

Introduction

The Cultures of Water Sovereignty in New Mexico

I walk with Hector along the irrigation canal, the village's *acequia*, as the ditch is called in northern New Mexico. The only sounds are the pulsing, burbling water in the constrained channel and fluttering cottonwood leaves. Standing on the canal bank, we can feel the vibrations from the water through our feet. Hector, the mayordomo, a kind of ditch boss, turns and raises his eyebrows: "It's pretty clean, isn't it?"

"The water looks great," I respond.

He frowns, shaking his head, and starts walking again as he mutters, "No, I mean the banks of the *acequia*."

I stop. In one awkward moment, I missed the point completely. From Hector's perspective, this is not about the water. His remark is about the collective work of villagers in nature. The *acequia* is not *just* a ditch; it is also an important institution in which people manage and allocate water.¹ Water brings together the people on the ditch, through the act of sharing it, and it is the lifeblood of this valley. The ditch and the institution are *their* work, defining *their* water and their landscape. As a cultural and political institution, the *acequia* keeps neighbors from fighting over water. These ditch institutions have forged an agrarian cultural landscape with political clout and clear institutional rules. After this momentary misunderstanding, I forge on.

"So, Hector," I ask, as he walks along his ditch, "are your water rights adjudicated and accounted for on this stream?"

He turns, cocking his head, a slight squint in one eye, coming to a dead stop. "Who wants to know?"

I am sure I blink a few times. After a beat, I respond. "I do."

His head lobs farther toward his shoulder. The squint hardens. “And who are you, exactly? You’re not a lawyer are you, or some fancy engineer?”

I’m not wearing a suit, but my words suggest I have one hidden under my jeans and T-shirt. I rush to explain I am neither a lawyer nor an engineer. I’m a geographer from a liberal arts college trying to understand adjudication and its relationship to water users in New Mexico. A simple summer research project, I say. Hector snorts.

At that moment, the tension between us feels thicker than wet clay. For Hector, adjudication is a four-letter word, the A word. The state of New Mexico uses water adjudications to map and redefine water access as a private-use right, not bound to the village or valleys, parsed to individuals and not the communal institution of the acequia. My seemingly innocent question is perceived by Hector as an alien, unnatural framing of water in legalese. For hundreds of years, the acequias were largely left alone to allocate and manage water along their ditches. Hector’s acequia is one of the hundreds of these local water sovereigns, as I have come to think of them, that preexist the state of New Mexico.

Water sovereignty explains much of Hector’s reaction in this context. Redefining water in any cultural, political, and historical setting is contentious. Members of the ditch control water, which they think of almost as family. Thus, the intimate sovereignty over water is not perceived as only political. Sovereignty includes the lived practice of managing the water as an essential part of the cultural and sacred landscape, across hundreds of valleys in the state. Hector is concerned about losing control over decision-making, about local water governance, *and* about keeping water attached to the land.² Losing the water would imperil the sense of community, as he told me:

Listen, Eric. No, we haven’t been touched by that process [adjudication] yet, and a lot of people are nervous about it up here. Once it starts, it touches everything. Everything . . . old family grudges, all the cultural stuff between Pueblos [Indians] and Hispanos gets dragged to the surface again . . . It exposes everything and everyone. In some ways I wish it had happened fifty or sixty years ago, you know? Back when there was more water use and agriculture on these ditches . . . now [shaking his head] . . . I don’t know what kind of water will stay in this [Embudo] Valley once the state engineer is done with us. There’s nothing simple about it . . . and [tapping on my chest with a finger], *you’re gonna be sucked into this for more than a summer if you ask the right questions . . . just like we will be.*

Over a century ago, the 1907 New Mexico water code created the Office of the State Engineer and charged it with a monumental task. The state engineer was to perform “general stream adjudications,” accounting for all existing uses of water in every watershed in the state. That task continues today. The state maps out diversion points, land parcels with water rights, the first date of beneficial use of water,

and the crops that are grown and their water use in acre-feet per year. The details needed and captured are painstaking. For those undergoing adjudication, the stakes are high: irrigators, agencies, and cities are under pressure to make full and visible use of their water rights. Water users scramble to find old historical documents related to their first-use dates or deeds of property ownership. Adjudication sparks a scramble for time, priority dates, and evidentiary proof to get one's full measure of water. Studying this process is also a monumental task. Hector was right. This research lasted much longer than that single summer, and I soon found myself, like Alice in Wonderland falling into the rabbit hole, swept into the dizzying maze of adjudication.

Part of me wishes the *A* word had remained distant and foreign to me because of its complexity and its reach into all aspects of water. Nevertheless, I found it too fascinating and revealing to ignore. These water adjudication lawsuits expose everything that is strange and contentious about western water law and water use: disagreements over use, local and expert knowledge contests, competing legal notions of water, the allocation of water rights by crop, arguments about water's purpose, and interstate disputes over water.

