Spring 4-15-2019

La gota que colma la caguama: Cummulative Tensions Transformed into the Defense of Water

Anthony J. Meluso
University of New Mexico

Anthony Meluso

Candidate

Geography and Environmental Studies

Department

This thesis is approved, and it is acceptable in quality and form for publication:

Approved by the Thesis Committee:

Dr. Benjamin P. Warner, Chairperson

Dr. Ronda Brulotte

Dr. Chris Duvall

La gota que colma la caguama:
Cumulative tensions transformed into the defense of water

BY

Anthony Meluso

B.A., Geography, University of Colorado – Boulder, 2015

Thesis

Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Science
Geography

The University of New Mexico

May 2019

Dedication

"'You have to live with your mind your whole life.' You build your mind, so make it into something you want to live with. Nobody has ever said anything more valuable to me."
Marilynne Robinson

To my parents, teachers, mentors, and friends
who have helped me develop a nice place to live.

Acknowledgements

I gratefully acknowledge my advisor and committee chair, Dr. Ben Warner. After each one of our meetings I felt smarter and more capable. You have expanded my view of the world. I also thank Dr. Ronda Brulotte for encouraging me to be adventurous and think bigger. I thank Dr. Chris Duvall for his excellent teaching, and help in clarifying my thoughts and writing. I am grateful to the participants of this research that I lived with and learned from this summer. You all have made me a better neighbor. Special thanks to the Department of Geography and Environmental studies for giving me a home.

La gota que colma la caguama:
Cumulative tensions transformed into the defense of water

BY

Anthony Meluso

B.A., Geography, University of Colorado – Boulder, 2015

M.S., Geography, University of New Mexico – Albuquerque, 2019

ABSTRACT

Making water management decisions is often where dreams and visions about potential futures are constructed and contested (Swengedouw 2015). However, in a globalized world, it is not well understood how people can challenge dominant paradigms to shape desirable futures when they are also complicit in, and dependent on existing structures (Arts & Buizer 2009; Emery, Perks, & Bracken 2013: Kleinschmit, Böcher, & Giessen 2009). This project examines a brewery conflict in the Mexicali Valley that provides an example of how protesters were able to challenge dominant assumptions about water management in a complex, globalized environment. I draw on Laclau's (2005) theory of empty signifiers and perform a narrative analysis to analyze the conflict. I also use historical analysis and interviews to support my claims. I argue that water was used as an empty signifier, a flexible symbol that enables various non-traditional alliances to collectively resist in the face of a recent history of undermined collective agency. Protesters used an alternative narrative, I term the *defense of water,* to gain political traction and challenge the dominant narrative. Somewhat paradoxically, this narrative obscured a primary driver of water scarcity, agricultural use practices, even though addressing water scarcity is a goal of the protesters. This paper discusses the implications for material-symbolic relationships with water in the Mexicali Valley.

Table of Contents

Contents

1. INTRODUCTION – BREWING ILL FEELINGS, A GROWING OPPOSITION

Negotiating water use is nothing new for the farmers in the Mexicali Valley. Situated in the desert, nearly all agriculture is supported by communal irrigation systems that have carried water from the Colorado River since the early 1900s. Over the years, farmers have collectively faced many challenges; they have unionized to respond to high levels of salinity from upstream agriculture runoff from the United States, and organized to negotiate the effects of the All-American Canal built on the U.S. side of the border (Cortez Lara 2014). Organizing once again, farmers of the region are protesting water-use changes driven by Constellation Brands' new brewery currently under construction in the city of Mexicali.[1]

The Constellation Brands Brewery was attracted to Baja California by the state government, the state offering to build a publicly funded aqueduct from the Colorado River to supply water to the brewery (Martinez 2017). Citing concerns of already strained and over-allocated water resources in the valley (Conagua 2015), farmers and Mexicali residents protested the construction of this aqueduct (Animal Politico 2017). Responding to the public outcry, the state government rescinded their offer to build the aqueduct (Martinez 2017). Nevertheless, Constellation Brands moved ahead, privately paying for the aqueduct and continuing the construction of the brewery. Construction has persisted and the brewery is projected to be operational by 2020 (Constellation Brands 2016). The products of the plant will almost exclusively be sold in California (Constellation Brands 2016). Protests continue, made up of many grassroots organizations.

[1] Constellation Brands brew Corona, Pacífico and Modelo. They are a US owned branch of AB InBev and acquired Grupo Modelo in 2003 and.

Decisions made about water permeate through the social, economic, environmental and political elements of our lives. Water use in the Mexicali Valley offers dramatic examples. Physically, the valley was one of the hottest and driest valleys in North America just over a hundred years ago; now it is a global scale provider of cotton, wheat, and alfalfa. The lives of the just over one million residents in the valley are enabled by harnessing the Colorado River water. There are 17,253 water users (Conagua 2016). Water management is often where dreams and visions about potential futures are constructed and contested (Swyngedouw 2015). The Constellation Brands Brewery conflict is no different. Both physical and ideological values of water are being contested in the Mexicali Valley.

PROJECT DESCRIPTION

In embarking on this project, my goal was to usefully contribute to both local actors and the literature on political resistance to neoliberal water practices in Mexico and Latin America. A deeper understanding of current resistance to Constellation Brands Brewery is needed. With members of Mexicali community I continue Mexicali scholar Cortez Lara's research on farmers' political action in the valley. To accomplish this, I lived in Mexicali in the summer of 2018 and conducted interviews with farmers, water managers and activists. I analyzed their responses within the context of literatures on political ecology and semiotic theory. Scholars in the discipline of political ecology are interested in how people resist water management changes driven by neoliberal policies (e.g., Swyngedouw 2009; Atkins 2018). A specific branch within semiotics studies how narratives and consensus are formed with the goal of understanding how political power is wielded (MacKillop 2016). Understanding the counterpoint of resistance and negotiation is key to providing political tools for healthier, more connected environments between people and the world (Robbins 2012, Loftus 2017, Ávila Garcia 2014).

RESEARCH QUESTIONS AND ROAD MAP

I have divided this thesis into four sections. In this introduction, I provide a literature review of political ecology, my entry point for working with this community and a guide to studying societies and natures together. Because chapters two and three are both written to become stand alone articles, I include individual literature reviews for each one of those chapters. Chapter two draws on semiotic theory, specifically Ernesto Laclau's (2005) work on empty signifiers in social movements, and chapter three uses environmental narrative analysis to lay out narratives in the conflict.

