

**“The Importance of Governance and Institutional Design
for Achieving Groundwater Sustainability in California”**

Presentation to the California Water Commission

Michael Kiparsky, Ph.D.¹

Director
Wheeler Water Institute
Center for Law, Energy and the Environment
UC Berkeley School of Law

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Introduction

Chairman Byrne, Commissioners, thank you for the opportunity to share some thoughts on governance and institutional design for groundwater sustainability agencies. My remarks are based on a recently published report that we shared with the Commission in March.²

I am the director of the Wheeler Water Institute at UC Berkeley School of Law, one of the directors of the UC Water Security and Sustainability Research Initiative, and an author, along with seven national experts, on governance and institutional design for groundwater in California.

¹ The research reflects the contributions of a group of nationally recognized collaborators, but the remarks are my own. I am grateful to Holly Doremus and Nell Green Nysten for useful input on these comments.

² Kiparsky et al. 2016a

I will speak in general terms about the findings of our research, but will ground my observations with some reference to the proposed Groundwater Sustainability Plan Emergency Regulations (Regulations).³

Groundwater and SGMA

The Commission is well aware California's groundwater is threatened, and that unsustainable use is causing impacts in groundwater basins around the state. The Sustainable Groundwater Management Act (SGMA) represents a beacon of hope, with the potential to effect profound change in how California manages its groundwater. But the law leaves crucial questions unanswered.

I commend the Commission and the Department of Water Resources alike for the hard work they have done to take SGMA implementation to where we are today. You have accomplished a tremendous amount, and done it on a tight timeline.

However, much remains to be done, and given today's milestone, a look forward is in order.

Takeaways

I'll begin with some major takeaways.

- First and foremost, governance and institutional design will be crucial elements for achieving groundwater sustainability. In spite of the technical focus of the Regulations, this first phase of SGMA implementation is heavily dependent on the formation of new institutions. If GSAs do not have the ability to function effectively, they cannot possibly accomplish the substance of their work.
- Second, the opportunity exists to make sure that the experience of the early years of SGMA implementation is not conducted in a vacuum, but instead is captured and shared appropriately to foster joint learning and more rapid progress throughout the state.
- Thus, looking forward from today as stewards of California's water, the Commission, along with the Department, would do well to take a leadership role in tracking and evaluating how Groundwater Sustainability Agencies (GSAs) are forming, as well as in providing information to help GSAs do so effectively and fairly.
- Third, even as the dust settles today, the Commission and the Department can also look forward to opportunities to revisit the Regulations with governance principles in mind.

Flexibility and risk

³ Available at http://www.water.ca.gov/groundwater/sgm/pdfs/Proposed_GSP_Regs_2016_05_10.pdf

Dozens of new GSAs will have the unenviable task of achieving local groundwater sustainability by 2040.

The law does not specify how these agencies should be structured, what exactly they must do, or how they must do it. As we know, SGMA's authors wanted to leave room for creativity and adjustment to local context. But a result is that local entities face questions about governance (the processes, mechanisms, and organizations that enable policy decisions to be made and implemented) and institutional design (the process of choosing structures and rules that influence management).

The same flexibility that holds the promise of local optimization and efficiency also introduces risk. To put it directly, from a governance perspective the potential exists to create paper tigers that go through the motions but ultimately fail to achieve the goals of SGMA.

Near-term decisions on governance facing local entities today will have long-term consequences, and thus are vitally important for the success of SGMA.

Governance Criteria

Our research developed a framework for good governance by drawing on extensive scholarly work on common pool resource management, on experience in resource management in groundwater and other natural resources, and on legal analysis.

The bottom line is that if GSAs are to succeed, they will need to be both effective and fair. Our framework describes nine interrelated and mutually supporting criteria for governance to support these goals. I draw on these concepts in my remarks here.

1) Authority, capacity, and funding

Even the best plan will not be worth the paper it is printed on if an agency is not capable of actually implementing it. Indeed, unimplemented plans litter the resource management landscape.

So, GSAs must develop expertise, including for modeling and data analysis, or obtain outside assistance. Developing this capacity will be expensive and challenging.

Further, many GSAs will need to impose restrictions on groundwater pumping. That will not be universally popular among stakeholders in these basins.