Under the 1907 water code, water abruptly became a state-owned yet privately allocated resource. Adjudication was the process by which the state would translate water access to a private-use right. In some cases, adjudications went smoothly and quickly. These were typically in sparsely populated areas with little water to allocate. More typically, however, the legal process has been adversarial, costly, and lengthy. Multiple generations of families have been embroiled in the same adjudication lawsuit, and the most difficult and massive water cases have not even started yet. Water cultures in New Mexico, like the Hispano irrigators or Native sovereign nations who think in more collective, not individual, water terms, contested the state's rereading of their water norms and customary understandings of the purpose of water.³

Allocating small and big water shares will be an increasing challenge in this drier, warmer, more contentious century. Hector knows this, and so does the state engineer, but they think about water in different ways and at different scales. Scholars have recognized the importance of adjudications. Earlier contributions in a 1990 special issue of the *Journal of the Southwest* highlighted the problematic social tensions of adjudication as a process.⁴ Those concerns remain thirty years later. Ten years ago, in an interview by Jack Loeffler, Frances Levine wrote, "No contemporary issue is as emblematic of the struggle between traditional and modern lifeways as the water rights adjudications currently under way in much of New Mexico."⁵

In the field of critical legal studies, scholars have demonstrated that multiple customary and formal legal traditions can coexist in the same space. New Mexico represents such a case where competing worldviews and customary traditions of water use endure to this day.⁶ Legal scholars have assessed and critiqued various

state approaches to water adjudication, often focusing on the expense, the lengthiness, and the legal dilemmas. These works were aimed primarily at audiences of water law professionals.⁷ In addition, work by social scientists has addressed the impact of changes to water governance, water privatization, and the urbanization and commoditization of water.⁸ Water infrastructure, changes in water law, and federal Indian water policies in the American West have also been well documented.⁹ Historians too have provided rich accounts of the transformation of the American West's rivers, the impacts of large-scale irrigation and dams, and the movement of water to cities.

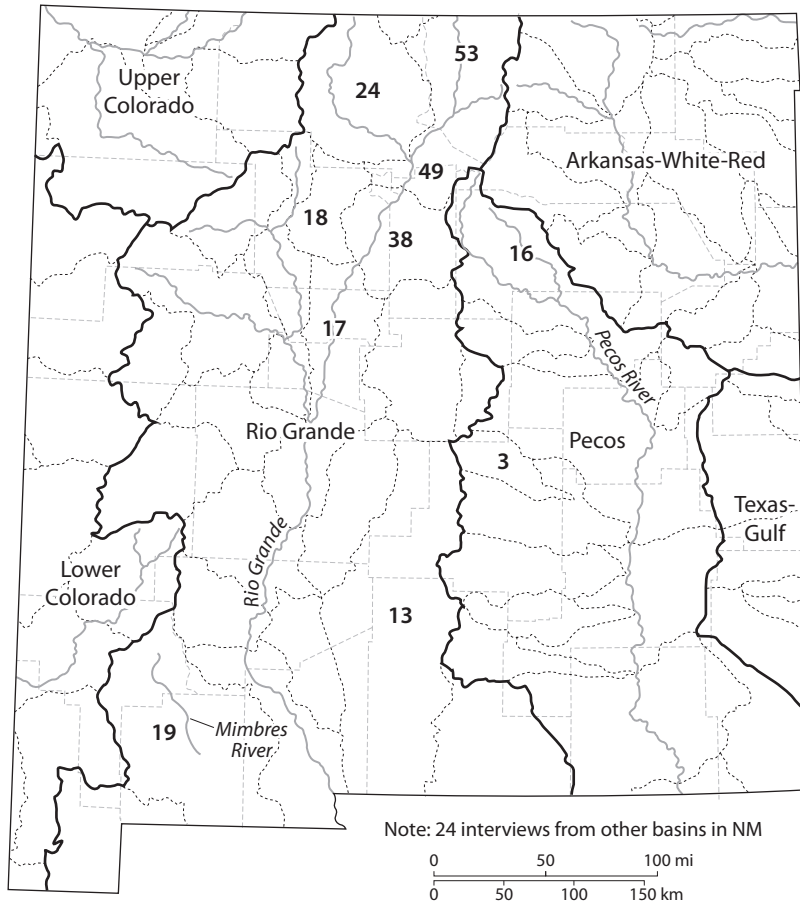
Unsettled Waters fills an unexplored space in the water literature, focusing on lived experiences of New Mexicans. I critically examine how adjudications affect water users, how they create new forms of water expertise, and also how they might be useful in addressing twenty-first-century water challenges. Adjudication spans generations, is ongoing, and has no end in sight. As I hope will be clear, adjudication has consequences, intended and unintended, for all water users. Here I focus on how the state translates and transforms water from a shared, necessary communal good into a singular resource to be owned by individuals.¹⁰ From a theoretical stance, tracking adjudication allows us to examine how a state “sees” water and attempts to redefine its new water citizens as property holders. Adjudication transforms water into a private-use right through law, a system under which water becomes a potential commodity.¹¹

COLLECTING NEW NARRATIVES OF ADJUDICATION

Unsettled Waters is based on a mixed-methods approach combining archival, field, and ethnographic research. Between 2006 and 2017, I conducted 274 interviews. Of these, 211 were of rural irrigators, with a special emphasis on those who belong to acequias or are in irrigation districts where acequias are present.¹² Local expertise preexisted the rise of disciplinary water “experts” (attorneys, engineers, etc.). I did not focus on a single basin or valley. Rather, I interviewed water users from basins around the state to get a fuller picture of this statewide process (see map 1).