In Chapter two, "La gota que colma la caguama," I examine the tensions underlying the conflict and what allowed those tensions to form into action. I argue that water is used as an empty signifier, a flexible symbol that enables disparate interests to come together. With strength in numbers, they collectively promote different policy goals This research provides insights into how farmers were able to collectively organize to promote policy goals after a period of disunity and weak influence in water policy debates. The chapter builds on the work of local Mexicali water resources scholar, Cortez Lara (2014), in documenting farmers' collective agency in water conflicts in the valley.

Chapter three examines the environmental narratives that emerged out of the Constellation Brands brewery conflict. I ask, 1) how did groups advance their political narratives?, and 2) what signifiers of water allowed groups to meet their goals? I show that two main narratives have developed, both the *defense of water* and the *technocratic solution.* Each narrative signifies material-symbolic relationships of water differently. Doing so has highlighted and obscured either material or symbolic elements of water. In the case of the *defense of water*, community members who subscribe to this narrative gained political traction by signifying the control of water as Mexican sovereignty. In contrast, those who subscribe to the *technocratic solution* reinforce the dominant approach to water management by portraying water as material. This chapter contributes to an understanding of how dominant paradigm narratives are contested. Additionally, it provides a tool for policy makers to identify common goals shared by both narratives.

The final chapter, “Brewing Monuments,” ties together both strands of research.

LITERATURE REVIEW

Political Ecology: Foundations to Current Mexican Water Issues

In this literature review, I describe the foundations of political ecology, the current debates in the field, and then microscope in on those same debates surrounding water issues in northern Mexico. Political ecology is a sprawling field that embraces diversity in its subjects and methodologies. That said, the conversation across the literature is broadly cohesive. Over the course of this section, I tie debates about political ecology’s role as a jointly critical and constructive discipline together, from the early 2000s to the present. Just because essentially the same debate has continued for 20 years is not to say that there’s been no progress. On the contrary, critiques have been taken up and enacted, creating more nuanced, deeper and more situated knowledges. In addition to becoming more situated, political ecology has become less centered on Anglo American perspectives and ideologies. The inclusion of various languages and backgrounds strengthens political ecology’s overall mission to serve as a tool to enact change in the world. I see this literature as fundamental for understanding conflict between farmers and the large brewing company establishing in Mexicali.

Foundations

To describe the underpinnings of political ecology, I primarily I draw on Paul Robbins and in his 2004 book *Political Ecology.* It chronicles the genesis of political ecology, defines the central topics of political ecology research, and offers guidance as to where political ecology must venture in order to grow. I also look at Walker’s essays (Walker 2005; 2007) on the nature of politics and ecology, and why the two topics should be thought of together within the discipline.

Robbins (2004) distinguishes political ecology as a response to apolitical ideas of ecology. Principally, political ecologists reject the binary framework that humans and the environment are separate from one another. Rather, they see environments of the world as inextricably linked with politics and human action. Robbins (2004: 12) offers a succinct definition of the field: "empirical, research-based explorations to explain linkages in the condition and changes of social/ environmental systems, with explicit consideration of relations of power."

From this definition we garner that political ecology roots itself in both the critical and the constructive. Grounded in the study of power relationships, and social and environmental change, political ecologists are deeply connected to social sciences that deconstruct epistemologies. In addition to a critically deconstructive lens, political ecologists value reconstruction; understanding the linkages and connections that drive change can serve as tools for participants to better make adaptive decisions.

Held within these broadly defined goals, Robbins (2004) delineates four main categories warranting attention: "degradation and marginalization, environmental conflict, conservation and control, and environmental identity and social movements" (Robbins 2004:14-15). These theses key in on periods of transition, striving to explain the contingency between actors, institutions and environment.

Attempting to combine social theories and ecology has always been both a struggle and a strength of the field. By 2004, Robbins describes two main critiques of political ecology, namely that there is not enough or too much of either politics of ecology in the research. Walker joins this debate by asking "Where's the Ecology" and "Where's the Politics" fleshing out these concerns in greater detail than Robbins does in his book (Walker 2005; 2007).

"Political Ecology: Where is the Ecology" (Walker 2005) takes up the critique that while political ecology began as a means of addressing ecological phenomena with their interconnected political discourses, the field now has researchers that are minimizing the

ecological component all together. What some authors critique as a lack of ecology (e.g. Vayda 1999), others responded to with the assertion that nature and society are dialectical (Walker 2005). They cannot be separated and so therefore studies of environments that are defined as including humans and human activities are certainly ecology. Walker (2005) argues that the field of political ecology should remain broadly inclusive of biology and social sciences.

In his 2007 article, Walker again addresses critiques of political ecology in "Political Ecology: Where is the Politics." Alternately, Walker examines the constructive aspect of political ecology, political ecology's claim that it tries to "not only study but *wield* political power" (Walker 2007:364). Some notable successes in this field show that more perspectives and people were being involved in research. Many projects undertook co-produced knowledge experiments with communities, seeking to develop questions and solutions together. The process of becoming more inclusive and acknowledging different perspectives continues today, albeit with different language and more nuanced strategies (Loftus 2017). Walker recognizes that even with projects becoming more inclusive and collaborative, he sees great opportunity for these projects to be more sustained, timely and meaningful to the communities they study. The language that political ecologists frequently use now to describe this goal is with Donna Haraway's (1988) term situated knowledge. Ethical roles of researchers expressed in Walker's (2007) article as the dangers of exclusive conversations in the ivory tower also continue in conversations currently about decentering and decolonizing political ecology.

Political Ecology: Present Debates

Drawing together an extensive survey of the field, Loftus (2017) provides a review detailing the current state of political ecology. Overall, his analysis of the field shows continued interest in practicing a more inclusive political ecology like was called for in the turn of the millennium. He claims that work towards inclusivity and situated knowledge has led to current conversations on how to better situate research and understand socio-ecological relations. Loftus organizes the current threads of how this conversation is playing out into three main categories: linguistic diversity, decolonial

practices, and relational comparison.

Linguistically, political ecology has branched into Spanish, French and Portuguese. Due to unique contexts and histories, each has developed differently and now Loftus sees authors across linguistic divides communicating with each other. Chartier and Rodary (2015) argue the benefits of working between languages helps "being situated without being isolated, being connected without being acculturated."

