a decision-making or leadership role (Diduck & Sinclair, 2002; García & Bodin, 2019; Lukasiewicz & Baldwin, 2017; Shilling et al., 2009). The results also highlight other critical mechanisms of exclusion including the “professionalization” of these public forums, language barriers, meeting times etc. Even when communities surmount these barriers, many lack meaningful representation preventing them from having an influential vote or even voice in the process and face a process that can be so opaque that participants question the value of being there at all.

Despite all these challenges, however, the interviews also underscore the disruptive potential of institutional change. That some have had not just positive, but empowering experiences with SGMA implementation hints at the hope many still had for improvement. Even the most cynical of interviewees had suggestions on how the SGMA process could and should be improved. These suggestions, including financial support for community participation in meetings and independent consultants, translation, facilitation etc. are all well-aligned with existing literature on collaborative governance (Ansell & Gash, 2008; Brisbois & de Loë, 2016; García & Bodin, 2019; Lukasiewicz & Baldwin, 2017). In theory, we know that such things are critical to successfully implementing collaborative decision-making, in practice, we clearly see that marginalized stakeholders continue to do without.

The pattern of stakeholders appealing to the state for redress too is aligned with past findings (Cole, 1998). Whether they thought it was likely or not, there was a clear desire across most of the interviews for stringent state enforcement of SGMA requirements. That the state could or should provide more guidance around the implementation process, especially for enforcing public participation and transparency was also a commonality. As was the desire for the state to step up protections for drinking water, for example by requiring mitigation for adverse drinking water impacts or incentivizing drinking-water or community-oriented projects

be included in GSPs. In retrospect, several thought that more should have been done to require community representation in GSAs.

Theoretically, these suggestions could all be implemented. And if they were the preceding narrative indicates that the SGMA process might be markedly improved from an environmental justice perspective. But the fundamental disparities in power between stakeholders and diverse geographies raise more fundamental questions about SGMA's ultimate potential to meet community needs, at least uniformly across the state. While some environmental justice communities felt respected and adequately accounted for in their local GSAs, the majority did not and many worried their access to drinking-water might actually become more precarious under the new management regime. Thus, we see a clear illustration of the janus-face of collaborative governance, with the advantage currently going against environmental justice communities in California groundwater reform. But the challenge of this dialectic is not just the very real possibility of stagnation or retrogression, but also that collaborative governance invites this show-down over and over and over again, in diverse settings, and at least in the case of SGMA, simultaneously. In seeking to capitalize on context, the collaborative governance processes is also very clearly at the mercy of it.

There is a clear need for broader theorization about the role of governance in achieving human right to water (Franks & Cleaver, 2007) especially at this increasingly important new scale (Foster, 2002). Short-term, collaborative governance raises serious questions about how key social contracts such as the human right to water can be maintained in the plurality that is devolved management. Long-term these findings call for future research on the extent to which, if local context is your problem in the first place, various procedural and distributive fixes can be implemented to force a status change. Understanding the complex interactions between water governance scales as well as between water and non-water governance will yield important insights. Meaningful shifts will not likely be limited to one program, or one scale, but rather come from a broad range of strategies and actors both inside and beyond the state.

References

- Ansell, C., & Gash, A. (2008). Collaborative Governance in Theory and Practice. *Journal of Public Administration Research and Theory*, 18(4), 543–571. <https://doi.org/10.1093/jopart/mum032>
- Balazs, C. L., Morello-Frosch, R., Hubbard, A. E., & Ray, I. (2012). Environmental justice implications of arsenic contamination in California's San Joaquin Valley: A cross-sectional, cluster-design examining exposure and compliance in community drinking water systems. *Environmental Health*, 11(1), 84.
- Balazs, C. L., & Ray, I. (2014). The drinking water disparities framework: On the origins and persistence of inequities in exposure. *American Journal of Public Health*, 104(4), 603–611.
- Balazs, C., Morello-Frosch, R., Hubbard, A., & Ray, I. (2011). Social Disparities in Nitrate-Contaminated Drinking Water in California's San Joaquin Valley. *Environmental Health Perspectives*, 119(9), 1272–1278. <https://doi.org/10.1289/ehp.1002878>
- Berkes, F. (2010). Devolution of environment and resources governance: Trends and future. *Environmental Conservation*, 37(4), 489–500.