I also interviewed sixty-three lawyers, engineers, historians, technicians, and water managers who were working for state agencies and in private industry. I included these informants because no single body of water users can claim a monopoly on understanding water problems, much less solving them. These water “professionals” also provide balance against an overly localized and nostalgic view of water in the Southwest.¹³

Because this is a book that depends on the views and perspectives of *living* New Mexicans, informant names are pseudonyms. A few interviewees wanted to be recognized by their real names, and I honored their requests. In some instances, I modified characteristics of the person depicted or quoted to disguise the source



MAP 1. Interview locations included in *Unsettled Waters*. These are aggregated totals of the basin-specific interviews conducted by the author in New Mexico. Note that an *additional* twenty-four interviews came from smaller basins that are difficult to represent independently due to the map scale.

of information. I did not want to betray the confidences of those who shared sensitive, personal, or ditch-wide perspectives. When real names were published in the public record and legal documents, I used those real names. None of those cited, mentioned, or acknowledged bear any responsibility for misinterpretations of fact, fiction, or their own words. The views and voices herein reflect the concerns, thoughts, and constructive critiques of adjudications by New Mexicans.

Each of the interviews, stories, or accounts in this book has deep historical roots. Legal and historical archives were consulted and used to enrich my accounts of past adjudications, since many of these court cases have lasted through two or more generations of New Mexicans. Archival records were vital supplements to the gaps of peoples' memories as they recounted their court experiences.¹⁴ Adjudication relies on court decrees and data, hydrographic surveys, maps, and charts. I consulted these resources in interpreting the regional cases that appear later in this book. The maps themselves, often dating back to the days of hand-drawn ink on linen, are gorgeous objects left behind by the technicians doing the field mapping. However, numbers and maps alone cannot provide a full picture of the process or its effects on those involved. Since the state, hydrologists, and other experts already track quantitative aspects of adjudication and state knowledge, this book focuses on the qualitative and cultural impacts of an unfinished process.

Listening to those affected by the process reveals how water users have questioned and contested the state's simplified reading of water as property. Following Freyfogle's treatment, private property has always been a contingent relationship, not a solid and identifiable "object" of property.¹⁵ Water is owned by each state as a public good, but the use rights are private and dispensed to individuals by the state. Water rights are especially contingent since they depend on state-driven framings of water as a public good *and* an actual supply of water to use. Water itself in the West is thus a hybrid good: publically owned yet privately dispensed for use as a property right to use. This critical ethnography of water adjudication holds implications for those affected by the process, the state agencies and individuals doing the work, and those who have yet to be visited and adjudicated by the state.¹⁶

GOALS AND ORGANIZATION OF UNSETTLED WATERS

This is a hybrid text that uses the pragmatic lessons from New Mexican water users and experts and draws on insights from scholarship on water issues. I have intentionally written this as a kind of public political ecology, with as little jargon as possible.¹⁷ There is much to learn here from the region and its people, which can inform the scholarly water literature and water policy in the West alike. The lengthiness of the adjudication process may actually have some benefits. There is still time to reform or adapt adjudication, and lessons from New Mexico extend beyond the state line. Few western states have completed their water adjudication processes, and all are seeking solutions to water scarcity and allocation challenges.¹⁸

I have divided *Unsettled Waters* into thematic sections. Part 1 focuses on the work of adjudication and case studies. Chapter 1 describes the roots and purposes of adjudication and how adjudication is linked to prior appropriation, as well as how both complicate cultural understandings of water in New Mexico. The two regional cases in chapters 2 and 3 exemplify how adjudications founder in basins

with multiple cultures of water. Chapter 4 then details the problematic social, political, and hydrological consequences when adjudications leave the courts to become negotiated water settlements.

Part 2 examines what adjudications and settlements produce. Chapter 5 examines how adjudication has produced new metrics of space, time, and volumes of water. The adjudication-industrial complex has also produced new forms of expertise, as I argue in chapter 6. In chapter 7, I describe how new water-user organizations and regional water-planning strategies have emerged as by-products of adjudication.

Part 3 focuses on the future of adjudication and coping with new water demands and potential lessons. Chapter 8 discusses what threatens to be the hardest work of all: adjudicating heavily populated regions along the Rio Grande. Chapter 9 addresses climate change, the water demands of other species, and how to account for water in our new era. Finally, in chapter 10, I revisit the experiences of New Mexicans and how they may inform other western states struggling to count and allocate their waters.¹⁹