Working between languages is one of many ways being argued to decenter the field from an Anglo-American perspective. Many authors, especially in Latin America, engage with ideas of sovereignty, the right for communities to choose their own practices. Loftus describes how the renewed extractive activities in Latin America provide ample opportunity for political ecologists and geographers to apply experience having already documented resistance to these sorts of policies. This is where Hart's (2016) relational comparison comes into play. He finds value in comparing between languages and between Marxist and post-structuralism approaches to denaturalize the conversations already taking place. Denaturalizing, I take to mean as a way value new perspectives by moving away from familiar categories.

Political Ecology in Northern Mexico Water Disputes

Zooming in on a situated field of political ecology, I follow literatures in Spanish and English in northern Mexico water disputes. Generally, the field is focused on neoliberalism and privatization, and how they drive change in Mexican communities and environments. Resistance movements and adaptations are common points of study in order to understand this phenomenon.

Political ecology in Mexico, like political ecology more generally, is also seeking situated contexts and the inclusion of narratives from many types of peoples. Smith et al. (2011)

provide a summary of political ecology specific to Mexico. Much of the research in this field focuses on development and maquiladoras and how these changes shape the landscape the practices of the people that live there. Political resistance is common study in response to neoliberal economic policy influences in both markets and human connected environments. Smith describes scholarship largely from the U.S. in 2000s examining these sorts of conflicts and looking at various actors from largely Marxist and feminist perspectives. Smith et al. call for closer looks at these phenomena at the local level. By looking at these close up debates over environment, resources, production, and resistance, Smith et al. envision a better toolbox for people to access successful strategies of reshaping human environment relations in Mexico.

Emphasis on the study of neoliberal drivers is seen throughout this subsection of political ecology. Ávila García (2015) echoes Smith et al.'s description of focus for political ecology on neoliberal economic policies on Mexico, but for her, specifically related to water. She sees the key studies of political ecology in water focusing on a process of dispossession from rights to water. This is facilitated unsurprisingly by the private sector, legally and illegally, however, the state often promotes this dispossession, too. Political ecologist document how local actors respond in collective social movements resisting privatization of water and seeking sovereignty and control over water in their regions. Swyngedouw (2015), a political ecologist writing about water in Spain, stresses the necessary role the state plays in neoliberal changes. He signals that the state is not just a catalyst or a structure, but essential for water to be privatized.

All across Latin America political ecologists show how systematically and incrementally dispossessed of water. The effect of this not only benefits international corporate interests. It fractures once-connected and unified landscapes. It disconnects people from the practice of land use. Ávila García provides a brief insight into resistance against neocolonial practices. She suggests that social political movements defending their rights are a perfect context of study for political ecologists in water. In water conflicts, private and public intersect. Water is deeply entwined with lifestyle and goals. Understanding

resistance, and repression of resistance is key to providing political tools for healthier, more connected environments between people and the world. Studying water is a means to draw us closer to co-creating robust human and environmental practices.

Two examples of the work being done on resistance and adaptation to neoliberal and climate change factors are Buechler (2016) and Pacheco-Vega (2017). Buechler studied a community in Sonora as it adapted to changes in climate, water scarcity and the retreat of government assistance. She focuses on women's adaptations in particular. By looking at what women are doing, she builds an understanding of local adaptation strategies. To add to this, she provided these findings to community leaders to potentially institutionally support grassroots initiatives.

Studying the Zapotillo dam in Jalisco, Mexico, Pacheco-Vega found conflict around the dam as a serious problem with no clear direction for negotiation. His contribution has been to identify as many actors as possible and how they communicate with each other. Like Buechler (2016), he provided this conceptual map of communication to leaders with the hopes that this would foster more clarity in discourse.

On a whole, political ecology studies in northern Mexico are becoming more situated and building on local movements such as feminist movements and indigenous movements trying to direct policy debates (Torres-Mazuera 2018). The gaps in how communities can address neoliberal and climate changes are found in deeper dives into what local communities are doing to seek sovereignty. Buechler (2016) provides an excellent example of where political ecology can go. By studying women in a community resisting and adapting to changes in markets and ecologies, she found many daily adaptations that studies of men protesting missed. Studies in this region that focus solely on formal institutions (Mumme 2016, Chen et al. 2014) miss opportunities to encounter meaningful ways in that people actively shape their lives (Cortez Lara 2014). The actions of institutions are important, but political ecology can look at how those institutions are

shaped and influenced in periods of transition. This type of action needs to be studied at a more personal level. My research could add to a reciprocal process of creating institutions to support grassroots initiatives, and vice versa, grassroots initiatives shaping valuable and connected institutions.

2. LA GOTA QUE COLMA LA CAGUAMA

INTRODUCTION

Water is socially constructed as much as it is a feature of the environment (Linton 2010). How people use water, and who gets to control it have implications for who can benefit from it. The governance of water— i.e., the set of regulatory processes, mechanisms and organizations through which political actors influence environmental actions and outcomes (Lemos & Agrawal 2006)—is the political process through which groups vie for this control. To date, environmental social scientists have made strides toward understanding water governance as a political process (e.g., Molle 2008; Fischhendler 2015; Warner & Kuzdas 2016). However, research on the role of conflict and violent protest in water governance is in its relative infancy.

It is well understood among water scholars that challenges in the allocation of water among individuals, communities, or regions most often result in collaboration (Fleck 2016). On the rare occasion that violent confrontation and conflict arises in the face of water scarcity, underlying and ongoing social strife is argued to be its cause, and water is presented as a catalyst that exacerbates the real cause (Wolf 2007; Feitelson & Tubi 2017). While this conceptualization of water may be useful for understanding conflict as a social process, it presents water as a passive agent in social movements.

In a different strand of scholarship, resent research on social movements suggests that unifying under powerful symbolism is a way to address issues collectively in the absence of institutions that can effectively address individual concerns (e.g., Torres-Mazuera 2018, Alvarez et al. 2017). Water, permeating social strata, the rural and urban, and providing a rich historical context can serve as symbolism that unites people in a cause (Swyngedouw 2015). Erik Swyngedouw demonstrates in his book *Liquid Power* how the control of water formed “alliances [that] effectively marginalized or repressed those

who dissented while nurturing the heterogeneous interests of those who took an active role in sustaining the existing networks and power relations" (p.224). Scholarship shows many examples of symbolism uniting those in support of the most powerful interests (e.g., Ziai 2009; Methmann 2010). I investigate the opposite, how the less powerful or disenfranchised can unite under the powerful symbolism of water to contest the dominant power structure and reshape the use of water.

