DISPUTE RESOLUTION CLAUSES IN INTERORGANIZATIONAL COORDINATION AGREEMENTS: A COMPARATIVE ANALYSIS

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June 2021

Stanford | Water in the West

Acknowledgements

The authors would like to thank Gina Bartlett for her thorough and insightful review of this report; her comments and suggestions helped to significantly improve the discussion. Our great appreciation to Anita Milman for her contribution in the design of the research, to Lisa Beutler and Michael Roberts for connections to facilitators and GSA contacts. Thank you to the lawyers, facilitators, and water managers that we interviewed as part of this work. A huge thank you to our research assistant, Michael Golz, for his help in document analysis. Finally, thank you to the S.D. Bechtel, Jr. Foundation for their financial support of this work.

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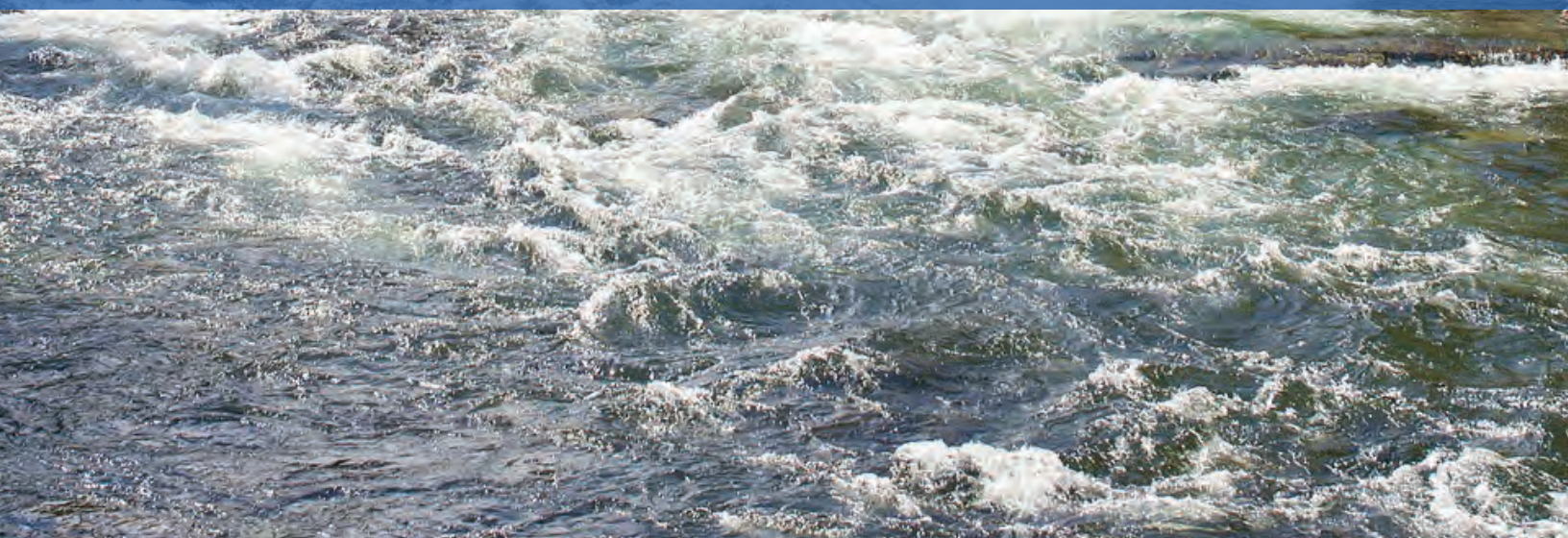
Recommended Citation

Moran, T., J. Martinez, W. Blomquist. DISPUTE RESOLUTION CLAUSES IN INTERORGANIZATIONAL COORDINATION AGREEMENTS: A COMPARATIVE ANALYSIS. Water in the West. Stanford Digital Repository. Available at: https://purl.stanford.edu/rg866ht6113



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EXECUTIVE SUMMARY

Interorganizational relationships (IORs) are essential but susceptible to conflict. Proactive management of conflict and disputes can reduce costs and increase IOR efficiency. Despite these benefits, dispute resolution clauses are not ubiquitous in IORs. This research investigates the factors that may affect the inclusion and specificity of dispute resolution clauses in interorganizational agreements, and whether the participants in IORs regard dispute resolution provisions as an important element when they institutionalize IORs through the adoption of interorganizational coordination agreements.

To pursue these questions, we examined 74 interorganizational agreements which were particularly appropriate for comparison because they all have the same origin and occurred at the same time. They are interorganizational agreements establishing new local agencies under the statutory framework of California's Sustainable Groundwater Management Act (SGMA). SGMA requires the creation of Groundwater Sustainability Agencies (GSAs), and authorizes local governments either to form GSAs separately or join with other local governments in the same groundwater basin to form one. Where GSAs were formed as intergovernmental bodies, the participating governments must engage in considerable coordination of effort. SGMA requires GSAs to develop 20-year Groundwater Sustainability Plans for state review and approval, implement those plans with extensive monitoring and reporting requirements to determine progress in achieving a sustainable groundwater supply, and adjust plans and actions as needed. Given the high stakes and history of conflict over water resource management in California, and the substantial coordination requirements associated with SGMA implementation, there is significant ex ante potential for interorganizational disputes to arise within these joint GSAs. The dataset of their 74 interorganizational coordination agreements therefore presents a distinctive and perhaps unique opportunity to assess whether the participants perceived preparations for dispute resolution as a salient matter and whether they incorporated such preparations into their agreements through dispute resolution clauses.

First, we examined the 74 interorganizational agreements establishing joint GSAs to determine whether there were any patterns to (a) their inclusion or omission of dispute resolution clauses, and (b) the specificity of those clauses when they were included. We considered several possible factors, based on the existing literature on interorganizational conflict and cooperation. Among others, these potential explanatory variables included the number of agencies involved in the agreement, various measures of the diversity of participating agencies, agency capacity measures, physical conditions of the basin, and whether the agencies participating in an agreement had engaged the services of facilitators during the agreement development process.

Only agency annual budget and the use of facilitation services were statistically significant factors in predicting the inclusion of DRCs in the agreements. These findings suggest that better resourced agencies (both financially and with improved access to expertise) are more likely to include DRCs in their agreements. Based on these results, one could hypothesize two potential factors affecting the inclusion of DRCs in well-resourced agreements: 1) the agencies perceive a higher risk and potential loss resulting from conflict and therefore seek to mitigate it, or 2) access to more resources increases the likelihood that lawyers, facilitators or others involved in drafting the agreement are familiar with DRCs and their potential benefit in complex IORs.

To garner insight into these and other potential factors influencing the inclusion and specificity of DRCs in the agreements, we conducted interviews of key participants who were involved during the development of the interorganizational agreements. Interviews were conducted with a subset of GSAs representing a diversity of regions, sizes and water resources conditions. The interviews provided us an opportunity to inquire about the perceived salience of dispute resolution during the agreement development process, how dispute resolution clauses had been added to the agreements where they appear, or why they had been omitted in agreements where absent. There was a near uniform lack of salience associated with the inclusion of dispute resolution clauses, let alone with their content or specificity. In the cases where dispute resolution clauses had been included in the agreements, interviewees did not recall much or any discussion of the language of the clause or even of whether to have it in the agreement. In most cases the language appeared to have been copied or adapted from other previous agreements to which one or more of the participating agencies had been parties in the past. These results suggest that lawyers or facilitators, rather than

agencies themselves, are the primary driver for including DRCs in IORs. In the cases where dispute resolution clauses were not included, interviewees did not recall the option being considered.

Our research thus presents a puzzle. On one hand, experts consider dispute resolution provisions to be an important component of multi-entity agreements. On the other hand, even in a setting with a high likelihood of interorganizational conflict emerging, the inclusion of dispute resolution clauses and their specificity appeared nearly haphazard, often driven by the particular inclinations or experience of the agreement drafters with minimal involvement of the other participants to the agreement itself. It clearly cannot be taken for granted that dispute resolution provisions will be adopted when interorganizational coordination agreements are composed and established, nor do their inclusion or contents appear to draw much attention from the agreement signatories. There remains considerable room for further education and advocacy regarding the importance of providing for conflict and its resolution as an element of interorganizational coordination, and somewhat worrisome risk that in the absence of such provisions an unnecessarily large number of interorganizational disputes will end up in litigation.

