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Uncharted groundwater: How a California county made sense of a mandate to manage groundwater

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Abstract: In this paper, I offer an interpretive account of how county staff and elected officials engaged in organizational sensemaking to co-construct a collective response to a mandate to manage groundwater. In 2014, the California state legislature signed the Sustainable Groundwater Management Act (SGMA). Under SGMA, county governments were placed in the unique position of being the presumed managers for un-districted portions of groundwater basins. Historically, counties in California were not directly involved in groundwater management and thus individual county organizations had to decide whether or not to assume their new authority. Drawing on ethnographic fieldwork, I present an initial account of how staff and elected officials in one county made sense of their role as potential groundwater managers. By highlighting the lived experience of policy making processes during periods of organizational change, I illuminate the sometimes messy process and contested understandings attached to “sensible” and “rational” policy pathways.

Introduction: A role for county government in managing California’s depleted aquifers?

In 2014, the California state legislature approved the Sustainable Groundwater Management Act (SGMA) with the goal of addressing decades of groundwater depletion. Prior to SGMA, the state legislature and state regulatory agencies made attempts at correcting overdraft by providing financial and technical support for local decision-makers to develop groundwater management plans. These voluntary approaches largely failed (Leahy 2015), resulting in the designation of 127 groundwater basins in a state of overdraft (Department of Water Resources 2016). The passage of SGMA

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signaled a new approach to groundwater governance and management, one which held the tension between local control and state oversight. Under SGMA, local agencies were granted new power and authority to regulate groundwater by developing basin-wide, groundwater sustainable plans (GSPs). However, unlike prior approaches, local agencies were held accountable by the state and could forfeit local control of groundwater if they didn't comply with the regulatory requirements of SGMA.

Existing public agencies had two years (from 2015-2017) to form new political entities called groundwater sustainability agencies (or GSAs). Eligible agencies included single purpose districts, such as irrigation districts, water districts, water storage districts, and community services districts, to name a few. General purpose governments (I.e. cities and counties), were also eligible to become GSAs. Unlike cities and the single purpose districts mentioned above, the SGMA legislation placed counties in a unique position. Under SGMA, groundwater use in un-districted land (meaning acreage that is not covered by another public agency) defaulted to the county to manage (CWC §10724). Most counties in California (as is the case across the United States) have not directly participated in groundwater governance and management. Importantly, counties were not compelled by the state to participate in groundwater governance; rather, they had to affirm their willingness to represent un-districted land. Once SGMA was signed into law county governments had to make the choice to either become independent GSAs, partner with other agencies to form multi-agency GSAs, or remain uninvolved in groundwater governance. Beginning late in 2014/early 2015, many of the 16 counties with un-districted land in overdraft basins began placing SGMA on their monthly board of supervisor meeting agendas to deliberate and decide how their county would respond to SGMA's mandate.

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In this paper, I offer an ethnographic account to illuminate how county boards of supervisors, planners, and administrators in one California County interpreted their roles in the SGMA legislation within the context of formal deliberation and decision-making processes. As this research develops, I will include one or two more counties to conduct a comparative ethnographic analysis. As an ethnography of process, I pay careful attention not only to the decisions county government made with respect to their involvement in SGMA, but to the ways individuals with situated identities, embedded in the county organizational structure made sense and meaning of their roles throughout the process. By doing so, I aim to shine a light on the intra-organizational dynamics and complexities that influence how and why organizations engage in collective action—an area underexplored in the institutional collective action literature (Kim et al. 2020). County governments are increasingly taking on new roles and emerging into new fields of governance, including taking a more direct role in environmental governance (Pink-Harper 2018). I expect findings from this research will help us better understand the micro-level processes that influence the decisions county elected officials and professionals adopt.

This paper unfolds as follows: I begin with an overview of how the focus for this research evolved in an iterative, inductive manner through interaction with county staff and elected officials. By doing so, I highlight the particularities of counties in the SGMA process from my firsthand perspective. In the section that follows, I build out from these empirical understandings by reviewing key aspects of organizational sensemaking, which I employ as an interpretive framework for understanding the sensemaking processes county staff and elected officials engaged in to determine appropriate responses to SGMA. After a brief outline of my methods, I present early findings from an examination of a single case, a county located in the Central Valley of California. I end with a brief discussion of my findings and outline a framework for developing the research further.

Research background and context

I became interested in the role of county implementation of SGMA while doing ethnographic fieldwork for a larger research project examining inter-agency coordination. For my fieldwork, I spent several months in 2019, travelling throughout the San Joaquin Valley in Central California, interviewing GSA staff and attending public meetings. During interviews with county staff and officials as well as more informal interactions with county representatives at public board meetings, committee meetings, and public workshops, I began to appreciate some of the particularities of the county's role in SGMA.