- Brisbois, M. C., & de Loë, R. C. (2016). Power in collaborative approaches to governance for water: A systematic review. *Society & Natural Resources*, 29(7), 775–790.
- Brisbois, M. C., Morris, M., & de Loë, R. (2019). Augmenting the IAD framework to reveal power in collaborative governance—An illustrative application to resource industry dominated processes. *World Development*, 120, 159–168.
- Clement, F. (2010). Analysing decentralised natural resource governance: Proposition for a “politicised” institutional analysis and development framework. *Policy Sciences*, 43(2), 129–156.
- Cole, L. W. (1998). The theory and reality of community-based environmental decisionmaking: The failure of California’s Tanner Act and its implications for environmental justice. *Ecology LQ*, 25, 733.
- Diduck, A., & Sinclair, A. J. (2002). Public involvement in environmental assessment: The case of the nonparticipant. *Environmental Management*, 29(4), 578–588.
- Dobbin, K., & Lubell, M. (2019). Collaborative Governance and Environmental Justice: Disadvantaged Community Representation in California Sustainable Groundwater Management. *Manuscript Submitted for Publication*.
- Feinstein, L., Phurisamban, R., Ford, A., Tyler, C., & Crawford, A. (2017). Drought and Equity in California. *Pacific Institute*.
- Foster, S. (2002). Environmental justice in an era of devolved collaboration. *Harv. Envtl. L. Rev.*, 26, 459.
- Franks, T., & Cleaver, F. (2007). Water governance and poverty: A framework for analysis. *Progress in Development Studies*, 7(4), 291–306.
<https://doi.org/10.1177/146499340700700402>
- García, M. M., & Bodin, Ö. (2019). Participatory water basin councils in Peru and Brazil: Expert discourses as means and barriers to inclusion. *Global Environmental Change*, 55, 139–148.
- Garrido, A., & Ingram, H. (2011). Beyond universal remedies for good water governance: A political and contextual approach HEIEN INGRAM. In *Water for Food in a Changing World* (pp. 259–279). Routledge.
- Glaser, B. G. (1965). The constant comparative method of qualitative analysis. *Social Problems*, 12(4), 436–445.
- Gleick, P. H. (1998). The human right to water. *Water Policy*, 1(5), 487–503.
- Harrington, C. (2017). The political ontology of collaborative water governance. *Water International*, 42(3), 254–270.
- Kashwan, P., MacLean, L. M., & García-López, G. A. (2019). Rethinking power and institutions in the shadows of neoliberalism:(An introduction to a special issue of World Development). *World Development*, 120, 133–146.
- Leahy, T. C. (2015). Desperate times call for sensible measures: The making of the California Sustainable Groundwater Management Act. *Golden Gate U. Envtl. LJ*, 9, 5.

- Lubell, M., & Lippert, L. (2011). Integrated regional water management: A study of collaboration or water politics-as-usual in California, USA. *International Review of Administrative Sciences*, 77(1), 76–100.
- Lukasiewicz, A., & Baldwin, C. (2017). Voice, power, and history: Ensuring social justice for all stakeholders in water decision-making. *Local Environment*, 22(9), 1042–1060.
- McFarlane, K., & Harris, L. M. (2018). Small systems, big challenges: Review of small drinking water system governance. *Environmental Reviews*, (999), 1–18.
- Molle, F. (2008). Nirvana concepts, narratives and policy models: Insights from the water sector. *Water Alternatives*, 1(1), 131–156.
- Morrison, T. H., Adger, W. N., Brown, K., Lemos, M. C., Huitema, D., & Hughes, T. P. (2017). Mitigation and adaptation in polycentric systems: Sources of power in the pursuit of collective goals. *Wiley Interdisciplinary Reviews: Climate Change*, 8(5), e479.
- Newig, J., & Fritsch, O. (2009). Environmental governance: Participatory, multi-level—and effective? *Environmental Policy and Governance*, 19(3), 197–214.
- Paavola, J. (2007). Institutions and environmental governance: A reconceptualization. *Ecological Economics*, 63(1), 93–103.
- Pahl-Wostl, C., Craps, M., Dewulf, A., Mostert, E., Tabara, D., & Taillieu, T. (2007). Social Learning and Water Resources Management. *Ecology and Society*, 12(2).
<https://doi.org/10.5751/ES-02037-120205>
- Patrick, R. J. (2009). Source water protection in a landscape of ‘New Era’ deregulation. *The Canadian Geographer/Le Géographe Canadien*, 53(2), 208–221.
- Purdy, J. M. (2012). A framework for assessing power in collaborative governance processes. *Public Administration Review*, 72(3), 409–417.
- Purdy, J. M., & Jones, R. M. (2012). A framework for assessing power in collaborative governance processes. *Public Administration Review*, 72(3), 409–417.
- Quay, R. (2010). Anticipatory governance: A tool for climate change adaptation. *Journal of the American Planning Association*, 76(4), 496–511.
- Sabatier, P. A., Focht, W., Lubell, M., Trachtenberg, Z., Vedlitz, A., & Matlock, M. (2005). *Swimming Upstream: Collaborative Approaches to Watershed Management*. MIT Press.
- Seawright, J., & Gerring, J. (2008). Case selection techniques in case study research: A menu of qualitative and quantitative options. *Political Research Quarterly*, 61(2), 294–308.
- Shilling, F. M., London, J. K., & Liévanos, R. S. (2009). Marginalization by collaboration: Environmental justice as a third party in and beyond CALFED. *Environmental Science & Policy*, 12(6), 694–709.
- Sultana, F., & Loftus, A. (2013). The right to water: Prospects and possibilities. In *The Right to Water* (pp. 19–36). Routledge.
- Swyngedouw, E. (2005). Governance innovation and the citizen: The Janus face of governance-beyond-the-state. *Urban Studies*, 42(11), 1991–2006.