In this article I explore the role of water—both the physical and symbolic elements —in recent protests in Mexicali, Baja California, Mexico. The Constellation Brands Brewery stands on the outskirts of Mexicali and is being constructed to produce up to 20 million hectoliters per year, opening in 2020 (Constellation Brands, 2016). The company produces Corona, Pacífico and Modelo beer labels. If the brewery were to operate at full capacity, they could use up to 30 million cubic meters of water annually (Martínez Zazueta, 2018). For comparison, this would be about the amount of water used in 2,800 hectares of cotton (Walsh 2008). The Mexicali valley cultivates about 180,000 hectares per year for various agriculture uses (Brun et al. 2010). The brewery was contested following the announcement in 2015 by farmers and activists. At a time when farmers were cutting back on water consumption because of an over exploited aquifer (Conagua 2015), the incentives that Constellation Brands was receiving from the state government seemed out of touch to many in Mexicali (NPR, 2018).

The material aspects of water, water use and water scarcity, play a part in the many tensions that animate protesters. Yet water scarcity and management themselves are not what pushed farmers to unify and act. Instead, I argue that water is used as an empty signifier, a flexible symbol that enables various non-traditional alliances to collectively resist a history of farmers' undercut political agency. Otherwise put, protesters' *defense of water* operates as a broad term that encompasses more than physical demands about water, but additionally has come to represent concerns involving labor, border inequality, gas prices, market access, and environmental quality.

In this article, I support my thesis by answering two questions about Mexicali Valley water protests. (1) What are the tensions underpinning the struggle in an arid, transboundary water setting? (2) And, what enabled these tensions to change into action? I focus on water governance in the Mexicali Valley, but conceptualize it broadly given my claim that water represents wide-ranging tensions that have been incorporated into an empty signifier, the *defense of water*.

I answer my questions by first articulating the theoretical underpinnings of my thesis. I show how professionalized water management and the privatization of water drove civil unrest. Then, I demonstrate how a water narrative developed that enabled farmers to regain collective agency and political traction in water governance. More specifically, I show that by bringing water concerns into the *gasolinazo*[2] protests of 2017, disparate protest groups were able to unify under a *defense of water* narrative.

THEORETICAL UNDERPINNINGS

I build from the semiotic components of a political theory developed by Laclau and Mouffe in 1985 and expanded by Laclau (2005), which provides a framework for understanding how groups of people form collective identities to gain political traction. Laclau (2005) shows how a collective identity requires a unity of demands. While perspectives and demands among groups of people are complex and diverse, they may be unified and incorporated into a collective identity if they are represented by an empty signifier. An empty signifier is an expression of demands that embraces the differences in demands (Laclau 2005). For example, during the 99% movement in the U.S. in 2011, where many demands were represented in a vague claim about identity, people coalesced

[2] *Gasolinazo* refers to a gasoline price increase, similar to saying a gas price gouge.

and articulated their demands using the “99%” as an empty signifier (Gitlin 2013).

The empty signifier does not diminish the distinct nature of the demands, but rather represents these demands through what Laclau (2005) calls a chain of equivalence. A chain of equivalence is the process in which diverse demands become represented equivalently by an empty signifier. Laclau (2005) argues that in the absence of an institutional way to differentiate and address individual demands, people see unfulfilled demands over time as having an equivalent relationship. For example, a group of people experiencing various issues such as housing, health, and access to resources, may correlate these issues and express unified resistance to the system that created these issues through an empty signifier. Thus, an empty signifier through a chain of equivalence can represent unsatisfied demands, regardless of their differences.

When an empty signifier represents multiple demands, people represented in the empty signifier can form a collective identity (Laclau 2005). Thus a new identity is created; a collective identity representing various demands equivalently is what Laclau terms populism (2005). Creating an identity lends more stability than a collection of demands acting independently (Laclau 2005).

The empty signifier framework has gained attention in recent years, which has led to its refinement. Political ecology research that addresses change in the relationships between humans and the environment with a focus on relations of power (Robbins 2012, 20) has increasingly used the concept to characterize how dominant neoliberal ideology has used terms like “sustainability,” “development,” or “climate protection” to promote status quo neoliberal policies (Brown 2016; Atkins 2018; Alston 2009; Cummings & Richthofen 2017; Kuchler and Hedrén 2018; Methmann 2010; Ziai 2009). This work demonstrates the ability of politically powerful groups to repurpose an empty signifier to reinforce a dominant paradigm.

In one example from political ecology, Brown (2016) shows how "sustainability," a term without a specific meaning, can be used to represent policies that promote efficiencies and development simultaneously at odds with social justice and climate goals. Similarly, Cummings and Richthofen (2017) show how Arab Gulf States promote "green policies" as a justification to continue economic growth and development projects that undermine environmental and climate stewardship goals. Atkins (2018) shows how "sustainability" has been used to legitimize the development of a mega-dam in Brazil. Each of these examples show how the vagueness of certain concepts can be divorced from ideas such as social justice or historical context to promote a dominant paradigm, most often neoliberalization[3].

The last main branch of empty signifier literature is in the realm of political theory (MacKillop 2016; MacKillop 2018; Giesen & Seyfert 2016, Teijlingen & Hogenboom 2016; Ziai 2009; Alvarez et al. 2018; Ansotegui 2018; Howarth & Griggs 2008). The authors deal with how coalitions of people are created and how consensus is gained. MacKillop (2016) and Giesen and Seyfert (2016) are developing theories on how signifiers gain or lose prominence. MacKillop (2016) analyzes explicit contestation of meaning as one way that empty signifiers lose their unifying power, while Giesen and Seyfert (2016) categorize some empty signifiers as either private or public, what can be debated and what cannot. Societies shape their beliefs on mysterious, centering, empty signifiers, such as God, or justice, while these internal and private beliefs are in turn shaped by debates (Giesen and Seyfert 2016). Empty signifiers may also be public, and in turn shape how people understand more private empty signifiers (Giesen and Seyfert 2016). Price (2005), an international relations scholar, additionally asserts that the empty signifiers can become a physical site, a place that enables contestation of under examined

[3] By neoliberalization I mean a process that favors privatization, deregulation, efficiencies and free trade.

assumptions. In other words, a place that brings private and public empty signifiers into debate.