ABSTRACT

Adoption of California's Sustainable Groundwater Management Act (SGMA) in 2014 posed a major coordination challenge for diverse public agencies by requiring them to align their activities at the scale of groundwater basins, which is not how most governing bodies are organized. Meeting this requirement meant establishing governing and operating relationships between agencies. Such interorganizational relationships (IORs) are essential in many fields, but are also prone to conflict. Understanding the factors affecting the inclusion, specificity and salience of dispute resolution clauses (DRCs) in interorganizational agreements ensures the long-term functionality of IORs. We examined 74 multi-entity agreements forming new quasi-voluntary local agencies, devoted to developing and implementing groundwater sustainability plans to achieve groundwater sustainability under SGMA. Statistical analyses were performed to identify potential factors influencing both the inclusion of DRCs in agreements, as well as the degree of specificity. Agency annual operating budgets and the use of facilitation services during agreement formation were statistically significant factors in predicting the inclusion of DRCs in agreements. Interviews were conducted with a subset of agency representatives, facilitators and lawyers to understand factors motivating the inclusion of DRCs and the salience of those clauses. We found a near uniform lack of salience associated with the DRCs. While DRCs are considered an important component of multi-entity agreements, their inclusion and specificity are often driven by agreement drafters with minimal involvement of agreement parties impacting the salience of DRCs and potentially their use long-term.

Keywords: Alternative dispute resolution, Dispute resolution clauses, Interorganizational dispute resolution, Interorganizational coordination, Groundwater

1 INTRODUCTION

Interorganizational coordination (IOC) is essential in all types of endeavors across a wide range of domains. From business supply chains to local public services to regional planning, relationships among organizations (such as firms, governments and NGOs) are the primary means by which complex tasks are carried out. The relationships developed to support interorganizational coordination are supposed to leverage organizational specialization and expertise, having different tasks performed at appropriate scales, and allowing for the variations in values and preferences of organizations' clienteles or constituencies (V. Ostrom et al. 1961; E. Ostrom 2005; Pahl-Wostl et al. 2020).

The benefits of interorganizational relationships (IORs) are accompanied, and to a certain extent constrained, by the possibilities of conflict and challenges of coordination. Tensions may emerge from differences of organizational culture and values, asymmetries in resources and resource control, diverging perspectives on the purposes and benefits of the collaboration, contrasting interpretations of agreements, relative influence and power and more (Hardy and Phillips 1998; Gray 2004; Adger et al. 2005; Chong and Zin 2012). Some IORs manage to sustain a balance of oscillating degrees of cooperation and conflict over time (Bodin et al. 2020). These complexities make the IOC phenomenon a challenge to analyze and understand (Bardach 2001).

Thompson (1967) provided a useful framework for thinking about IORs, IOC and conflict by focusing on the type and extent of interdependence among organizations. The simplest type is pooled dependency, where units share and use common resources but are otherwise independent. Second is sequential dependency, where organizations collaborate serially such that one's output becomes another's input. The third and most complex form of interdependence is reciprocal dependency, where units feed their work back and forth among themselves, with each member receiving input from and providing output to others. Because reciprocal dependency increases both the frequency and intensity of interorganizational reliance, Thompson anticipated that IORs featuring this kind of interdependence would also be most susceptible to interorganizational conflict (also Ouchi 1980; Kumar and van Dissel 1996; Dekker 2004).

Kumar and van Dissel (1996) added that organizations with reciprocal interdependency are not only at a higher risk of conflict, but have multiple ways of harming one another, making them susceptible to more types and degrees of risk of conflict. Mitigating these risks is challenging if not impossible because mechanisms must be adjusted to the actions of many interacting positions. Developing coordination mechanisms capable of containing all the contingencies in these complex reciprocal relationships can be cost or time prohibitive or simply not possible.

We add one further consideration to Thompson's insightful and useful framework. The analytical literature on IORs generally and understandably treats these relationships as voluntary, akin to relationships of mutually beneficial exchange in pursuit of efficiency gains. In many circumstances this may be accurate. However, whether and to what extent organizations are free to join an IOR and whether organizations seek or realize gains from IORs should be treated as an empirical matter rather than being assumed. Marando (1968), for example, challenged the assumption that inter-local cooperation is pursued for efficiency considerations. Under some circumstances, interorganizational coordination may be a condition of the receipt of funding and thus quasi-voluntary (Gallotti et al. 2016). Interorganizational coordination may even be mandated under certain conditions, as when a larger-scale government requires smaller governments within a region to coordinate planning or facilities or service delivery (e.g., Schafer 2016). If interorganizational conflict is likely to arise from tensions associated with interdependence, as Thompson and others have observed, those tensions may be exacerbated when an IOR is born of quasi-voluntary or mandatory circumstances.

By whatever means an IOR comes into existence, structuring and maintaining coordination can and likely will entail addressing conflict, before it arises or afterward. Anticipating the emergence of conflict and seeking ways to resolve it can lead representatives of organizations to incorporate dispute resolution procedures into contracts or other coordinating agreements. This is the essence of our contribution in this report to the literature on IORs and IOC.

Our research explores factors influencing the decision to include or not include dispute resolution clauses (DRCs) in interorganizational agreements, and the specificity of those clauses. We analyzed 74 quasi-voluntary, multi-entity agreements that created multi-member groundwater management agencies in California. Those agencies, named Groundwater Sustainability Agencies (GSAs), were formed during 2015-2017 in response to a state statute enacted in 2014, the Sustainable Groundwater Management Act (SGMA).

2 MULTI-MEMBER GROUNDWATER SUSTAINABILITY AGENCIES AND THEIR GOVERNING AGREEMENTS

SGMA mandated several policy outcomes to be carried out at the scale of groundwater basins within the state and allowed for the formation of single- or multi-entity GSAs to achieve these outcomes. The law required GSAs to be formed within each groundwater basin covered by the statutory mandate,[1] but left the decision to each local government body whether it wanted to form a GSA, join with other local bodies to form a GSA, or stay out of GSA formation altogether and leave it to others.[2] The law also provided discretion over other aspects of GSAs' governance structures including voting mechanisms, representation, cost sharing, and the format and content of intergovernmental agreements (including any provisions for dispute resolution).

In that sense, the IORs that were created when local governments chose to join together in a GSA might be characterized as quasi-voluntary. While one or more local governments had to form a GSA within a groundwater basin, the ones that chose to participate could decide whether to partner with anyone and, if so, with whom. Other aspects of interorganizational coordination, however, were mandatory: where multiple GSAs exist within a covered basin, they are required to either collaborate on the development of a single Groundwater Sustainability Plan (GSP, Plan) for the basin or to coordinate their Plans if they chose to develop their own. More than half of the 134 basins covered by the law will be managed by multiple GSAs (Conrad et al. 2016). In light of the high stakes associated with mandate compliance and the extensive amount of IOC the legislation requires, Moran and Cravens (2015) anticipated and called attention to the potential importance of dispute resolution processes for SGMA implementation.

Of the 264 GSAs formed by the June 30, 2017 deadline, 74 (28%) were formed as multi-entity GSAs through a Joint Powers Agreement (JPAs) or a Memorandum of Agreement/Understanding (MOAs/MOUs) (Milman et al. 2018). The remaining 190 GSAs (72%) were formed by a single local public agency. The 74 inter-agency GSA formation agreements constitute our database for

1 The California Department of Water Resources (DWR) categorized all 515 of the state's groundwater basins into one of four categories: low-, very low-, medium- or high-priority. All groundwater basins designated as high- or medium-priority must have formed Groundwater Sustainability Agencies (GSAs) by June 30, 2017. Once formed, these agencies were required to develop and implement Groundwater Sustainability Plans (GSPs, Plans) to achieve groundwater sustainability within 20 years of Plan implementation (by 2040 or 2042, depending on the condition of the basin).