First, because county jurisdictions tend to cover multiple groundwater basins, the county staff and board of supervisors I spoke with were often participating as member agencies in multiple GSAs and/or were acting as independent GSAs and were participating on coordination committees to ensure integration across planning activities. The diversity of approaches counties adopted in response to SGMA is illustrated in Figure 1. While some counties adopted a uniform approach by either becoming independent GSAs (depicted in the figure as the beige colored counties) throughout their jurisdiction or by partnering with other agencies to form multi-agency GSAs (depicted in the figure with the mauve color), the majority adopted a mixed approach (depicted in the figure with the brown color).

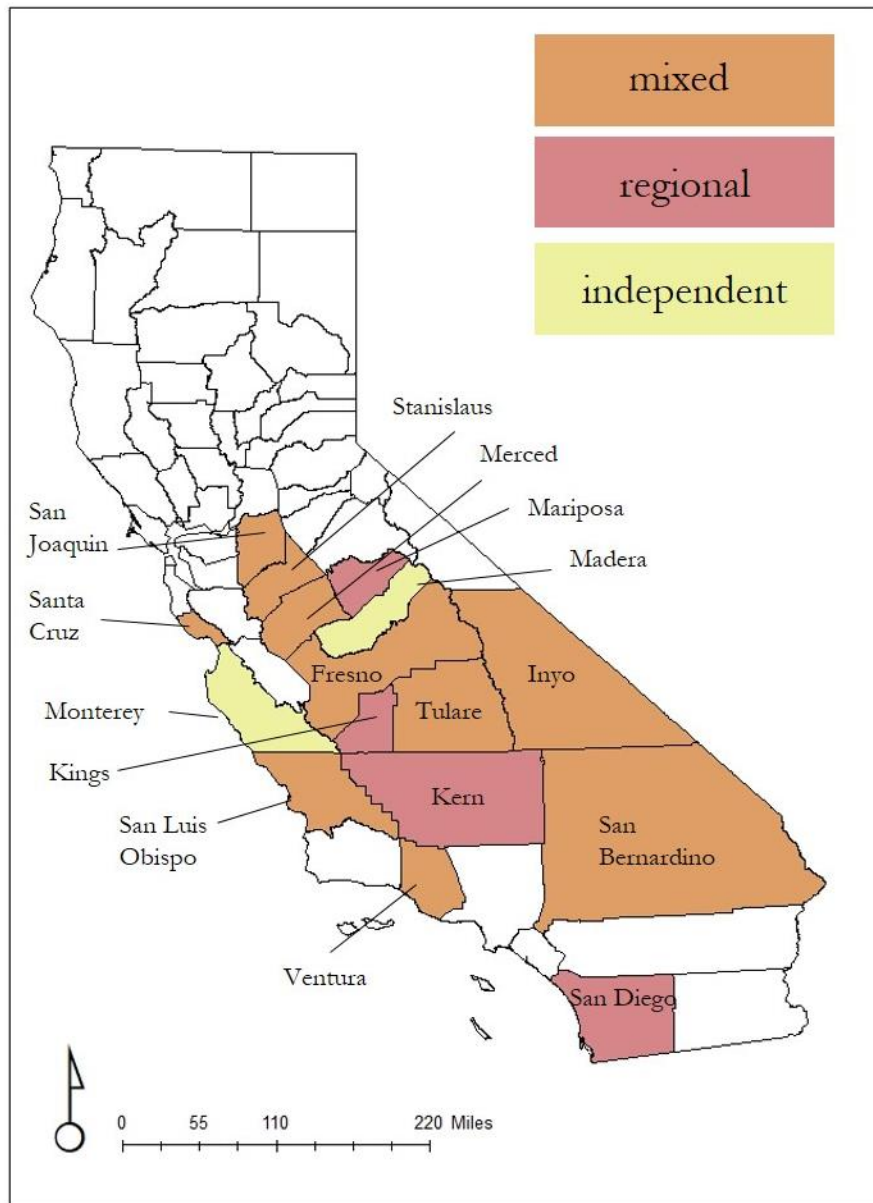


Figure 1: This figure depicts the 16 counties in California who were subject to SGMA legislation.

Second, unlike the water and irrigation district managers who had a grasp on the technical complexities associated with surface and groundwater management, county staff and elected officials often claimed they weren't water experts and that they left the "technical stuff" to the consultants and experts. While admitting a lack of technical expertise in groundwater science, county

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representatives were quick to claim bureaucratic knowledge and expertise. This dynamic surfaced in public meetings where county staff remained silent during technical discussions, but were often called upon to clarify rules of procedure to ensure the meeting was compliant with California public meeting regulations.