Building on Laclau's theory, Alvarez et al. (2018) describe additional implications for the use of empty signifiers in social movements. They argue that empty signifiers enable diverse actors not only to join together in an identity, but also to operate separately with diverse effects. Otherwise put, actors maintain their previous goals, actions, and demands, but see each other as one movement. Effectively, the collective identity can include many strategies to advance one goal. The authors show examples of both "civic" and "uncivic", or rather activity seen as outside of the socially acceptable, coexisting in protests. Protest movements built around empty signifiers become a site to bring the appropriateness of activities or ideas into debate. The authors describe coexisting strategies of resistance as, "almost always [resulting] in conflict-inducing but sometimes productive tension" (Alvarez et al. 2018: 17).

Authors disagree on how empty signifiers should be dealt with to create more just and equitable worlds. Brown (2016) and Alston (2009) both see empty signifiers as a way to reach more equitable consensus. They draw on Laclau's (2005) insistence that meanings are never fixed, and can constantly be contested. For Brown (2016), empty signifiers have no allegiance and can swiftly be taken up by counter narrative. For example, Brown (2016) suggests adding the word "future" to "sustainability" to reshape the narrative practice around the word. Alston (2009) recommends bureaucratic shepherding by international women's experts to retain historical context and goals when negotiating new policies. MacKillop (2016) describes a lack of understanding in how signifiers gain and lose credibility and the need for "micro-studies exploring the cases characterizing the strategies of hegemonies in the hope of learning from them and formulating new, more equal, alternatives."

I find the following authors most useful in analyzing the Constellation Brands conflict.

Each author provides a lens for understanding how underlying societal assumptions and narratives are challenged with empty signifiers. Geisen and Seyforth (2016) assert that private empty signifiers, the sacred, are ideas shaped by public debate. How private understandings of concepts like "justice" are not well understood, but the literature indicates cases where sacred ideas can be discussed (Price 2005; Alvarez et al. 2017). Empty signifiers can shape and reshape both narratives and physical spaces (Price 2005). Writing about Jesús Malverde, a legendary altruistic bandit, Price (2005) ties churches and memorial sites in his name as a locus of negotiations around what is seen as legitimate activity. Describing Malverde as an empty signifier, she shows that physical memorials of his name had "an enduring capacity to shape and reshape historical memory, place, identity and power relations" (Price 2005, 192). This type of literature demonstrates how empty signifiers can be manifest both legislatively and physically.

In short, Laclau's theory provides a useful lens to view the formation of resistance among actors with ineffective institutional means to advance their demands. Farmers in the Mexicali Valley fit this social and historical context. The theory of empty signifiers also helps explain why water, or the *defense of water*, became the locus of protest movements in the valley.

METHODS

To answer my research questions, I used a grounded theory approach to examine how water was used physically and symbolically in protests surrounding the Constellation Brands Brewery (Corbin and Strauss 2008). I utilized a mixture of qualitative methods: semi-structured interviews, direct observation and extraction from texts to collect data (Bernard et al. 1986). The mixture of these methods helped contextualize the narratives gathered from personal interviews and observations.

I analyzed fourteen semi-structured interviews about the Constellation Brands brewery

conflict and related topics, nine group assemblies related to the conflict, twenty-five newspaper articles, two environmental impact statements from Constellation Brands and from Conagua, and ten videos about the conflict posted on Facebook or YouTube.

Fieldwork took place in Mexicali and the surrounding agricultural area during the summer of 2018. The 14 formal interviews and nine group assemblies were attended in this study area. Interview subjects were identified through a snowball method with contacts at organizations including the *Universidad Autónoma de Baja California*, NGO *Mexicali Resiste*, farmer resistance movements, and government water agencies. Ten of the interviewees were male and four were female. The group meetings attended were at the *Procuraduria Agraria* public meeting, a meeting of *ejido* leaders, *Mexicali Resiste* meetings, a press meeting at *Rancho Mena*, a protest outside the courthouse, a meeting with the *Comisión Nacional de los Derechos Humanos*, and a meeting with lawyers involved in the case.

I took part in daily life, attending protests, *asembleas*, and social and political events in May, June and July of 2018. Facebook pages and YouTube posts of interviews were also utilized. Newspapers and technical water management magazines were incorporated in order to contextualize the research.

I consulted with local historical scholars, books, local museums, magazine publications, internet accessed videos and scholarly works. While I was not present for the beginnings of the movement, or the ongoing efforts, these works provided context for understanding the movement more broadly.

Interviews were semi-structured and included open-ended questions about personal experiences with the Constellation Brands Brewery conflict, interviewees' perspectives on challenges facing the community, the history of water management in the study area,

and proposed solutions. Five of the interviews were audio recorded and transcribed. I took notes during the other nine interviews and then followed up by writing field notes of all I could remember immediately following the interviews. Group meetings were documented with in session note taking followed by field notes afterwards.

HISTORICAL FOUNDATIONS OF WATER PROTESTS

To understand the reasons and foundations of recent protests, it is important to unpack the history of water use and policy in the Mexicali Valley. This section begins with the first modern attempts to privatize land and water in the valley and marks major events and eras in the history of Mexicali water governance.