Appendix A. Supplemental Methods: Selection, recruitment and discussion of sample

Participants were selected through a combination of purposive and convenience sampling. An initial list of small low-income communities, hereafter referred to as environmental justice communities, located partially or fully within SGMA-impacted groundwater basins was developed using ArcMap. In order to more easily facilitate fieldwork, this list of 241 communities was then narrowed to only those 120 communities in the central and South San Joaquin Valley (Tulare Lake and San Joaquin hydrologic regions).

From this sample pool a purposive random sample of 17 communities was generated based on key variables including GSA type, community Median Household Income, population, incorporation and GSA eligibility (Dobbin & Lubell, 2019). Using this list as a starting point, outreach was conducted via email and phone. To fill gaps created by non-participation, non-response, or in a few cases, an inability to find anyone to contact at all, an iterative process of convenience sampling using both personal and professional networks as well as cold-calling paralleled this process. Table one summarizes the completed interviews. Throughout the recruitment and interviewing stages, the sample distribution was regularly assessed to ensure as adequate of representation and diversity among communities as possible (Seawright & Gerring, 2008).

Nonetheless, non-participation, non-response and challenges contacting certain communities from the sample pool necessarily mean that this sample is biased. Indeed, the nature of the research question and existing research on the challenges and limitations to marginalized actor participation in collaborative governance generally (Ansell & Gash, 2008; Purdy, 2012; Swyngedouw, 2005), and SGMA specifically (Dobbin & Lubell, 2019), anticipate this to be the case. As such, this bias is an important source of “data” and is extremely germane to the line of inquiry.

All outreach efforts and contacts were carefully logged. A few clear patterns are apparent from these records and are worth noting. First communities without a public water system, that is communities reliant on private domestic wells or unregulated state small systems (systems with less than 15 service connections) were particularly challenging to reach. Only 3 of the 23 interviews, or 13%, fall into this category whereas, 17.5% of such communities were identified in the initial list, which is still missing many of the smallest and most sparsely populated communities of this type due to the limited resolution of state and federal data.³

Second, response and participation was biased to those public water systems with staff, a challenge which clearly demonstrates the well-documented capacity limitations of many small community water systems (C. L. Balazs & Ray, 2014; McFarlane & Harris, 2018) and the determinative relationship of capacity and participation in collaborative governance (Ansell & Gash, 2008). Third, response and participation was biased to the relatively higher-income communities, that is those with a fourth quartile Median Household Income (MHI) among California DACs. This mirrors the disparity in formal representation by MHI documented by Dobbin and Lubell (2019).

Finally, while it is not possible to verify given the nature of non-response bias, cross-referencing GSA meeting notes with non-responses indicates that those not actively participating

³ PolicyLink has developed an effective methodology for identifying and mapping disadvantaged unincorporated communities, however, such an undertaking was beyond the scope of this particular project.

in SGMA implementation may have been less likely to respond to the authors repeated requests.⁴ An important counter point to this speculation, however, is that multiple interviewees included in this study were not actively attending many or any GSA meetings. Some reported following the process by other means, and a few were interested in getting involved but had not yet done so for various reasons. Thus, a lack of physical participation in the SGMA process should not be simply interpreted as a lack of interest nor should non-respondents be necessarily assumed to be uninvolved in implementation.

Table 1. Interviewees by role/position

Role/position	Number of individuals interviewed
City/Public Water System staff	14
Elected board member/city councilmember	6
Resident/community leader/community organization representative	11
Environmental justice organization/technical assistance provider representative	4
Total	35

⁴ Notably few GSAs list all members of the public in attendance at their meetings meaning that these records are not very good records of broader stakeholder participation and the ability to cross-reference was limited to only a few areas.