Lastly, in talking with county representatives about how their organizations became involved in SGMA, it became apparent that there were differences of opinion regarding how the county *should* have responded to SGMA. The points of contestation between individuals situated in different departments within the county and with different degrees of agency in shaping the decision-making process focused my interest in understanding how counties collectively engaged in sensemaking within the context of formal, public deliberations. In the following section, I give a brief overview of sensemaking as an interpretive framework for my initial analysis.

Collective Sensemaking in County Organizations

The variation in county approaches to SGMA implementation outlined above reflects some of the findings from research examining county response to state and federal mandates. Some scholars have characterized counties as highly responsive to state mandates, finding they adopt problem-solving, regional approaches to meet a mandate's requirements. This appears to be the case even when the county's interests are not aligned with the goals of the mandate (Jenks 1994). Other findings present a different narrative, showing instead that counties are likely to respond to a mandate in ways that minimally satisfy a mandate's requirements while at the same time keeping county constituents satisfied with the county's performance (Khator 1994). While there are likely myriad economic, political, and environmental factors at play, I argue that in order to understand the outcomes of county policy approaches to taking on new roles, we need a more nuanced and textured understanding of the processes through which situated individuals within the county

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organization collectively make sense of new mandates. With that in mind, I now broadly describe sensemaking as a potentially useful interpretive framework for my research.

Sensemaking (largely based on the work of Karl Weick; see for example, Weick 1969, 1979, 1995) is a microfoundational concept for institutional theory that describes how individuals interactively make sense of their circumstances and past experiences, which becomes constitutive of organizing action (Powell and Colyvas 2008). There are several aspects of sensemaking that lend itself to interpreting how individual actors co-construct a shared understanding of sensible and meaningful action. In this section, I review key aspects of sensemaking, which I then relate to the literature on county organizational structure and behavior.

First, organizational sensemaking is an interpretive activity which necessarily involves interaction between individuals. These can be informal, less structured interactions (e.g. water cooler talk), or sensemaking can occur in highly structured, formal settings (e.g. a city council meeting, or regular county board of supervisor meeting). Processes that unfold in highly structured, formal interactions where actors in positions of authority have a greater amount of control over the inflow of new information coming into the organization are characterized as *guided* forms of organizational sensemaking. Guided organizational sensemaking tends to lead, at least nominally, to shared understandings between members within an organization regarding the appropriate path forward. Organizational sensemaking that occurs in less structured environments tends to lead to more fragmented understandings between participants, which can result in the organization taking contradictory action (Tan et al. 2020). Thus the form of sensemaking that occurs within organizations helps shape narratives that emerge through interaction.

Second, sensemaking highlights both the uncertainties and ambiguities of social life within organizations. Organizational sensemaking events are often triggered by sudden changes in the

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organization's environment. These could be structural changes to norms and routines, such as adoption of new information processing procedures or sudden changes in organizational leadership. Organizational sensemaking may also be triggered by periods of crisis, such as lawsuits, correctional intervention by a higher level agency, or public scrutiny that calls into question aspects of the organization's identity or mission. Sensemaking could also be triggered by mandates that require organizations to take on new roles and responsibilities. Sensemaking helps actors within organizations navigate unsettled times by providing a rationalization process where individuals collectively draw on their past experiences and situated identities to reduce equivocality and find legitimate and acceptable courses of action.

Third, as a process of rationalizing, actors engaged in sensemaking often try to influence and persuade the collective group toward particular actions. This is often called out in the literature as sensegiving. Sensegiving by an individual or group of individuals within an organization is likely shaped by their professional training, organizational identity, and role within the organization. Another aspect of sensemaking that is particularly relevant when organizations are faced with the task of interpreting new or ambiguous information is sensedemanding, which refers to attempts to process or gain new information in order to reach greater clarity. Finally, sensebreaking refers to situations where actors within organizations call into question or contest old ways of thinking and acting, which often leads to the adoption of novel approaches to navigate organizational change (Glynn & Watkiss 2020).

As an interpretive framework for understanding how actors within organizations navigate uncertainty and ambiguity when faced with taking on mandated roles, sensemaking is ideally situated to helping understand how actors within county government organized a response to SGMA. While there is an extant body of literature focusing on the different and sometimes conflicting roles county

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governments perform in the U.S. (see for example, Waugh 1994, Cigler 1995, Benton et al. 2008, and Menzel et al. 1992), there is less understanding regarding why counties assume some roles and avoid others. Much of the latter has focused attention on how different actors within counties act rationally to promote their own interests (Bickers et al. 2010, Gerber & Gibson 2009, Meyer et al. 2014). While useful for gaining broader understandings to answer *why* elected officials and professional administrators steer decision-making to more or less regional approaches to governance, this line of inquiry doesn't shed light on *how* situated actors interact and engage in sensemaking processes. In this paper, I aim to gain a richer and more textured understanding of the lived experiences of actors embedded in county organizations.