2 County governments are somewhat of an exception on this point. To avoid a situation where no local government requested designation as a GSA or where GSAs did not cover an entire groundwater basin, the state law directed county governments to be the default GSAs for the uncovered areas. County governments could opt out of GSA participation only if other local governments formed the needed GSAs for any basin or basins located within that county or they were willing to risk the basin being out of compliance.

this study, where we focus on whether the participating agencies included DRCs in those agreements and on the contents of those DRCs. We found that GSA formation agreements differed considerably and interestingly regarding (a) whether they included a DRC, and (b) if they did, how specific or detailed the DRCs were. Our methods and analysis of those agreements are presented in detail in Section 4 below.

Recognizing the complexity of GSA formation and the potential for conflict during this process, the California Department of Water Resources (DWR) provided facilitation support services to "help local agencies work through challenging water management situations."[3] To receive funding for facilitation services, local agencies were required to work with professional facilitators to support the GSA development process. Attorneys also played an important role in drafting the GSA formation agreements, however their roles were distinct from facilitation services. Facilitators were hired to support the GSA formation process as a whole, while attorneys were generally brought in to ensure the interests of individual clients were represented in the agreement. Thus, multi-entity GSA agreement formation generally included multiple attorneys representing their parties' interests and one facilitator helping to advance the process across parties.

Our study provides a distinctive look at the provisions of a large number of IOR governing structures created simultaneously within the same state and under the same policy mandate, but with considerable discretion to craft their own agreements and decide what provisions to include. This research is an opportunity to explore the variations in the IORs that were created within that common context. We can therefore focus on the differences in the inclusion and content of the DRCs in those agreements, and what characteristics might be related to those differences. That focus allows us to address questions such as when and why agencies entering into IORs, and trying to achieve at least some level of IOC, anticipate the prospect of conflict and provide for dispute resolution, as well as how much detail they invest in those arrangements. Understanding the factors influencing DRC inclusion and specificity can help organizations engaged in other IORs recognize factors that may help or hinder the development and use of DRCs in their own governance structures.

3 DISPUTE RESOLUTION MECHANISMS IN AGENCY FORMATION AGREEMENTS

Individuals and organizations have often used litigation and arbitration to settle disputes, but those processes can be time consuming, expensive and favor larger, more established entities (Chong and Zin 2012). Thus, there has been a shift over the last several decades toward alternative or appropriate dispute resolution (ADR). ADR encompasses a range of processes to resolve conflicts that shift the locus of decision making around the process and outcome from the court to parties themselves, alone or with a neutral third party. It may be helpful to clarify assumptions about the array of process choices available in ADR. On a spectrum of control, parties retain control of both process and outcome with direct party negotiation. Mediation (and facilitation) introduce a third party neutral that assumes control of process and aids the parties to explore options for settlement. In adjudication, the third party neutral is vested (by law or agreement) with authority to bind the disputants to the terms of an award or decision. Trial (public) and arbitration (private) are common adjudicative processes. ADR usually includes mediation and arbitration, but may provide for hybrid processes as well. Research on U.S. federal district courts indicates that less than 1% of cases go to trial; the vast majority of civil cases settle (Galanter 2004, Issacharaoff 2012).[4]

3 See: *https://water.ca.gov/Programs/Groundwater-Management/Assistance-and-Engagement*

4 United States Courts, "Table C-4: U.S. District Courts—Civil Cases Terminated, by Nature of Suit and Action Taken, During the 12-Month Period Ending March 31, 2017," 2017, p. 1, *https://www.uscourts.gov/sites/default/files/data_tables/fjcs_c4_0331.2017.pdf*

Alternative or appropriate dispute resolution (ADR) usually includes mediation and arbitration, but may provide for hybrid processes as well. Fitting one or more dispute resolution processes to a specific category of disputes has come to be known as dispute system design. A system designer will weigh an array of elements that shape a stream of disputes, taking into consideration the goals, stakeholders, context and culture, process options, resources and metrics for success (Amsler et al, 2020).

Dispute system design is motivated by both process efficiency in terms of access, cost and speed, and the desire to enhance diverse party and stakeholder participation and identification of underlying needs and interests (Fuller, 2001). As such the use and long-term success of DRCs rely on three critical components: clause 1) inclusion, 2) specificity, and 3) salience.

Inclusion — Having a DRC is not sufficient to prevent or mitigate disputes, therefore the design process is critical as a model for the stakeholders' performance and engagement over time (Amsler 2020). Moran et al. (2019) found DRCs are included in multi-entity agreements for several reasons that go beyond providing a proactive mechanism for resolving conflicts. In some cases, DRCs may have been included in an agreement to serve as a "calming tool" for parties that have not worked together in the past or have a history of conflict, and help to bring parties to the table that might not otherwise participate in the agreement. Other agreements may include DRCs based on advice from counsel, facilitators or other parties involved in agreement development, incorporating well-crafted, thoughtful DRCs into agreements requires consideration of a variety of factors — the goals above, long-term relationships, parties' ability to fulfill agreements, context, available resources and enforceability. Facilitating conversations on these topics takes time, skill and, in some cases, education to fully appreciate the requirements and benefits of dispute resolution (Forester 2009; Innes and Booher 2015). More broadly, research on forum-setting clauses in DRCs has observed a quality of "stickiness," wherein lawyers tend to use their standard agreement templates (with or without DRCs) with minimal discussion or revision (Nyarko 2021).

Parties may choose to exclude DRCs from their agreements for a host of reasons. When agreements are negotiated under strict deadlines, time may not allow for development and inclusion of well-crafted mutually agreeable clauses. Parties may be concerned that discussing conflict could be viewed as undermining currently amenable relationships. There may be insufficient appreciation of DRCs and their potential value. Entities may feel DRCs are unnecessary or that other aspects of their agreement are adequate or will preclude disputes from arising. Also, some individuals or agencies may feel that ADR is not in their best interest and that litigation represents their best option (Moran et al. 2019).

Specificity — Similar to inclusion, the specificity of a DRC in addressing the dispute system design factors outlined above does not assure its use, functionality or success in resolving disputes. It may, however, serve as an indication of the amount of consideration given and the degree to which parties discussed goals, dispute resolution processes, funding and other desired outcomes during the development of their DRC. Detailing in advance procedures to be used if disputes arise may help parties resolve them more efficiently and equitably. In the case of SGMA, the inclusion of DRCs in agency formation agreements was voluntary and as such they varied substantially. Some dispute resolution clauses were vague, requiring only that "The Parties shall work collaboratively and in good faith." Other agreements outlined clear processes, timelines and financing mechanisms for resolving disputes. Capturing this broad range of clause specificity enabled statistical analyses to understand potential factors influencing inclusion and specificity of DRCs.

Salience — The term salience represents the extent to which parties regarded crafting a dispute resolution procedure as an important and relevant element of constituting their IOR and were involved in that process. The perceived significance of dispute resolution could be a function of the anticipated likelihood, severity or intractability of conflict. These expectations may be affected by factors such as the number and diversity of parties, voting or other decision-making protocols, or the nature of interorganizational relationships in the basin over time . These or other variables could motivate DRC development to ensure that the clause is tailored to the party's goals, structures and desired outcomes.

Salience of DRCs may depend on the parties' understanding of their process choices both ex ante to include in a DRC, as well later once a dispute arises. The ability of parties to exercise preferences about DRCs rests on the gateway issue of whether they know about or are educated on the available options and their relative merits (Shestowsky 2018).

In the water resources context, several variables have been associated with increased potential for conflict, including water scarcity (Elhance 2000; Wolf 2007; Tir and Stinnett 2011); rapidly changing physical conditions or hydrologic variability (Elhance 2000; Wolf 2007; Fishhendler 2004); existing hostile relationships (Wolf 2007); an increasing number of signatories with competing interests (Hamner and Wolf 1998; Petersen-Perlman et al. 2017); and technical uncertainty (Hamner and Wolf 1998; Milman and Ray 2011; Petersen-Perlman et al. 2017). In some cases, these have been successfully mitigated with collaborative agreements, institutional adaptive capacity and existing positive relations (De Bruyne and Fishhendler 2011; Petersen-Perlman et al. 2017).