At the same time, GSAs will need to generate funding to support these activities.

In sum, success will require strong agencies with adequate technical, legal, and financing tools, coupled with sufficient authority to make and enforce the difficult decisions awaiting them.

The Regulations require plans to provide some degree of information about governance, with a focus on funding and legal authority.⁴ This is important beyond the surface level of allowing DWR to evaluate GSAs as institutions. That is because it provides an opportunity for self-reflection, if you will, by prospective GSAs. Some may determine that they would be unable to muster the resources to carry out all the tasks required of GSAs. Some may realize that their interests would be better served by a different approach, or even by consolidation. Such learning, and acting accordingly, could save a lot of pain if it is done earlier rather than later.

This work needs to start happening now. Think of it this way. SGMA implementation is like a sailing race. In a sailing race, there is a starting line, and the boats try to sail towards that line so that they are heading full speed across it at the moment the race starts. For SGMA, the starting line is the moment of GSA formation. The run up is the pre-work of developing institutions. Local entities that don't get this running start will be hamstrung by lack of capacity as the implementation period truly begins.

Many local entities realize this, and you can tell by how hard some are working to put GSAs in place. The Commission can recognize and support broadening these efforts in tangible ways.

Looking forward, information on governance has great value to the extent that it can enable local entities to learn from each other's experiences.

Thus, the Commission may find it wise to consider requesting⁵ a study to track, digest, and share information on GSA formation during these first crucial years. The goals of this study would be to allow the Department, the State Water Resources Control Board, and the public to evaluate institutional capacity as it develops around the state, and to enable information sharing about creative ideas and what is and is not working. We acknowledge the hard work being done by the state's facilitators, but argue that a more systematic data gathering and sharing mechanism is warranted.

We have a lot to learn in a short time. Done well, information sharing could foster collective learning and help avoid a situation where multiple GSAs simultaneously try to reinvent the wheel in isolation.

2) Scale and the need for transparency

Ideally, in a common pool resource management situation like groundwater, decision-making entities would match their jurisdictional areas to the scale of the resource being managed. This could help to avoid conflict and reduce transaction costs.

⁴ E.g., § 354.6, § 354.44

⁵ See Cal. Water Code § 163.5, stating that "The department shall furnish to the California Water Commission, at its request, such assistance, including technical, legal, and clerical services, as is required to the extent funds are made available therefor."

This does not seem to be how things are shaking out in many parts of the state.

For groundwater, transparency is particularly important because the full effects of near term decisions may not be readily apparent for some time, but the decisions still require information and analysis now. This tension is especially acute given the need for effective coordination, including technical consistency, between multiple GSAs in a single basin.

The Regulations allow the Department to request "data input and output files" for models, but it is not clear whether these request will be made, and, if they are, whether the data would be made available to the public or not.⁶ In effect, the Regulations give the Department significant discretion over data transparency.

With due respect for the great work the Department is doing in this administration, the reason for cementing discretion over transparency for this and future administrations is not clear, particularly given the importance of transparency. The commission and the department should reconsider and address this deficiency.

3) *Accountability*

Accountability is being answerable for decisions and their impacts.

In a multi-layered governance system like that envisioned under SGMA, accountability needs to run in multiple directions. GSAs should be accountable to the Department. This is the piece that the Regulations do address. However, GSAs should also be accountable to stakeholders in the basins they manage as well as in related basins, and ultimately to the State Water Resources Control Board as well. Further, the Department should be accountable to the people of the state for how it carries out its work under SGMA.

One concrete opportunity for increased accountability can be found in the periodic updates to GSPs enabled by the Regulations.

High priority basins will need to put their governance structures in place quickly. However, they will have the opportunity at any time for adjustments, potentially major, through plan amendments, and in addition self-evaluation is required at least every five years.⁷ While the Department will accept public comments on plans submitted for approval,⁸ the Regulations do not indicate the opportunity for public comment on amendments.