Site Selection and Methods

For this exploratory analysis, I selected a single county located in the Central Valley of California. To protect the anonymity of research participants, the specific county is unnamed in this manuscript. As mentioned earlier, the majority of counties with critically overdrafted basins in their jurisdiction are located in the Central Valley. While I expect each of the 16 counties subject to SGMA are unique both in their interpretation of the law and the sensemaking processes they engaged in, the county selected for my interpretive analysis shares similar characteristics to other counties in the Central Valley. First, agriculture is the primary economy in the county. Second, surface water is scarce and is primarily managed and distributed by federal contractors. Third, the county selected has jurisdiction in more than one critically overdraft groundwater basin. Fourth, similar to most counties in the Central Valley, the county selected adopted a mix approach by forming multi-agency GSAs with other agencies for some portions of their jurisdiction and became an independent GSA for others. Finally, through my ethnographic fieldwork, I have built rapport with members of the county community and have been able to conduct pilot interviews for this project, giving me a lived

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experience perspective of the sensemaking process. As I discuss later, I will likely include more sites with the goal of comparing sensemaking processes across counties.

Data for this exploratory phase consisted of agendas, meeting minutes, and audio/video recordings of county public meetings. I began by looking through 2013-2017 archives of public meetings and making note of any agenda items with the words “drought,” “sustainable,” “groundwater,” and “management.” This allowed me to construct a four year timeline for county public meetings addressing topics that likely included discussions of interest to my research. From these, I went through each agenda item and took note if the item was on the “consent” agenda or the “items not timed” portion of the agenda. Consent items are typically voted on as a packet and do not include deliberation or discussion before voting. For example, an item to periodically update a resolution the board has previously approved would be placed on the consent agenda. Items not timed, on the other hand typically will involve lengthy discussions, staff presentations, and public comments and thus provide opportunities for collective sensemaking. Once I located all the “items not timed” I either listened to or watched the meeting in its entirety, jotting down observation notes. I then wrote an in-depth observation summary, similar to what I would do if attending a public meeting in real time. I then reviewed the recordings again to make more careful transcriptions of sections of the meeting. Next I open coded my observation summaries and transcription using words and phrases to describe the code names, a process known as *in vivo* coding.

In addition to analysis of publicly available information, I conducted pilot interviews with county staff and administrators. Interviews were unstructured and typically lasted an hour and a half. Similar to the process outlined above, I iteratively open-coded these interviews, looking for emergent themes. The primary emergent theme was the theme of “making do” where county staff

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recounted their experiences of having to manage relationships to key decision-makers and make the best of decisions that in the staff person's view, was less than ideal for the county in the long-term.

In the following section, I present initial findings from my interpretive analysis in two parts. The first part titled "Collective sensemaking of drought and a mandate to manage groundwater" centers on two key moments in the county sensemaking process. The first is a public meeting to declare a local drought emergency. The second is the first public presentation of the SGMA legislation by county staff to the elected board of supervisors. Thus, part one unfolds chronologically. The second section of my analysis, titled "From making sense to making do" presents key themes from my pilot interviews with county staff.

Collective sensemaking of drought and a mandate to manage groundwater

Declaring a Drought Emergency—“A disaster in the making”

On January 17, 2014, Governor Jerry Brown declared a drought emergency throughout the state of California. The governor's declaration authorized the State Office of Emergency Services to administer funds to local agencies through the California Disaster Assistance Act (CDAA), marking the first time the CDAA had been deployed to address drought. In this section, I examine the sensemaking processes that professional staff and elected officials engaged in as they co-constructed the county response to drought. As mentioned earlier, organizational sensemaking is often triggered by moments of crisis that disrupt the status quo operations, day-to-day processes, and collective identities of organizations. By illuminating the sensemaking that occurred in the months leading up to the passage of SGMA, I show how the narratives that emerged helped to frame the discourses used to construct the county response to SGMA's mandate.

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Just over two weeks after Governor Brown's drought emergency declaration, a Central Valley County Board of Supervisors unanimously voted to approve a resolution, "proclaiming the existence of a Local Emergency due to Drought." The resolution was placed on the "Items Not Timed" portion of the agenda, allowing for a lengthy back and forth between county staff and board of supervisors.