Our analysis focuses on the number of signatories (Petersen-Perlman et al. 2017), and their diversity regarding water rights, administrative capacity, concerns over autonomy (Subramanian et al. 2012) and the involvement of a facilitator during agreement formation. Applying this literature to the particular context of groundwater management in California, differences in water rights, severity of groundwater basin conditions and diversity of participating agencies (e.g., water districts as compared with cities or counties) are all hypothesized to increase the likelihood or intensity of conflict. Administrative capacity is assessed using two variables: annual budget as a proxy for an agency's ability to invest in programs or projects to meet changing physical or political challenges; and the inclusion of a city or county as an agency member. Counties play a special role under SGMA: they are assumed to be the GSA covering any areas that do not fall within the management area of another GSA, unless the county opts out of this responsibility. Thus, counties are likely to serve two key functions under SGMA: 1) they serve as the connective tissue in groundwater basins where a governance structure does not span the entire basin; and 2) because counties are often parties to other inter-agency agreements, they can provide a legal perspective that other agencies may not have. Finally, under SGMA, the DWR provided grant funding for facilitation services to support GSA formation. The use of facilitation services is hypothesized to increase the likelihood of DRC inclusion as well as specificity and salience, either because agencies seeking facilitation were already more attentive to the agreement formation process or because the facilitators drew agencies' attention to the importance of providing for dispute resolution.

4 METHODS

This study investigates factors affecting the inclusion, specificity and salience of DRCs in the multi-entity agreements. As described in Section 2, SGMA's mandated deadline for agency formation was June 30, 2017 and resulted in the formation of 74 multi-entity agencies established through JPAs or MOAs. Also as noted, inclusion of DRCs in these agreements was voluntary, which establishes an ideal condition to assess factors affecting agencies' decisions about whether to include a DRC in their formation agreement, as well as its specificity.

4.1 Variable construction

4.1.1 Dependent variables

Content analysis of the 74 JPAs and MOAs was performed. If a DRC was present, we coded whether it specified: (a) goals of the clause, such as types of disputes that could be included as part of the dispute resolution process or any disputes excluded from the process; (b) who pays for the dispute resolution process; (c) who among the affected stakeholders can invoke the dispute resolution process; (d) timelines for the dispute resolution process; and (e) the process means of resolving disputes, including negotiation, mediation, arbitration, and litigation. Table 1 shows the results of this analysis.

Table 1. DRC components included in the multi-entity agreements. These components are not mutually exclusive (n=47).

DR Clause Component	Total (number, %)
Specifies a dispute resolution process or set of processes	Yes: 47 (100) No: 0 (0)
Specifies the *type* of disputes that can be included	Yes: 32 (68) No: 15 (32)
Specifies who can *invoke* the dispute resolution process	Yes: 24 (51) No: 23 (49)
Specifies who will *pay* for the dispute resolution process?	Yes: 23 (49) No: 24 (51)
Provides a process timeline?	Yes: 20 (43) No: 27 (57)

This analysis allows for two dependent variables. The first dependent variable is presence or absence of a DRC. A total of 47 (64% of the 74) agreements include DRCs. The second dependent variable is a ranked variable measuring specificity in terms of the number of elements in each DRC, as outlined above and in Table 1. Values for this variable range from a minimum of 1 to a maximum of 5, as all DRCs included some process for resolving disputes or for working together.[5] An additional point was awarded for each element included for a maximum value of 5.

5 Additional details can be found in Table 3.

4.1.2 Exogenous variables

The agreements were coded for a variety of factors including the number of signatories; the inclusion of a water rights protection clause (any clauses pertaining to the protection of member surface water or groundwater rights); membership and voting procedures; and the diversity of member agencies, including agency type.

This information was combined with data from external sources to develop seven exogenous variables thought to influence the inclusion and specificity of DRCs (Table 2). These are number of signatories; adaptive capacity; diversity of signatories; surface water rights diversity amongst members; members' concerns over water rights; physical condition of the basin; and the use of facilitation services. An overview of these variables and details on their development are included in Table 2.

Table 2. The exogenous variables, the rationale for including them in the analysis, and a description of the variable. DRC is dispute resolution clause.

Exogenous variable	Hypothesis	Variable description/method
Number of signatories	• As the number of signatories on an agreement increases, so too does the likelihood of conflict (Wolf 2007). Thus, agreements with more signatories would be more likely to have DRCs. • As the number of signatories increases, the likelihood of institutional capacity also increases (Hamner and Wolf 1998). Thus, agreement with more signatories are more likely to have a DR clause.	• Coded directly from each agreement and included only signatories to the agreement.[6] • Measured variable: min = 2; max = 19; mean = 5.1 (n=74).
Adaptive capacity	Agencies with more resources, internal capacity or experience negotiating contracts are more likely to have a DR clause in their agreement (De Bruyne and Fishhendler 2011). Our analysis uses two proxies for adaptive capacity: • Whether there is a **city and/or county as a signatory to an agreement,** and • **Agency budget**, which serves as a proxy for an agency's capacity and ability to pay for counsel, consultants, facilitation and other services.	• County as a signatory: Nominal variable (n = 74). • City as a signatory: Nominal variable (n=74). • City OR county as a signatory: Nominal variable (n=74). • Agency annual budget: Measured variable: min = $8700; max = $2,972,604; mean = $757,449 (n=39).[7]

6 Some agreements included additional, often non-voting, members (with no rights or obligations) to their agreements. These members were not included in the number of signatories count.

7 Fiscal year 2019 budgets were available for most agencies, although six agencies reported budgets from fiscal year 2018.

Exogenous variable	Hypothesis	Variable description/method
Diversity of signatories	Agencies with more diversity in the types of agencies that have signed onto an agreement may be more prone to conflict (Petersen-Perlman et al. 2017). Our analysis includes two proxies for member diversity, including • Agreements with a mix of agencies with direct water related responsibility • Agreements with a mix of water rights holders and non-surface water rights holders	• Water agency mix: Nominal variable where agreements have a mix of water and non-water agency signatories or they do not have a mix of water and non-water agencies (i.e. all of the agencies in the agreement are either all water agencies or all non-water agencies) (n=74).[8] • Surface water rights mix: Nominal variable where agreement signatories have a mix of water rights holders or do not have a mix of water rights holders (i.e. all of the signatories to the agreement either have water rights or do not have water rights) (n=74).[9]
Surface water or groundwater rights protection clause	Agreements with an explicit clause outlining protection of surface water or groundwater rights have higher concerns for autonomy are therefore more prone to conflict (Wolf 2007). Thus, agreements with a with an autonomy clause would also be more likely to have a DR clause.	• Coded directly from each agreement and included clauses that specifically referenced the protection of members surface water or groundwater rights.[10] • Nominal variable where agreements have or do not have an autonomy clause (n=74).

8 For this portion of the analysis, signatories were divided into one of two categories: 1) agencies directly responsible for managing, storing or purveying water (e.g., water districts, irrigation districts, water storage districts and 2) agencies that do not exist solely for water management purposes (e.g., cities, counties, universities).

9 Information on surface water rights were collected for every signatory to each agreement from the California State Water Resources Control Board's Electronic Water Rights Information Management System.

10 For example, This Agreement "shall in no way determine or modify the surface water rights or groundwater rights, if any, of any Party."