I recognize that no plan is the worst kind of plan. We are glad to see the SGMA implementation process moving forward, and doing so quickly. But since everyone is new at this, it will be important to reevaluate individual plans, and also the process by which they are approved, as

⁶ § 352.4(g)

⁷ § 355.10 and § 356.4

⁸ § 355.2 (c)

well as other elements such as clarifying the understanding of what is meant by “substantial compliance” in the Regulations. Therefore, comments, and, as warranted, periodic revisiting of the Regulations, will be an important part of enabling institutional adaptation,⁹ and doing so in a way that respects the need for both consistency and accountability in institutional change.

Revisiting the Regulations

We understand that there are concerns among all parties about how these Regulations will play out.

SGMA directs the Department to develop Regulations that “shall” address “evaluating . . . the implementation of groundwater sustainability plans,” and “shall identify . . . other information that will assist local agencies in developing and implementing groundwater sustainability plans and coordination agreements.”¹⁰ We note that the current Regulations focus on evaluating GSPs and identifying necessary plan components, with much less emphasis on implementation and “other information” including elements of governance that could help GSAs do what they need to do.

Now, the legislature exempted these Emergency Regulations from the usual sunset provision. However, SGMA suggests a convenient timing for a near-term potential update. The law specifically draws the Department’s attention to the possibility of incorporating the best management practices it must develop by January 1, 2017.¹¹ If the Department does so, it would provide an opportunity to update the GSP Regulations in early 2017. The Commission has the power to advise the Department to take this path and to make recommendations for areas that need specific attention.¹²

So while we celebrate the milestone of the new Regulations, we can also begin to look forward to the potential to adjust and improve some of the elements related to governance for the benefit of GSAs and the state as a whole.

Conclusion

This is an exciting and transitional moment for California. California has the opportunity to move from the position of national laggard on groundwater, to take its rightful place as a leader

⁹ Blomquist (2016)

¹⁰ Cal. Water Code § 10733.2

¹¹ Cal. Water Code § 10733.2 (b)(1), stating that “The department may update the regulations, including to incorporate the best management practices identified” pursuant to Water Code Section 10729.

¹² See, e.g., Cal. Water Code § 161, stating that “The California Water Commission shall confer with, advise, and make recommendations to the director with respect to any matters and subjects under his jurisdiction,” and noting the Commission’s role in rulemaking.

and innovator. The challenge will be to actualize the promise of SGMA, and, as I have argued, governance will be a crucial determinant of the law's success.

If you come away with one thing from my remarks today, let it be this: governance and institutional design of GSAs are crucial for realizing the potential of SGMA - without effective governance, even the best plans will have limited value. Accordingly, I hope the Commission will track, evaluate, and share lessons learned about the development of GSAs during the crucial months ahead, so they can cross the starting line with their institutional sails full.

I commend the Commission and the Department alike for your leadership as you strive to tailor groundwater management to California's unique circumstances, and in so doing set a new standard for others around the country and the world to follow.

Thank you for the opportunity to engage with you, and again for all of your tireless efforts on behalf of the state of California.

About

Michael Kiparsky is director of the Wheeler Water Institute at UC Berkeley Law's Center for Law, Energy and the Environment (CLEE). He is also a co-director of the UC Water Security and Sustainability Research Initiative, and co-author, along with seven national experts, of the report, "Designing Effective Groundwater Sustainability Agencies: Criteria for Evaluation of Local Governance Options."

The *Wheeler Water Institute* develops interdisciplinary solutions to ensure clean water for California. Established in 2012 at the Center for Law, Energy & the Environment (CLEE) at Berkeley Law, the Institute conducts projects at the intersection of law, policy and science.

The *Center for Law, Energy & the Environment (CLEE) at Berkeley Law* educates the next generation of environmental leaders and develops policy solutions to pressing environmental and energy issues. The Center's current initiatives focus on reducing greenhouse gas emissions, advancing the transition to renewable energy, and ensuring clean water for California's future.

University of California Water Security and Sustainability Research Initiative (UC Water) assembles water researchers from across the UC system to address water resources issues through research and outreach on information, institutions and infrastructure.

Further reading

William Blomquist. "SGMA and the Challenge of Groundwater Management Sustainability." *California WaterBlog*, May 15, 2016. <https://californiawaterblog.com/2016/05/15/sgma-and-the-challenge-of-groundwater-management-sustainability/>

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