The discussion began with an introduction by the County Office of Emergency (COE) staff. After performing the customary address to the chair of the board, the supervisors, the county executive, and the county counsel, the emergency services staff framed the drought and the response to the drought as a series of firsts: The first drought in 500 years to cause such impacts; the first time surface water allocations were at or near zero; the first time the state of California used the word "exceptional" in reference to drought; the first time the federal government declared a state of emergency for a drought; and lastly, the first time the California Disaster Assistance Act was used to address impacts of drought. The staff went on to rank the impacts in the county with the primary impact being on agriculture, followed by the loss of access for some communities to clean drinking water. In predicting the scale of impact, the staff person claimed, "It's going to be big and it's going to be bad." With that, staff ended their introduction of the resolution by positioning the county's role as one of coordinating emergency response with the state and local agencies, and as providing short-term, emergency services to county constituents as necessary. Following their presentation the staff person stood for questions from the board.

In the deliberations that followed, county supervisors echoed the dire and unprecedented nature of the drought. However, unlike county staff, some supervisors positioned themselves as victims of the drought. By doing so, the county supervisors brought into focus the drought's

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economic impact to agriculture and the farming community as the following excerpt from a portion of the supervisor's statement illustrates.

I am a Friant¹ water user. I am one of the farmers who didn't get an allocation [and who] won't be able to sustain our trees.

Responding to his colleague, another county supervisor affirmed the negative impacts to farming in the county and historicized these impacts by providing an account of how the federal government built the Friant Kern Canal, dramatically changing the landscape from foothill grasslands to cultivated citrus orchards. Without a guarantee of surface water, the citrus economy would collapse, thereby devastating the agricultural economy, which in their account would have cascading effects in the county and the state. Notably, here again the county supervisor makes the impact personal by calling back to the statement made moments earlier.

This is truly a disaster in the making. I would say to you today the worst case scenario is also the most likely. When the supervisor says his trees are going to die, I mean trees are going to die folks! Thousands of citrus trees are going to die! So trees 100% dependent on the Friant Canal and don't get an allocation, they are going to die. It will have a huge impact on the county because of property tax. If there's no production, there's no tax. Huge impact on us. Huge impact on the state. This is a huge issue.

In addition to providing a firsthand understanding of the impacts of drought on the farming economy in the county, the supervisors in attendance drew causal connections between the state's inaction to invest in capital projects that would help secure additional surface water for the county and the scale of impacts caused by the drought. Here again, the supervisors embed themselves in a decades long struggle between the governor and lawmakers in Sacramento and the hardworking

¹ The Friant Kern Canal is a federally operated irrigation canal and is a primary source of surface water for irrigation throughout portions of the Central Valley.

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farming communities in the Central Valley. Moreover, in making sense of “how we got here” members of the board positioned the state as advocate of the environment and antagonist to the agricultural community. This is evidenced through multiple references to the state wasting water on environmental flows to sustain threatened Salmon species, leading one supervisor to express the following:

My concern is this. That there will be some water. But is it going to go to public health, safety and agriculture? Or is it going to be diverted into the delta for wildlife? I think that is a real concern. When it comes to fish or man, it will be man. This is the message that has to get out now. We're not just blowing smoke here.

Before voting on the resolution to declare a local state of emergency, a county supervisor representing a district in the southwestern portion of the county re-focused the discussion from surface to groundwater, saying:

We can't forget about groundwater. That's the only thing we have control over and right now we don't even have control over that. We can influence local policies that can address some of the groundwater issues that we face.

With this comment, at least one county supervisor signaled their interest in the county being involved in groundwater management through the adoption of county ordinances. However, the suggestion was not amplified by the other four county supervisors in attendance, signaling a possible unwillingness of the county to voluntarily get involved in the complicated issue of groundwater management. Moreover, while the county staff reiterated the county's role as coordinator with the state to respond to the drought crisis, the majority of county supervisors cast the state, and in particular the governor, in the role of antagonist and the cause of the crisis.

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The ability of the county supervisors to make such clear causal connections between the culpability of the state in not doing enough to prevent the worst impacts of drought stands in contrast to the county emergency management staff who made an effort to present factual information and who evaded being brought into the political discussion by saying to the county board of supervisors:

We try to be as apolitical as possible in the office of emergency services.

This contrast is important because it highlights the role of the forum for deliberation, the rules and customs, and the situated professional and political identities of the participants in guiding the sensemaking process. Thus, county supervisors were afforded more freedom and tools of persuasion to engage in sensegiving while county staff were often constrained in the public discussion to accessing, distilling, and circulating information.

From Emergency Management to Groundwater Management—“So what’s the county role?”