Exogenous variable	Hypothesis	Variable description/method
Physical basin conditions	Basins with the worst physical conditions have the highest potential for conflict (Wolf 2007). Thus, agreements occurring in basins with poor physical conditions are more likely to have a DR clause in their agreement.	• **Basin Prioritization:** Ranked variable where agreements are placed into a category from 1-5, based on DWR's ranking of the basin. They are categorized as: 1 is very low-priority, 2 is low-priority, 3 is medium priority, 4 is high- priority, and 5 is critically overdrafted (COD) (n=74).[11] • **Groundwater declines:** Nominal variable where 0 are agreements in basins with no observed groundwater level declines, and 7.5 are agreements in basins exhibiting groundwater level declines (n=74).[12] • **Subsidence Points:** Ranked variable where 0 are agreements in basins with observed inelastic subsidence, 3 are agreements in basins with historical inelastic subsidence, and 10 are agreements in basins with current inelastic subsidence (n=74).[13] **Seawater Intrusion:** Nominal variable where 0 are agreements in basins with no observed seawater intrusion, and 5 are agreements in basins with documented evidence of seawater intrusion (n=74).[14] • **Water Quality points:** Ranked variable where 0 are agreements in basins with less than 3 water quality points, 1 are agreements in basins with ≤ 3 and less than 6 water quality points, 2 are agreements in basins with ≤ 6 and less than 8 water quality points, 3 are agreements in basins with ≥ 8 water quality points (n=74).[15]
Facilitation Services	Basins that receive facilitation services during agency formation are more likely to include a DR clause.	Nominal variable where agreements received or did not receive facilitation services during agreement development (n=74).[16]

11 See: Sustainable Groundwater Management Act 2019 Basin Prioritization Process and Results (DWR 2020). See: *https://water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization.*

12 *id.*, pg. 23.

13 *id*, pg. 23-24.

14 *id*, pg. 24-25.

15 *id*, pg. 25-28.

16 Information on facilitation services were reported through a GSA facilitation listserve and verified through informal interviews with multiple facilitators contracting with DWR to provide facilitation services for GSA formation.

The exogenous variables discussed thus far represent potential factors influencing the inclusion and degree of specificity of DRCs, but there are other relevant factors. Additional variables that may affect agencies' ability or inclination to develop and include more sophisticated DRCs in their agreements include: familiarity with dispute resolution processes and their potential benefits; counsel's or facilitator's experience in using and developing DRCs and counseling clients regarding them; agencies' past relationships (whether successful, tense or adversarial) with the other parties to the agreement; and time pressures associated with drafting and signing agreements (Moran et al. 2019). We conducted semi-structured interviews with participants in a subset of the 74 multi-agency GSAs to learn more about the role of other potential factors on the use and specificity of DRCs (additional information on interviews is included in Section 4.3).

4.2 Statistical methods

Our exogenous variables include a mix of nominal, ordinal and ratio measures. The nominal variables include county and/or city as a signatory, diversity of signatories both with respect to the mix of water versus non-water agencies and the diversity of water rights, water rights protection clause, groundwater declines, and seawater intrusion. The ordinal variables include basin prioritization, subsidence and water quality. The budget and number of signatories constituted the ratio variables. Accordingly, different statistical tests of significance were used. The Fisher's exact test was used to test significance between nominal variables. Fisher's exact test does not depend on any large-sample distribution assumptions and is appropriate for smaller sample sizes (McDonald 2014). The Kruskal-Wallis test was used to test significance between ordinal and ratio variables. While the Anova test is traditionally used to test for significance between ordinal and ratio data, it assumes that data are normally distributed; therefore we used the Kruskal-Wallis test of significance which is not as sensitive to deviations from normality (McDonald 2014).

4.3 Interviews

To better understand the role of salience on development of DRCs in multi-entity agreements, 11 semi-structured interviews were conducted with water managers and county representatives involved in the formation of agreements representing a range of DRCs.[17] These interviews represented 10 agencies: seven with DRCs and three without. Specifically, for interview selection, agreements were divided into one of three categories: no DRCs, very low specificity DRCs (defined as having a value of 1 on the dispute resolution specificity index) and very high specificity DRCs (defined as having a value of 5 on the dispute resolution specificity index).[18] Within each category, we used the statistically significant exogenous variables from the quantitative analysis described above to identify agreements representing members within each category. For example, because budget was a statistically significantly variable for the presence of DRCs, we looked for high (low) budget agreements without (with) DRCs. Where multiple potential agreements were identified, we looked for overlap with agreements that had the variables identified as being statistically significant for DRCs specificity. A total of 14 agreements were identified as being of interest using this process. Of these, four agreements were considered equivalent to one another, providing options for engaging interviewees in case some individuals could not be contacted or did not respond to requests for interviews.

17 Interviews were conducted under IRB protocol 34498.

18 Given the greater resource requirements of interviews, we purposefully focused our interviewing on the lower and higher ends of the DRCs specificity spectrum — i.e., GSAs with no or limited dispute resolution provisions in their agreements, and GSAs with extensive dispute resolution provisions. The goal of the interview dimension of our data collection strategy was to identify agreements across the range of statistically significant variables (e.g., across a range of budgets, with and without autonomy clauses, etc.) in order to explore the decision-making processes that had led to one approach or the other with regard to DRCs. Therefore we did not add interviews with participants in GSAs whose agreements fell into the middle (i.e., 2,3,4) of our 1-to-5 scale. The interviews were not intended to follow a statistically valid sampling protocol.

The semi-structured interviews with individuals whose agreements included a DRC focused on learning: (1) if the agencies worked with a lawyer or facilitator during agreement formation, and the role those individuals played in DRCs initiation and development; (2) what was the key driver for including a DRC in their agreement and how decisions were made to include specific elements of the DRC; and (3) about past relationships or conflicts between signatories to the agreement. In addition to interviews, a short pre-survey was sent to all interviewees with a DRC. The pre-survey asked interviewees to rank the relative importance of five factors on their decision to include a DRC in their agreement. These included: (1) the role of the lawyer, facilitator or other members to the agreement; (2) ensuring a process to resolve disputes between members; (3) protection of rights; (4) efficiency and timeliness; and (5) the physical conditions of the basin. A total of seven pre-surveys were distributed. Five pre-surveys were completed, despite multiple reminders to the two agencies with outstanding pre-surveys. Rankings from the pre-surveys served as prompts for the subsequent interviews.

Finally, interviews with individuals whose agreement did not include a DRC focused in understanding: (1) if the agencies worked with a lawyer or facilitator during agreement formation; (2) whether they considered including a DRC in their agreement and if so, what factors affected their decision not to include one; and (3) past relationships or conflicts between signatories to the agreement.

Given the small numbers, qualitative analyses of the survey and interview data were conducted, along with a simple frequency analysis of the responses. These results are included in the next section, following our findings from the review of all 74 agreements.

5 RESULTS

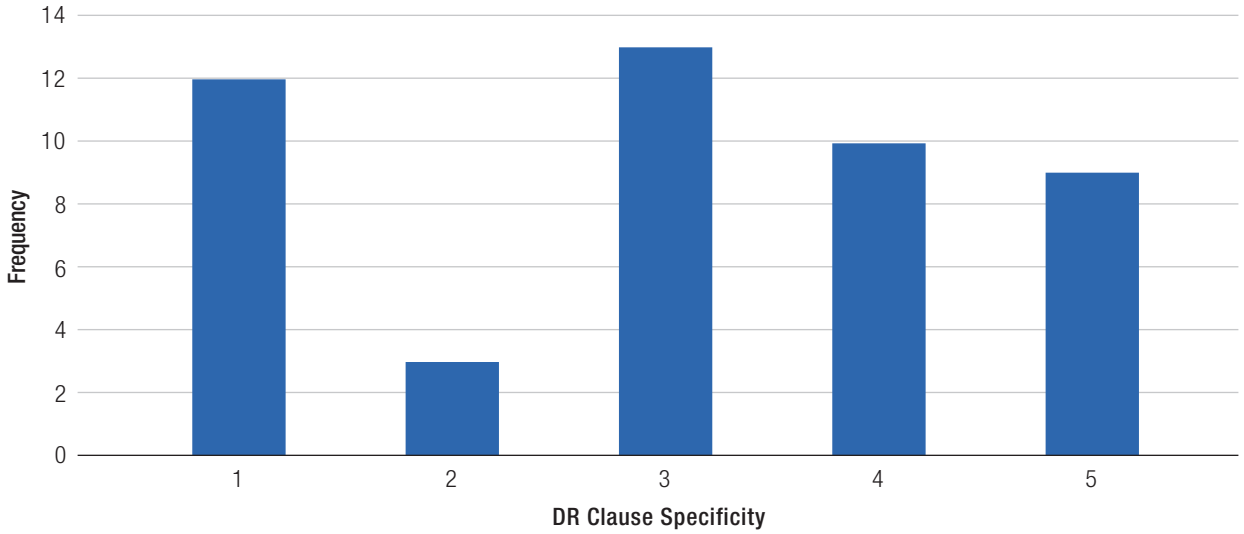
After constructing our variables based on insights from the research literature on dispute resolution and interorganizational relationships, and applying the analytical methods described above, we identified several findings from our dataset. Those findings relate to our interests in the inclusion (or omission) of dispute resolution provisions in the inter-agency agreements, the specificity of those provisions and the salience of dispute resolution as the agreements were being developed. We begin the presentation of our results with descriptive statistics from the data on our dependent variables.