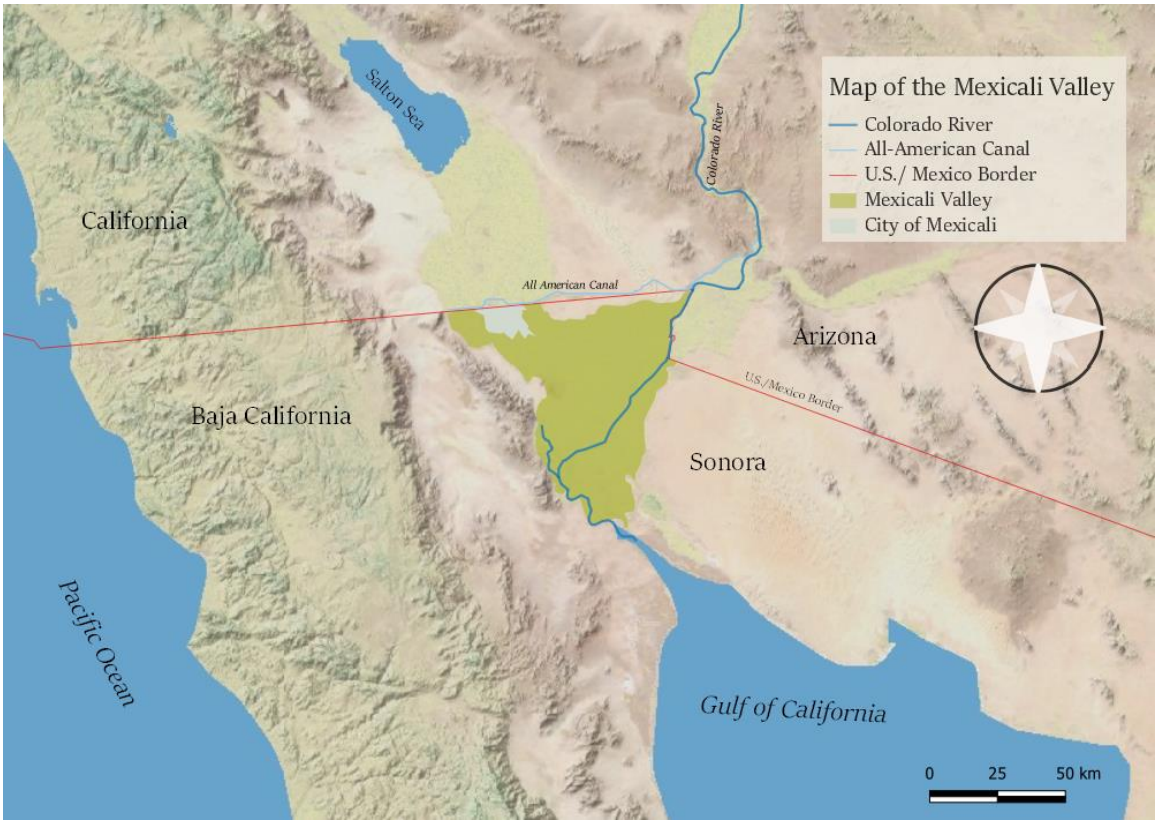

Figure 1

Agrarian development and the Colorado River Land Company, 1901-1937

Abundant, verdant vegetation is not a native feature of the Mexicali valley, portrayed in Figure 1. Prior to the 1900s, Mexicali was one of the hottest and driest places in North America. It is located on the western side of the continent where a semi-permanent high-pressure system prevents inflow of moisture from Pacific Ocean. Nonetheless, at the turn of the century, entrepreneurs from Los Angeles, California purchased 340,000 hectares of land in the desert for what would become the world's largest cotton farming operation (Kerig, 2001, 28). Reaching its base level, the Colorado River would snake, berm and flood the valley for millennia depositing fertile sediment across the arid landscape. Native Cucapah and Yuma people had for centuries cultivated crops along the rivers' annually shifting banks, but the American-owned Colorado River Land Company would transform the entire valley to industrial scale agriculture with reliable water delivery from a canal system (Sánchez Ogás 2010).

The Porfirio Diaz regime[4] and immigration from Asia are largely what enabled the scale of this project (Duncan 1994). In an effort to promote foreign direct investment, the Porfirio Diaz regime was selling large swaths of land to internationally owned companies (Schmidt 2005). The Colorado River Land Company purchased nearly the entire valley from the Porfirio Diaz regime (Sánchez Ogás 2010). The scale of the project made the Colorado River Land Company the major employer in the Valley (Kerig 2001). Previously, Mexicali had a small population without any other major employment in the area. Chinese immigrants arriving in southern California were then enticed to Mexicali to work on constructing the canals (Kerig 2001).

This early period of American industrial farming left a strong legacy on the way land and water are used in the valley today. These canals, in their updated forms are still used to reliably deliver water to crops (Kerig, 2001). Cotton, the intended crop for the valley is

[4] The *porfiriato*, or Porfirio Diaz regime, generally refers to a period of strong centralized control in the Mexican government from 1876-1911. Economic growth was considerable during this period, as well as unequal. The *porfiriato* largely created the tensions leading up to the Mexican Revolution.

still one of the most grown crops along with wheat and alfalfa (Brun et al. 2010). The manner in which this valley is farmed today reflects the legacy of close involvement with American style industrial agriculture (Wright 2012). Tractors, fertilizers, large plots of land, all characterize the Mexicali landscape today and date back to their development in this period (Brun et al. 2010; Sánchez Ogás 2010).

Gradually during this era, many mestizo Mexicans began to work the fields in the Mexicali Valley (Kerig 2001). Along with the growing discontent of wage levels, racial tensions between Asian workers, and land reform movements stemming from the Mexican Revolution of 1910-1920, the Valley became ripe for the redistribution of land that happened in 1937 (Garduño 2004).

Cárdenas backs the Asalto de las Tierras, 1937-1950

By 1937, mestizo residents of the Mexicali valley took over the holdings of the Colorado River Company by force and split the land into *ejidos* and *parcelas* (Sánchez Ogás 2010, Kerig 2001). Like other land takeovers of foreign owned companies in this era, people from various parts of Mexico traveled to Mexicali to take part in the repartitioning of land (Kerig 2001). Promoted by president Cárdenas, much of the corporately held land was split-up into *ejidos* by petition to the federal government (Wright 2012). *Ejido* status endowed certain rights to the *ejiditario*. As long as the land was worked, *ejiditarios* could remain on the land and profit from their work (Sánchez Ogás 2010). In contrast to other *ejido* communities in Mexico, communal land in Mexicali was divided into comparatively large parcels of no smaller than 20 hectares (Kerig 2010).

The *ejido* land pattern still dominates the makeup of farming in the Mexicali Valley. President Cárdenas' intention to support the creation of a middle class of farmers in the region by providing a substantial amount of land gave many farmers a means for livelihood throughout the previous century (Schmidt 2005). Cárdenas' goal was to break up large landholdings from the colonial era and from multinational investment under the Diaz regime and redistribute this among more people. The plot size of 20 hectares was

larger than other parts of Mexico, in part because of the sparseness of the population in the area and the legacy of industrial scale farming. The large plot sizes were also a reaction to earlier *ejido* experiments that split land in to single hectare portions, but were seen as limited to subsistence style agriculture.

For many, the Asalto de las Tierras is the starting point in resisting the construction of Constellation Brands' brewery. To them, their ancestors' takeover of the Colorado River Land Company is representative of the same struggle. Many of the farmers trace their ancestry in the valley back to involvement in this event. Among protesters are even those who were children during the event.

In 1944, the western states of the U.S. and the border states of Mexico participated in the creation of the 1944 water treaty (IBWC 1944). This treaty allotted a guaranteed 1,500,000 acre-feet of water annually by way of the Colorado River. This is still the amount that is due to Baja California today. This amount has been measured and delivered to Mexico since this landmark decision. The treaty also founded the federal organizations that negotiate current water treaties (IBWC 1944).