On September 1, 2015, staff from the county administrative office gave the first presentation to the board of supervisors regarding the SGMA legislation. The purpose of the presentation as articulated in the agenda description was to provide “an update on the Sustainable Groundwater Management Act [and] provide direction to staff in regards to the Implementation of the Act.” At this time, the Department of Water Resources (DWR) was still working out the regulations, a fact frequently mentioned by the board of supervisors and county staff. While this was the first public presentation to the board of supervisors, members of the board were already coordinating with staff from the office of administration as well as their constituents and local water agencies. In this section, I examine the September 1 board of supervisor meeting as an organizational sensemaking event where county staff and elected officials construct a collective response to SGMA. I specifically focus my analysis on the ways the role of the county is conceptualized by situated actors.

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At the September 1 public meeting, county staff began their presentation by giving an overview of the act and interpreting the overall intent of SGMA as an effort to equip local agencies with the tools and authority they needed to govern and manage groundwater. In describing the law, county staff interpreted the county as the backstop in cases where local agencies were unable or unwilling to govern or in cases where there are portions of the basin uncovered by an existing agency. However, they were careful to point out that county governments could also elect to walk away from the process, which would, in the staff's interpretation of the law, trigger state intervention.

After describing the GSA formation process and options available to the county board of supervisors, county staff described the different approaches to GSP development and provided an overview of how the process was starting to play out in each of the critically overdraft basins within the county. In doing so, administrative staff made clear the county preference to work with as many agencies as possible to create joint GSPs as the following excerpt illustrates.

Obviously from the county's perspective, the more plans you have, the more complex it is to implement them when you talk about land use and planning and I have talked to them [the land use and planning department] and we will continue to talk.

While taking a centralized approach to SGMA implementation was the best path forward from the county staff perspective, in their presentation, county staff acknowledged that local agencies were already indicating a preference for forming multiple GSAs and were expressing an interest in developing separate GSPs. One group of agencies had already filed their GSA formation notification with DWR. In response to a county supervisor's question of the impact to the county of multiple GSAs forming, county staff reiterated the consequences to the county, saying to the supervisor:

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Certainly for management, from the county's perspective for land use and planning it creates another layer of bureaucracy. Also, in regards to the balance of the subbasin, whatever plan the group comes up with the group will need to show the state they are coordinated.

County staff go beyond conceptualizing the impacts to the county administrative departments whose day-to-day management would be complicated by having multiple GSAs forming throughout the county's jurisdiction. In another back and forth with county supervisors asking for clarification about the consequences of a decentralized approach to SGMA, county staff put forward their viewpoint that the county should encourage as much cooperation as possible, telling the board of supervisors:

Having a centralized GSA provides the best coordinated coverage and increases our odds of keeping the state out.

The above interpretive account underscores two key points. First, similar to earlier interactions between county emergency staff and county supervisors during the discussions to approve a resolution to declare a local state of emergency, county staff from the administrative office position the county's role as one of regional coordinator and collaborator. While clearly giving objective interpretations of SGMA's legal code with respect to counties, and outlining the multiple pathways county supervisors could take in response to SGMA, county staff reduce equivocality by narrowing the options to the most sensible approach from a county management perspective. The sensible or rational approach from the staff point of view is one that ensures uniformity throughout the county's jurisdiction, thus minimizing complications for the county planning and zoning departments as well as providing the best path to compliance with the law. Yet, as the remainder of this section illustrates, the county supervisors amplify the staff's viewpoint that the county should be

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involved in SGMA implementation but contest staff's presentation of the facts as overly simplistic and not sensitive to local, political contexts.

Following staff's presentation, a county supervisor addressed the following remark to his colleagues on the board. Here he reframed the county staff perspective to capture the political complexities of GSA formation and encouraged greater involvement by the elected supervisors in the GSA formation process. Also noteworthy, the county supervisor positioned the county in a leading role, extending their responsibility beyond representation of un-districted lands to ensure basin-wide compliance:

It's extremely important that every member of the board become extremely familiar with each GSA process because it spans all our districts, and it's a little more complicated than what was presented up here. What we're finding is a reluctance of the people in the basins, the individual basins, to organize to form a basin-wide GSA. [A]nd we're gonna have to take a leadership role as a county to make sure this happens. And the white areas are under our jurisdiction, but we have all the other areas that we have to pull together to come up with a basin-wide plan. It's gonna take some time. We don't have a lot of time to do it. And that's why I'd like everybody to get familiar with it because I'm sure we're going to have to use some of our authority the legislature gave us to make this happen.