5.1 Dispute Resolution Clauses

Of the 74 agreements, 27 (36%) did not include DRCs indicating that more than one-third of inter-agency agreements that chose to accept responsibility for planning and implementing sustainable groundwater management did not mention what the parties would do if disagreements arose. This is somewhat interesting in light of (a) Thompson's argument that interorganizational relationships characterized by reciprocal interdependence would be most prone to conflict, and (b) the often contentious and frequently litigious history of water resource management in California. Nevertheless, this may be a rational choice given that DRCs were not required, and parties were required to negotiate agreements under tight deadlines. Parties therefore had to weigh whether they have enough information and time to make an informed judgement on designing a dispute resolution process ex ante, or would prefer to select an appropriate process ex post.

Figure 1 shows the extent of specificity of the dispute resolution provisions in the 47 agreements that had DRCs. Most dispute resolution provisions contained minimal details or multiple details. The least common type of DRCs (rated 2 on our scale) were clauses that specified only one additional step or condition beyond some (in some cases very vague) process. Generally, DRCs were either vague and general (rated 1) or contained multiple details (rated 3, 4 or 5.) A slight majority of agreements (25 of the 47 or 60%) that contained DRCs were rated 3, 4 or 5.

Figure 1. Frequency plot of the DRCs specificity index (n=47).



Considering both dependent variables together, the data suggest that the multi-agency agreements fell into three broad groups. Those that contained no DRCs, a vague clause or a detailed clause. The first two of those groups comprised roughly half of the agreements.

Table 3 presents a breakdown of the processes provided in agreements with DRCs. Processes are not mutually exclusive. We found that the most frequently mentioned dispute resolution options were negotiation (32 agreements) and mediation (32). Both are nonbinding processes. Arbitration was mentioned less often — in 15 agreements, five of which specified nonbinding arbitration. Litigation, while an option unless binding arbitration is agreed upon, was specifically mentioned in 16 agreements, usually just to note that the parties retained their rights to go to court if other dispute resolutions processes failed.

Table 3. The range of dispute resolution mechanisms included in DRCs (n=47). Processes are not mutually exclusive.

Process	Number
Negotiation. Includes to meet and confer, mutually agree, and work cooperatively in good faith	32
Mediation mandated before litigation	12
Mediation	20
Arbitration (nonbinding)	5
Arbitration (binding)	10
Specially designed ADR	5
Litigation	16
Voting	2

5.2 Statistical Analysis

As described in Section 4, we tested several exogenous variables for their association or correlation (depending on measurement levels) with the two dependent variables. Table 4 reports the p-values generated by those significance tests.

Table 4. Results of statistical test of significance. DR is dispute resolution. SW is surface water.

	DR presence/absence	DR specificity
No. of signatories	0.51	0.38
County included	0.16	0.33
City included	0.24	0.38
County OR city included	0.62	0.61
Facilitation	0.04**	0.27
Budget	0.06*	0.46
Diversity of signatories: Agency type	0.16	1.00
Diversity of signatories: SW rights	0.43	0.44
Presence of water rights protection clause	0.14	0.02**
Basin priority	0.64	0.61
Groundwater declines	0.12	0.59
Subsidence	0.18	0.23
Seawater intrusion	0.64	0.62
Water quality	0.57	0.74

** indicates $p \leq 0.05$. * indicates $p \leq 0.10$.

Most of the exogenous variables that we employed based on the literatures on dispute resolution and interorganizational relationships did not show significant relationships to either the inclusion of a DRCs (all 74 agreements) or the specificity of DRCs in the agreements that had them (the subset of 47). We note especially that neither having more agencies as parties to an agreement, nor having diverse kinds of agencies as parties were associated with DRC inclusion or DRC specificity.

Having a general-purpose government (such as a city or county) as a party made no discernible impact. Our budget measure did have a p-value of less than 0.1 in relation to the presence or absence of a clause, indicating that agreements involving agencies with greater financial capacity were more likely to include dispute resolution provisions.

The presence of more serious groundwater problems such as falling water levels, subsidence of overlying lands or the intrusion of seawater into the groundwater, did not significantly affect the inclusion or specificity of dispute resolution provisions in these inter-agency agreements. The State of California's classification of the groundwater basins as low, medium or high priority also showed no significant relationship with either dependent variable.

There were two exogenous variables with significant relationships — one with each of the dependent variables. If the parties to an agreement had elected to use a facilitator during their agreement formation process, they were much more likely to have included some provision for dispute resolution in the agreement. As noted in Section 2 above, it may be that greater awareness of, or concern about, the potential for conflict led them to opt for a facilitator and also provide for dispute resolution, or it may be that the facilitator prompted the parties to think through matters such as how to handle future disputes. Either way, the use of facilitation services and the inclusion of a DRC tended to appear together, and agreements that were reached without a facilitator also tended not to address dispute resolution.

Our specificity variable was significantly associated with our measure of autonomy concern. In agreements where the parties included language safeguarding their rights, they were highly likely to have included comparatively detailed DRCs. Conversely, agreements lacking explicit protection of the parties' respective water rights were likely to have vague or general provisions for the resolution of disputes.

5.3 Interview Findings

As described in Section 4.3 above, we interviewed participants in a subset of cases about their choice whether to include DRCs in their agreement, and if they did, whether to have a comparatively detailed one. In addition to shedding light on why clauses were or were not included and what may have affected those decisions, the interviews were an important means of assessing the salience of dispute resolution as a topic of consideration when the agreements were made.

Almost uniformly, the interviews revealed that neither the inclusion nor the content of DRCs was a subject of deliberation among the parties. For the most part, the clauses had simply appeared in the agreements without discussion. Even where agreements contained highly detailed and specific dispute resolution provisions, we heard comments such as, "I don't recall it even being discussed," or, "We never really talked about it." With a couple of exceptions where the participants themselves had been directly involved in the agreement drafting process, most interviewees reported that the dispute resolution language in the agreement, as well as other language, had come from legal counsel. Most either knew or assumed that the dispute resolution language in their agreement was based on a JPA or MOA template provision or borrowed from other agreements. Regardless of how the dispute resolution language had originated, we asked specifically whether the parties had discussed or modified it, and in all but two of the interviews the answer was no. One non-lawyer described their aim to have simple, gentle legal language that was flexible, to minimize conflict; the lawyers reviewed and "blessed it". The absence of discussion on these DRCs was reflected by one official who noted "even bringing up a dispute resolution provision can seem adversarial."[19] Most interviewees described their organizational relationships as collaborative; a few had experienced intense conflict in the past, which motivated parties to avoid litigation.

Combining the results from the data on our dependent variables, the statistical analysis on relationships to our exogenous variables, and the interviews, it appears that anticipating and making arrangements for the resolution of disputes was not a salient consideration during the development of these 74 inter-agency agreements. Approximately half of the agreements contained no provision or only general language about addressing disputes "cooperatively and in good faith," and even in the cases where detailed language was included, most interviewees could not recall it being a subject of much, if any, discussion.