The salinity crisis and ejido protests, 1960-1979

Ejido farmers first unionized to address rising salinity in their water supply in the late 1960s (Cortez Lara 2014). Due to farming and municipal practices upstream in the United States, yields of crops dropped significantly due to the high salinity levels (Lohman 2003). However, smallholders were successfully able to collectivize their action to influence negotiations between the U.S. and Mexico to address this problem. The reforms introduced transborder policies that required the salinity of water released from the U.S. side to be below a certain level (Cortez Lara 2014).

Response to the salinity crisis represents the highpoint of farmer agency in the Mexicali Valley (Cortez Lara, Kaplowitz, & Kerr 2014). Farmers were able to collectively act to advance common goals in a complex international water management situation. In this period farmers had voluntary-funded unions and local representation in international water negotiations (Cortez Lara, Kaplowitz, & Kerr 2014).

This period also led up to the Latin American Debt Crisis as the centralized government assumed more debt from multinational entities to support its initiatives.

The Latin American debt crisis and neoliberal reforms, 1980-2000

Following the Latin American Debt Crisis of the 1980s, local and national governments enacted neoliberal economic reforms in the valley (Wright 2012). Most significantly, this shifted the agricultural economy from a semi-communal system to one with privatized land and water rights (Schmidt 2005).

The first of the changes involved limiting federal support in the way of fuel and seed subsidies in the 1980s (Gómez-Oliver 1994). The largest change started in 1992, when an amendment to the constitution enabled farmers to "transfer" or "cede" their rights permanently in exchange for money (Schmidt 2005). The verb choice of "transfer" or "cede" is crucial, because article 27 of the Mexican constitution written in 1917 prevents the "sale" of ejido properties. Nevertheless, today in practice, these verbs mean the same thing as "sale," permitting farmers to buy or sell their land or water rights (Schmidt 2005).

Thus began a process where farmers had more choices in what to do with their water. Farmers with salty soils could now sell their water rights to other farmers or industries instead of trying to grow crops on their land. Equally, if a family wanted to leave, they could sell that land and try to make a living elsewhere. Before, an *ejiditario* would not economically benefit from leaving. If a farmer wanted to grow a water intensive crop, such as alfalfa, she or he could buy extra water from a neighbor that was perhaps fallowing their field that year (Higuera Aguilar & Ranfla González 2016).

Two years after the 1992 land and water reforms, NAFTA adjusted who could purchase land in the border region (Audley et al. 2004). The 1917 constitution prevented the sale of any land to an international company within 100 miles of a border or coast. However, NAFTA and other reforms enabled international companies to operate within those boundaries (Audley et al. 2004). This permitted maquiladoras and industry to explode in the border region of northern Mexico. In concert with the newly liberalized water and land economy, both Mexican and international industry took off in the area (Cortez Lara 2014).

Water in Mexico sells at different prices based on the use of the water. The water prices are set by CONAGUA, the national water commission (CONAGUA 2015). Water prices are set lower for agricultural than industrial use. While at first intended to favor agricultural use by having a cheaper price, in the new water economy, farmers had a higher incentive to sell to industrial users than to other farmers (Palacios-Vélez & Escobar-Villagrán 2016).

Overall, this period privileged the narrative of privatization and minimized the history of collective and communal action that formed institutions in the past. Professionalized water districts replaced unions (Cortez Lara 2014). This led to viewing water management as a technical problem, instead of as part of a political process (Cortez Lara 2014).

The All-American Canal, 2003

The All-American canal represents the diminished agency that farmers experienced following neoliberal reforms. This section shows that farmers' ability to act collectively was undercut by professionalized institutions.

In 2003, the farmers once again responded to issues regarding water management north of the border. The U.S. elected to build a cement-lined canal to deliver Colorado River water on the United States side of the border. The concrete lining would reduce seepage and increasing deliveries of water to users in the Imperial Valley, the name for the valley north of the U.S./Mexico border (Ries 2008). The original canal was constructed in the 1930s. It was earth-lined allowing for seepage that helped recharge the groundwater south of the border. The seepage from the canal was so much that it inundated farmers' fields to the point of killing crops (Cortez Lara 2014). To manage the supersaturation of the soils from the seepage, farmers had adapted and built canals to utilize this extra water in the 1930s. When the US lined the canal, this was a dramatic change for Mexican border farmers. These flood mitigation canals dried up (Cortez Lara, Kaplowitz, & Kerr 2014).

Farmers were unsuccessful in resisting the canal lining project. They were unable to unionize and collectively resist as there were able to do in the 1970s (Cortez Lara 2014). Much of the inability to unionize is attributed to professional water organizations replacing the water unions. The professional organizations saw political activity as outside of their purview and lacked communication and leadership pushing for resolutions (Cortez Lara 2014). While the water rights have not changed for these farms, many relied on the extra water they received from seepage to grow crops (Cortez Lara 2014).

The All-American canal project has diminished the ground water recharge by up to 31% for the valley (Cortez Lara 2014, Navarro 1998). This makes all ground water users more vulnerable to water use changes. Throughout the valley, many farmers depend on ground water pumping to water their crops. Estimates from CONAGUA in 2015 show that the aquifer is overdrawn at its current use. Yields have potentially decreased because of this lack of reliable groundwater (Cortez Lara 2014).

Water Reallocation and the gasolinazo, 2010-2018

In 2010, in response to earthquake damage to water infrastructure, the U.S. government made a deal to assist with infrastructure reconstruction on the Mexico side in exchange for water use on the U.S. side (IBWC 2010). This enabled greater flexibility in water decisions for residents on the U.S. side in terms of water available (Buono and Eckstein 2014). The agreement also allowed Mexican authorities to store water in Lake Mead for deliveries upon request (IBWC 2012; 2017). "Minute 319" requires both sides to limit their water use in years of drought, and to share in years of surplus (IBWC 2012; 2017). A byproduct of the agreement is that new infrastructure will increase efficiencies on the Mexico side and the U.S. will keep the amount of water generated by the efficiencies (IWBC 2012; 2017). This was largely seen as a cooperative approach to water management between the U.S. and Mexico in sharing in shortages and surpluses, and finding agreements to fix broken infrastructure (Buono & Eckstein 2014). Because of the emphasis on promoting the sale of water and efficiency, the narrative of privatization of water has been furthered by this agreement.