The supervisor's call to county leadership was echoed by another county supervisor who was involved in negotiating with an irrigation district to form a multi-agency GSA through special act legislation. But here, the supervisor's role illustrates an interest in working with irrigation districts to ensure representation of the agricultural industry in the planning and decision-making process. By doing so, the supervisor signals the county's willingness to work with local, private agricultural interests throughout the basins within county jurisdiction—a message at odds with the county staff's

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recommendation to encourage as much collaboration and centralization as possible. In the following excerpt, we can see the county supervisor defend the decision to form a GSA:

I'm fortunate up in my neck of the woods because the irrigation district has been very aggressive. And I just wanna say the reason for forming the GSA through special act legislation is to have agriculture at the table because agriculture isn't a public entity. That's why there's a bill to create that.

The above excerpts illustrate two key points that help shed light on how county supervisors made sense of the county role in SGMA. First, county supervisors tended to position the county in a leading role rather than the supporting and coordinating role conceptualized by county staff. Second, while aligning themselves with county staff's recommendation to pursue centralized approaches to groundwater governance, county supervisors increase uncertainty around how GSA formation would play out in their basins, and signal a willingness to balance the instrumental goals of planning uniformity as espoused by county staff with the political preferences of local irrigation districts.

The willingness of county supervisors to adapt the county's approach to localized, political needs is evidenced in the decisions supervisors made throughout 2016 and early 2017. In all, the county made agreements with seven multi-agency GSAs in the critically overdraft basins within their jurisdiction. In one basin, and against the recommendation of county staff, the county became member agencies with two GSAs, thereby doubling the cost to the county and further complicating the uniform approach desired by county staff.

From Making Sense to Making Do—"I tell people my job is herding cats"

My analysis thus far has centered on the organizational sensemaking processes county staff and elected officials engaged in to co-construct reasonable and appropriate responses to managing an

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emergency response to drought, and after SGMA was passed, to managing groundwater. For my analysis, I have drawn on publicly available, archived records (I.e. audio recordings, meeting minutes, agendas, and formal agreements) of county board meetings. While useful for understanding the public discourse, framings, and narratives that interactively emerged and helped to shape the final policy decisions made by county supervisors, the above account does not illuminate the lived experiences of those engaged in the sensemaking process. Nor does the analysis of discourse help us understand how county staff, in particular, lived with the consequences of policy decisions that, in their view, complicated SGMA implementation. In this section, I offer a more in-depth, account based on fieldwork and interviews with the professionals charged with implementing SGMA.

In interviews and more informal conversations I had with county staff, many of the themes and conceptualizations of the county role in SGMA were reiterated. One of these was the viewpoint that the county should take a supporting rather than a leading role in GSP implementation. One county staff person, anchored this perception within an historical context, pointing to what county government could and could not do in the context of implementing SGMA.

There were like 100 agencies that could have ticked the box [to become GSAs]. How do you distribute that power? And so that's where the county played a role. We said, "We are not the water experts. You water agencies are the experts. We as the county don't want to implement SGMA by ourselves. Frankly, we're not good at carrying out programs. We're expensive. We're super bureaucratic. But we can help you set up the governance structure." Historically speaking that's been the role of the county for all things. We try to let locals and privates provide services and we, the county take on those roles that nobody else wants to take.

Another theme to emerge was the experience of formulating a response to SGMA while still being uncertain about what the regulations would require. This was particularly challenging for staff to navigate while trying to bring as many local agencies along with taking a more centralized

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approach to groundwater management, the primary challenge being persuading local districts to give up some of their autonomy without clearly understanding what that would mean down the road, as the following excerpt illustrates.

I'm sure you've heard the metaphor we've been building the airplane as we're trying to fly it right. So I mean aside from what SGMA says you don't really you, didn't really know how that was going to play out at DWR and what boxes we're gonna have to be checked for them and the process for that. So I mean there's so many unknowns that I don't think that they [local agencies] necessarily thought about like how, how is this process going to work? I think they were much more focused on protecting what they had or what they thought they had.

Given the uncertainties over SGMA regulations while GSAs were still forming, county staff struggled to leverage their relationships with local agencies and to maintain what they saw as the best approach to SGMA implementation. Their struggle was made all the more challenging when it became clear the private, agricultural interest in the county was influencing the county supervisors away from the centralized approach county staff had recommended. In the following quote from an interview with a county representative, we get a sense of the tension between the county role from a professional planning perspective and the politics of managing relationships with county elected officials and their constituents.

[W]e should only have, be members in one GSA and but they [a local district] played the political card and so they got a hold of a couple of my electeds (sic) and convinced them that like oh this is a great way to go. So when I brought it to the board [of supervisors] and said OK. Which, which one [GSA] do you want to be in. They were like well we can be in both, so that is how we ended up in both.