19 Interviewee 13, July, 2020.

6 DISCUSSION

SGMA provided that each basin in California covered by the statute develop a GSA, which could include multiple agencies acting together as a GSA. This governance structure led us to focus on interorganizational coordination as our unit of study. The scholarly literature describes how organizations leverage their specialization and expertise for mutual benefit through coordinated governance and conflict management. The interorganizational, multi-entity GSAs formed pursuant to California's SGMA legislation are characterized as quasi-voluntary: voluntary in terms of multi-entity structure, but mandatory in terms of function to manage their respective basins -- or risk the state's intervention. The mutually dependent relationship among organizations adds to both the benefits and potential conflict. The MOUs and JPAs formed by multi-entity GSAs selected different governance structures, including board membership, voting protocols, and dispute resolution provisions.

The motivation of our project was organized around the question: "When establishing IORs, what affects choices about whether and how to provide for dispute resolution?" This was broken into three component parts: (1) the inclusion; (2) the specificity; and (3) salience of DRCs. Of the 74 multi-entity GSAs enacted, 47 included a dispute resolution provision. Statistical analyses of DRC inclusion found two variables affecting the inclusion of DRCs: facilitation services and budget.

These findings highlight the potential role that facilitators, and potentially attorneys, play in helping agencies think through the potential for conflicts to arise and include clauses within their agreements to mitigate these conflicts for both quantitative and qualitative reasons. Facilitating conversations on these topics takes time, skill and, in some cases, education to fully appreciate the requirements and benefits of dispute resolution. The GSA formation process integrated the interests of various stakeholders in terms of the structure and operation (board membership and voting). Facilitators (subsidized by the state) and attorneys played a significant role in shaping the GSA composition, roles and responsibilities, as well as dispute resolution processes. Attorneys, as advocates for specific parties, also played a significant role in designing process and participation in decision making over the short and long term. Ideally, counsel would confer with clients on the anticipated source of conflict and possible means to resolve disputes expeditiously. However, use of attorneys (even if for a mutually constructive purpose) can send an adversarial signal and incur fees, both of which would discourage the effort. Thus, both facilitators and counsel served an educating role that could function to prevent disputes over time, but at different times with different perspectives.

However, as will be discussed later, the inclusion of a DRC does not necessarily translate to specific and salient clauses. Several of the facilitators that we spoke to during informal interviews discussed the need to educate GSA members about the long-term value of DRCs, which was particularly challenging and often not possible as agencies were grappling with a host of other priorities and were negotiating these agreements under tight timelines.

These findings are consistent with our survey results. Only one survey respondent did not rank the role of a lawyer or facilitator as being the most important factor affecting decisions about the DRCs. There was no consistent ranking of the remaining factors, which included: ensuring a process to resolve disputes between members; protection of water rights; efficiency and timeliness; and the physical conditions of the basin. The lack of consistency in these remaining factors suggests that external factors like the physical condition of the basin are either not salient enough with agreement members to motivate the inclusion of a DRC, the parties are not aware of the potential uses or advantages of including a DRC in their agreement, or they do not feel that the inclusion of such a clause would be needed or effective.

As discussed in our introduction, Thompson categorized IORs into three types based on level of interdependence — pooled interdependency, sequential interdependency and reciprocal interdependency. Agencies created under SGMA would certainly fall into Thompson's reciprocal interdependency category with each member relying on input from and providing output to others. These IORs are the most prone to conflict and presumably most likely to benefit from DRCs. Furthermore, in the particular context of water resources in California, participants in the GSAs are well aware that disputes, including disputes that might lead to litigation, are likely to arise at some point. Under these conditions, an investment in providing for dispute resolution processes would seem to be worthwhile.

However, there lies the problem. The same complexity of relationships, plus limited ability to predict and mitigate all potential conflicts resulting from these relationships, can make creating effective DRCs for these IORs extremely time consuming and insufficient. As a result, many conflicts end up being managed ex post rather than prepared for ex ante (Dekker 2004, Moran et al., 2019).

In addition to the role of facilitation services, annual budgets were a significant factor in the inclusion of DRCs. Not unexpectedly, agencies with higher annual budgets were more likely to include DRCs. Of the nine agencies in our analysis with annual budgets greater than $1,000,000, only one agency did not have a DRC. Annual budgets varied significantly between the agencies in our study, with a minimum annual budget less than $9000 to a maximum annual budget of nearly $3,000,000. Thus, budget may serve as a proxy for both the use of counsel in the development of DRCs, the ability of an agency to pay for a lawyer with experience in the water sector, the amount of time that a lawyer could devote to agreement development and the number of lawyers or other consultants involved in agreement development.

One representative we spoke to from an agency with an annual budget less than $500,000 indicated that no counsel was used in the development of their MOA. Instead they used a template MOA provided by the Association of California Water Agencies, a group formed to represent the interests of water agencies throughout California. "Our main goal was achieving regulatory compliance. We weren't looking to go above or beyond. Particularly given the tight timelines that we were under."[20]

DRCs ranged in specificity from one sentence "the parties shall work cooperatively and in good faith" to multi-paragraph sequential processes, with specifics about the scope of the disputes covered, who would pay for the processes and timelines for transitioning between processes. In light of this variation in DRC, we assessed the degree of specificity in DRCs. The only variable that correlated significantly with the degree of specificity was the inclusion of an autonomy clause or a clause that specifically referred to the protection of individual members water rights. For example, "Each Party intends to maintain, to the extent provided by law, complete control and autonomy over the surface water and groundwater assets…"

The inclusion of autonomy clauses in the context of the agreement included in this analysis is notable. All of the agreements were formed to establish multi-entity GSAs under SGMA. As such, the newly formed agencies are subject to all provisions of SGMA, one of which is that groundwater plans developed under SGMA do not alter surface water or groundwater rights (CWC §10720.5). Despite the law's explicit protection of surface water and groundwater rights, nearly 60% (42) of the agreements included clauses specifically protecting surface and/or groundwater rights. This prevalence indicates that water rights protection is a central concern for most agencies entering into these multi-entity agreements, and may foreshadow where agencies anticipate major conflicts moving forward. The inclusion of water rights protection clauses was also linked with greater DRC specificity.

Interestingly, the percentage of agreements with water rights protection clauses did not vary based on the mix or kind of existing rights the parties held. Agencies' concerns about declaring their rights protected were apparently independent of what rights other agencies possessed or claimed. California has been home to many epic battles over groundwater rights, with some groundwater adjudications playing out over the course of several decades (Blomquist, 1992; Szeptycki et al. 2018). Additionally, judgments or decisions on appeal in some groundwater adjudications have reversed previously established legal precedents making it difficult for individuals and agencies to predict the outcomes of litigation to protect groundwater rights (Szeptycki et al. 2018). Understandably this legal ambiguity may increase an agency's desire to put additional protections in place wherever possible.

20 Interviewee 04, August 2020.

While the lack of predictable adjudicatory processes should prompt agencies to develop robust DRCs, previous analyses by Moran et al. (2019) suggest that once conflicts escalate, many agencies prefer to rely on litigation to resolve disputes for a variety of reasons. This is an interesting and in certain respects counterintuitive phenomenon: presumably rational decision makers facing an uncertain litigation environment would prefer to make provisions for alternative methods of resolving disputes. However, among these 74 agreements, roughly half either omitted any dispute resolution language or included only a general statement about trying to work things out. It may be that parties are not as averse to litigation as might be thought, even with its expense and delay. Settling a dispute through an alternative process may be viewed as a weakening of position, especially if local court rules do not require an attempt at using mediation before trial. Alternatively, individuals or agencies may feel that they are more likely to achieve a better outcome via litigation or their constituents may view settling a dispute as compromising their position. Finally, litigation may be especially appealing if a public, evaluative process is sought, if a legal precedent is desired or continuing jurisdiction of the court is important.

