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Conflict, Change, and the Challenges of Water Governance in Chile's Maipo River Basin

Maipo River Basin, Santiago Metropolitan Region, Chile

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With support from the Latin American Specialty Group of the AAG, I was fortunate to get to spend the summer in the Maipo River basin in central Chile conducting fieldwork for my M.A. thesis in Geography. It is a critical time to be studying water governance in Chile, as prolonged drought and escalating conflicts are placing new pressures on the country's neoliberal legal framework for water management. My thesis research explores how these shifting environmental and social dynamics interact with water law and policy to shape decision-making, negotiation, and conflict resolution. I aimed to 1) identify factors contributing to conflict and collaboration among water users, 2) examine the way that climate change adaptation initiatives and social movements mobilized people to address water conflicts, and 3) assess the way these responses to conflicts supported, challenged, or contested the current legal framework for water governance. Two months of in-depth qualitative research in the Maipo basin provided invaluable experience, revealed exciting findings, and presented new questions for future work.

My time in the Maipo basin was roughly split between the capital city of Santiago and the mountainous upper basin area known as the Cajón del Maipo, with some excursions into the lower basin agricultural communities. In Santiago, I participated in meetings, workshops, and roundtables about water management, climate change, and water code reform. I also conducted semi-structured interviews with NGO representatives, private water companies, water user organizations, academics, activists, and government officials. These actors had differing views about the main governance challenges in the basin and how they should be addressed. Common concerns included institutional fragmentation, limited government regulation, lack of coordination among different types of water users, entrenched conflicts, slow progress on policy reform, and growing water scarcity among vulnerable populations due to distribution issues as well as drought.

From these initial conversations, I identified three major water conflicts: controversial hydropower development in the upper basin, water scarcity due to rapid agroindustry expansion in the lower basin, and contested administrative boundaries for water management. This third conflict came as a surprise to me. I had learned from National Water Directorate (DGA) maps and documents that the Maipo River is split into three sections for administrative purposes. However, through my fieldwork I found that many water users are convinced that there should actually be four sections and refuse to conform to the DGA's boundaries. As I investigated the river sectioning issue further, I began to realize that it held implications beyond this particular dispute over the appropriate placement of sections, affecting conflict resolution across the basin.

Despite the DGA's insistence that river sectioning is a benign administrative tool for organization, interviews with water users revealed that these "artificial" boundaries have very real social and environmental impacts and play an important role in the way water conflicts are handled. According to Chile's 1981 Water Code, water rights holders in each section are expected to organize themselves into water user organizations to distribute water and resolve internal disputes, independent of neighboring sections. Legally, water users can consume the entire flow in their section, without any consideration of the needs of users in downstream sections, who often rely on irrigation run-off to replenish the flow. In practice, the water user organizations in the first section are far more organized and have many more resources than those in the lower sections. The second section, in particular, was starkly underdeveloped

compared to the first section, with no user organizations and high dependency upon water left over from the first section. Despite inextricable social and hydrologic connections between river sections, the Water Code provides no legal mechanism for inter-section coordination.

Problems arise when water conflicts do not fall neatly within these administrative boundaries and when they involve actors other than titled water users (i.e. tourism, recreation, and conservation interests and river-side communities). This is the case of the other primary conflicts in the basin, in which hydropower development and agroindustry expansion have sparked complex long-term struggles that far surpass the conflict resolution powers of water user organizations and even the courts. I found that in both cases, social movements have formed to fill these gaps in governance, providing a forum for marginalized actors to amplify their cause and advocate for reforms that would better protect their interests.

Participant observation and interviews with members of the two major social movements revealed that this shift to alternative means of addressing conflict stems from distrust of traditional conflict resolution forums and frustration with the limited options open to actors lacking legal water rights. Movement leaders expressed feeling like their efforts were "subsidizing the work of the state," monitoring the impacts of large development projects and contesting injustices that otherwise went unchecked. Beyond their context-specific arguments against hydropower and agroindustry development, the two movements shared broader critiques of the injustices of Chile's "extractivist" development model, a common ground upon which they built solidarity and mutual support from opposite ends of the basin.

Climate change looms large in all of these water conflicts, posing major implications for the way people understand and deal with water scarcity. The increasing policy attention to the effects of climate change in Chile presents both challenges and opportunities. Among activists, there is concern that the focus on climate change and drought "naturalizes" and obscures underlying problems of structural water scarcity caused by uneven development and disparity of access. These underlying issues are especially apparent in the lower basin, where the ever-deeper groundwater pumping by agroindustry has left several rural communities entirely without water. While drought has aggravated this situation, characterizing the lack of access to water as a consequence of drought ignores the inherent political nature of the problem.

On the other hand, the broad recognition of the need to address climate change has provided social movements with a new arsenal of arguments for more equitable and sustainable water management. Increased concerns have also sparked new approaches to planning, with climate change adaptation initiatives forming to bring diverse water users together to identify key areas of vulnerability in the water sector and to plan adaptive measures. According to participants in these planning meetings, despite difficulty in moving from planning to implementation, the participatory process itself is important in the way it facilitates dialog and collaboration between groups and organizations that otherwise had no means for coordination.

This research was made possible in part by funding from LASG, which helped cover per diem expenses while in the field. During this time I was able to conduct more than 50 semi-structured interviews with a wide range of actors in the Maipo River basin and collect pertinent legal and policy documents, which I am now in the process of analyzing for my thesis. Three main themes emerging from the data are the perceptions of water scarcity within the context of drought and climate change, the role of social movements in water conflicts, and the implications of the administrative river sectioning on water user organizations and conflict resolution. In addition to preparing my preliminary findings for the UA Tinker symposium and the annual meeting of the American Association of Geographers, I am also currently collaborating on several scholarly publications, as well as a photo story with photographer David Chambers that highlights some of this work (http://www.davidvonnegutchambers.com/maipo/).