Splitting the county into multiple GSAs throughout their critically overdraft basins not only increased the costs for the county and made land use and planning within the county more

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complicated, but it also consigned the county to a policy pathway that future boards may not understand. This fact illustrates a key distinction between county professionals and elected officials. Unlike county supervisors who serve limited terms, county staff I spoke with took a long view of how a policy decision will impact the county operations. Moreover, by holding up the irrationality of the board's decision, county staff I interviewed, not only illustrated the difficulty of making the best of bad decisions, but indicate a willingness to hold onto that institutional memory, which may be helpful in persuading future boards to not follow the examples of their predecessors.

The challenge for county staff extended beyond needing to defend past policy decisions to newly seated county supervisors. County staff who regularly interact with county constituents also contended with the future position of needing to communicate to individual landowners in their constituency why they might be bound to different groundwater management policies as the following excerpt makes clear.

Five years from now how do we tell landowner A, "Hey five years ago the county decided to be in two GSAs and sorry you're in the more expensive one." I don't know how we do that. Maybe I should change a career path before we get into that.

Lastly, my conversations with county staff highlighted the ongoing uncertainty county professionals must navigate as they look forward to SGMA implementation. I end this section of the paper with a quote that suggests an ongoing, iterative sensemaking process where county staff negotiate their professional understanding of the role of county government and the political realities pulling the county farther away from the centralized and regional approach originally envisioned.

[T]o what extent does the board of supervisors want county staff to be getting into the water business? Or are we going to look to the GSAs and say when we have a development in this area we're gonna send it to you for

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review, but I know the [county] board's also going to want to keep their power. And I mean agriculture is a huge part of our economy so when you start restricting water use you're also restricting our general revenues. So you know it's just very complex and there's a lot of moving pieces and trying to frame that up from a county perspective of what's our role to engage in the GSP process and what flows out of those GSPs. What is that relationship going to look like going forward?

The above quote highlights the different positionality of county staff to their elected boards. While county staff make recommendations to county supervisors, they are not in the same position of power. Moreover, as the analysis in this and previous section indicate, county staff cannot exercise the same freedom to shape the public discourse in a way that aligns with their understanding of the county role and mission. Thus, while county professionals in this analysis primarily function as sense-demanders who provide objective and apolitical information with which they craft recommendations meant to clarify possible consequences of choosing one policy pathway over another, they rarely act as sense-givers in public forums.

Discussion and Future Directions

The findings to emerge from this initial analysis of one county's collective sensemaking process offer the following key insights.

First, while counties may engage in collective sensemaking to co-construct reasonable and rational responses triggered by moments of upheaval, situated actors are structurally constrained and enabled to influence the sensemaking process. Decision-makers higher up in the organization have greater control to guide the process and have more tools for persuasion at their disposal. This was evidenced by the ability of county supervisors to draw upon macro level discourses (E.g. environment vs. economy), situate their own identities in the sensemaking process (E.g. the farmer

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whose livelihood depends on the county as advocates), and make overtly political causal connections (E.g. state inaction is to blame for drought impacts) to craft rational approaches to SGMA implementation that were at odds with the professional recommendations of their staff.

Second, while county staff were constrained by structural features of the collective sensemaking process, through their lived experience of making do, they hold on to the equivocality collective sensemaking is intended to allay. This suggests an ongoing sensemaking that likely occurs informally between staff who share similar perceptions and worldviews regarding the role of the county in governance. Put another way, informal sensemaking within interpretive communities may help individuals within those communities navigate their own unsettledness and may even provide scripts for negotiating future organizational sensemaking. For example, one can imagine county staff offering cautionary tales to newly seated boards who question policy decisions made by their predecessors.

The insights mentioned above will be further explored as this research develops. In the future, I intend to build on the preliminary findings from this single site analysis by including one or two more counties in order to conduct a comparative analysis. Comparative ethnography is ideally suited to providing thick descriptions to illuminate how actors embedded in different contexts experience, manage, and cope with similar situations. Further, I will likely situate my comparative ethnographic account within an institutional logic multiplicity framework. Institutional logic refers to the socially constructed and culturally embedded frameworks that people within organizations draw upon to make meaning of their experiences, justify decision-making, and legitimize courses of action (Thornton and Ocasio 1999, Greenwood et al. 2011, Matinheikki et al. 2019). By logic multiplicity, I refer to the fact than more than one logic may be embedded within an organization. Multiple logics exist because of fragmentation (I.e. having many semi-autonomous and specialized departments

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within a single organization), which may cause conflict, particularly when the organization takes on new roles or responsibilities. The existence of logic multiplicity highlights the fact that fragmented organizations are not monolithic entities; rather they are dynamic spaces with multiple interests, values, and identities which are embedded within the lived experiences of the people within the organization.

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