We examined salience — the perceived importance of including and tailoring DRCs in the agreements — in two ways: first, using a short factor-ranking survey sent to water managers and county representatives to complete in advance of interviews; and second, via semi-structured interviews. The survey asked respondents to rank the importance of several factors with the potential to influence decisions about DRCs, including: (1) the role of the lawyer, facilitator or other members to the agreement; (2) ensuring a process to resolve disputes between members; (3) protection of rights; (4) efficiency and timeliness; and (5) the physical conditions of the basin. While the survey did not directly test for salience, results from the survey combined with the semi-structured interviews indicate that salience of DRCs is low in the existing multi-entity GSAs. Only one of the 10 agencies interviewed as part of this analysis discussed the specifics of the DRCs during agreement review meetings. “County counsel has a lot of experience drafting agreements and JPAs. [County] counsel worked hard to ensure that people understood the value of the clause and having alternatives to litigation.”[21] Even with this engagement, there was no modification of the DRC to the agency’s specific objectives. While the experience of counsel likely played an important role in developing a robust DRC that all agencies accepted without modification, it is also equally likely that other members to the agreement did not know or have sufficient time to assess and modify the DRC.

All of the agency representatives that we interviewed indicated that past relationships, which in some cases had been contentious, had been set aside to meet the state-legislated deadline of GSA formation. Equally important, however, is that all of the agency representatives that we spoke to indicated that in order to meet the GSA deadline formation, many of the challenging and potentially contentious discussions had been avoided. As one interviewee stated, we “have not had disputes among the member agencies since the agreement. On the other hand, the whole environment has changed….That has a lot of people upset, and although there is a negotiation process underway, there’s no way to tell how it will turn out. It has the potential to be divisive and to affect people’s attitudes and relationships.”[22] This same sentiment was echoed by an agency representative with no DRC. For example, “So far groups [GSAs]… are working well together, but we know there will be disputes and it’s unclear how to resolve those.”[23]

Importantly, the lack of discussion and modification of DRCs raises questions about the role of facilitators during agreement negotiations. Facilitators sit in the challenging position of educating parties, in conjunction with counsel, on potential options for governance, voting and dispute resolution, while also maintaining a process timeline to ensure that agencies meet necessary timelines. Moran et al (2019), found that strict timelines limited the inclusion and complexity of DRCs. One agency representative worked with counsel and facilitators to develop “placeholder” language outlining topics to be revisited when the topic could be given adequate attention. Further complicating this relationship is the dynamic between facilitators and lawyers. If these two individuals (or groups of individuals) are not aligned on the value and importance of specific elements within a DRC, signatories to

21 Interviewee 03, July 2020.

22 Interviewee 09, July 2020.

23 Interviewee 04, August 2020.

the agreement may be reluctant to ignore the advice of counsel. Also, while facilitators may be very influential during the process of developing an agreement — as our findings indicate they were during the GSA formation stage under SGMA — their role may be short-lived. Parties' attorneys are likely to remain in their roles after an agreement has been reached and signed. They are the ones who are likely to be present later if and when disputes arise. It is at least as important that attorneys develop familiarity and facility with dispute resolution processes since their involvement with the parties to the agreement will persist long after the facilitator's involvement has receded. Interviews with attorneys highlighted a broad range in knowledge of dispute resolution clauses, as well as experience with boilerplate language or in developing tailored clauses. Experience ranged from minimal knowledge of or ambivalence to high familiarity with the development of DRCs.

We find that unless and until there is significant conflict in a basin whereby an ex ante commitment to ADR offers a significant advantage to maintenance of interorganizational relationships and groundwater management, most agencies will choose to exclude a DRC from their agreement all together or they will include one that has not been sufficiently tailored to their agency's unique objectives and circumstances. In agencies where DRCs exist, processes contemplated in these clauses reflect the parties' desire to avoid litigation and negotiate directly, or seek assistance from a third party neutral to facilitate agreement before using a more evaluative process like arbitration or undertaking adjudication in the courts. In such circumstances, lawyers are used as a resource for templates, but, in most circumstances are unwilling or unable to provide additional information on different ADR process options and their comparative value. Thus, the affected parties in groundwater management do not perceive the value of deliberate dispute process design sufficient to invest additional time in DRC development. They do have a general sense that collaboration is important and valuable, so long as that forecloses state intervention, and prescriptive rights protection is not at stake.

CONCLUSION

Interorganizational relationships are ubiquitous and essential, and also complex and susceptible to conflict. While the majority of research to date has focused on voluntary IORs, governments are increasingly relying on legislation, regulations or policies requiring agencies to work together to solve complex environmental, planning or societal challenges across sectors and regions. Understanding the factors affecting not only the inclusion and specificity of DRCs, but also their salience will be increasingly important in ensuring the long-term functionality and success of these IORs.

Through the 2014 Sustainable Groundwater Management Act, California spurred the creation of a multitude of interorganizational relationships among local agencies, municipalities and counties, and each of those relationships is accompanied by a host of other stakeholders. We examined 74 quasi-voluntary multi-entity agreements through which local entities formed new GSAs during 2015-2017. Given the potential for conflict to arise within those partnerships, we explored whether, to what extent and for what reasons the parties to those agreements provided for alternative dispute resolution processes. Nearly two-thirds of these agreements included DRCs. Agency annual budget and the use of facilitation services were statistically significant factors in predicting the inclusion of DRCs, thus suggesting that resources, either monetary or otherwise are likely to drive an agency's familiarity with and inclusion of DRCs in agreements.

While protection of water rights was embedded in the legislation requiring the formation of these agencies, nearly 60% of the agreements included a water rights protection clause. The inclusion of a water rights protection clause was the only statistically significant predictor of DRC specificity, suggesting that agencies with concerns for autonomy are more likely to include a more specific DRC.

Although DRCs appeared in most agreements, we found little evidence that they were a salient consideration. Only one of the 11 agency representatives that we interviewed recalled any discussion of DRCs during agreement negotiations. These findings suggest that while DRCs are considered in the literature to be an important component of complex multi-entity agreements, where they are included it is often done by the lawyers or consultants who draft the agreement with minimal input from the parties in crafting the arrangements for addressing conflicts if or when they arose. Thus the content of the DRCs and their degree of specificity is largely driven by the experience, expertise and perceptions of the lawyers or consultants developing the agreements rather than by agreement signatories. This finding raises questions about whether and how the parties will invoke and use these clauses to mitigate conflicts when they inevitably arise.

There are numerous factors affecting members' ability to engage in discussions to tailor DRCs to their unique circumstances, including competing interests, concerns that even discussing conflicts may be viewed as adversarial, or a lack of time, resources and knowledge. However, our research suggests that unless and until there are significant conflicts in the California groundwater basins that now must be managed through interorganizational coordination, the apparently low salience of dispute resolution appears unlikely to change. There is considerable room for further research, however. Currently, these GSAs are developing GSPs — some are already submitted and under review by the state, many more will be submitted in 2022. In groundwater basins where GSAs submit multiple GSPs, those plans are required to be accompanied by Coordination Agreements stating how the GSAs will work together toward basinwide results. Coordination Agreements must describe how the parties will resolve disagreements. Although not every GSA included in our study will have to be party to a Coordination Agreement, it should be interesting to see how those with mandatory Coordination Agreements consider the specificity and salience of their DRCs compared to those in our study. In addition, SGMA requires that GSAs measure, report progress and update their plans every five years, which may open windows of opportunity for reconsidering other aspects of GSA functioning, such as how well inter-agency relationships are operating. Beyond the SGMA context, there is opportunity for further research on whether and how our inclusion-specificity-salience framework applies to dispute system design in other interorganizational relationships.

The increasing use of IORs to solve complex challenges will be contingent on the ability of these organizations to effectively prevent and manage conflicts before they arise, and to resolve these conflicts equitably and efficiently when they do. Doing so will require these organizations engage through members to not only include DRCs in their agreements, but to have jointly developed these clauses to ensure they meet the organization's collective goals. In many cases, achieving this outcome will require the lawyers and consultants supporting the development of these agreements to educate their members on the ADR process options and their comparative value. While this may require additional time during the agreement negotiation process, it may prevent the time consuming and expensive process of litigation.

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