In the past 10 years, pollution of both air and water became an issue of concern for the residents of Mexicali (Eades, 2018). In 2011, the World Health Organization ranked Mexicali as having the 4th most polluted air in the world (WHO 2016). Studies showed increased concern about the high rates of asthma caused by high particulate matter from growing industry, energy production and farming (Reyna Carranza et al. 2017). Environmental protections in place in 2012 were showing little effect on improving on the low environmental quality measures (Quintero-Núñez 2012)

Constellation Brands Brewery Conflict, 2016-2019

On January 16th, 2018, at Rancho Mena outside of the city of Mexicali, around 40 protesters and police violently clashed at the construction site of a water pipeline for the Constellation Brands Brewery. Videos showed both sides throwing rocks as the police attempted to remove protesters to continue building the pipeline (La Jornada 2018). The primary protesters present were from two organizations, *Mexicali Resiste*, an urban social

justice coalition, and *Comité Ciudadano de Protección del Agua*, a rural organization of farmers and *ejido* leaders. Both organizations continued strategies to stop the brewery from building the Constellation Brands Mexicali plant.

The conflict at Rancho Mena was in many ways a continuation of a series of protests that erupted a year before in Mexicali, Baja California and cities across Mexico; both protest groups that day at Rancho Mena had formed out of the previous year's protests. Known as the *gasolinazo*, protests erupted all over Mexico on January 1st, 2017 when gas prices rose 14.2% (Fuentes Carranza, 2017). Gas prices rose as part of the privatization of the Mexican gas company, Pemex. Many protesters returned to the streets in 2018 when gasoline prices rose again (Vanguardia 2018).

Mexicali residents and those in the surrounding agricultural valley participated in protests in large numbers, at times in crowds up to 30,000 people (Exelsior, 2017). The demands expressed at the protests were many. People protested President Peña Nieto and the rising gasoline prices. In addition to the national *gasolinazo* protest, Mexicali protesters made local demands. At the local level, protesters vocalized opposition to the privatization of water and compared it to the privatization of Pemex. When protesters said they were opposing the privatization of water, this referred to a recent law permitting the sale of Mexicali municipal supply water to Constellation Brands brewery and state funding for an aqueduct providing the brewery with water (Animal Politico, 2017). Figure 2 below shows a protester holding a sign that demonstrates the blending of national level gasoline concerns with local level water concerns.

Figure 2 - Feb. 5, 2017. This photo shows a protest sign that reads "Expensive Gasoline NO!!! Beer that takes away the water, NO, NO, NO." from (Lindero NorteTV 2017)

Responding to the *gasolinazo* protests, the Baja California state government, led by Governor Francisco Vega, rescinded state funding for the aqueduct providing water to the Constellation Brands Brewery in July 2017 (Dibble, 2017). Eighty percent of the brewery's water supply would still come from Mexicali's municipal supply. However, without the aqueduct to make up the remaining 20%, the brewery purchased individual water rights from farmers and constructed three large wells around Ejido Villa Hermosa (Martinez Zazueta, 2018). For many of the protesters, the government and brewery's responses were not enough, and saw these actions as displacing the problem (NPR 2018). Groups of farmers, urban residents, and academics formed groups to resist the

construction and operation in general of the Constellation Brands Brewery. The *gasolinazo* protests have since ended, but many continue protesting under the banner of what I call the *defense of water* narrative. Preventing Constellation Brands Brewery from using Mexicali water is the main target of these protests.

The conflict at Rancho Mena in January 2018 was just one of many struggles in ongoing protests. Protestors permanently occupied encampments outside of the capital building in Mexicali and outside of the brewery property. Protestors have occupied construction cranes, led town-to-town marches and formed weekly protests. Some leaders of protest groups have been imprisoned, and groups have gathered at courthouses to show solidarity. *Mexicali Resiste* creates weekly video information and others organize lawyers and documents to form legal cases. The actors and actions involved are diverse. By March 2019, opposition groups accumulated 17,000 signatures on a petition to hold a state plebiscite on the operation of the brewery (Heras, 2019).

EXPLAINING POLITICAL SUCCESS IN AGRARIAN POLITICAL MOVEMENTS IN THE MEXICALI VALLEY

In this section I focus on two moments from Mexicali's history. I look at farmers and how they have exercised power in international water conflicts. I show how the professionalization of water has been one of the driving factors in changing farmers' relationship to collective bargaining power. Farmer demands were made more powerful in organized groups. They executed this power in both formal and informal institutions. However, this unified power has not always been a constant. I contrast the relative success of the Salinity Crisis negotiations (1961-1973) to with a loss of collective bargaining power in the All-American Canal Lining Project (1998-2009).

The Salinity Crisis, 1961-1973

The Salinity Crisis, from 1961-1973, marks a high point in farmers' ability to organize and impact international water concerns. The crisis began in the 1960s when industrial

agriculture runoff from the Yuma valley in the United States caused salinity levels to rise (Oyarzabal-Tamargo & Young 1977). The Colorado River naturally picks up salt over its course from the Rocky Mountains to the Gulf of California. However, increased salinity levels started affecting productivity in the downstream Mexicali Valley by damaging irrigation networks and crops (Cortez Lara 2014). A breaking point was reached when drainage from the new Welton-Mohawk irrigation system began emptying heavily saline water below the US agriculture diversion, but above the Mexican border. This caused, sudden and extensive damage (Cortez Lara 2014).

In response, farmers became involved through the use of unions and informal social networks founded in agricultural practices (Cortez Lara 2014). Additionally, farmers became vertically integrated with the federal government (Cortez Lara 2014). These examples support the claim that during the Salinity Crisis period, farmers wielded collective decision-making power. Mexicali based scholar Cortez Lara characterizes this period:

> A high degree of unification within the agricultural sector was an informal institutional behavior that was guided by local and national leaderships that at the time enjoyed a high level of credibility and trust (Cortez Lara 2014: 58).

The farmers' unions, and the collaboration of these unions, provided a platform for farmers to negotiate their demands. Operating with the federal irrigation district, unions were able to fund projects through a voluntary tax on the amount of water delivered. In return, union leaders and federal officials used the funding to organize boycotts of certain US goods and assemble large protests. Simultaneously, federal officials worked to push the Mexican government to prioritize salinity negotiations with the US. Through this organizational structure, the Mexicali farmers reported a sense that they could promote their demands (Ries 2008; Cortez Lara 2014; 194; Cortez Lara, Kaplowitz, & Kerr 2014).

Informal social networks also provided farmers with ways to address high salinity levels. For example, salinity levels collected by individual farmers were used during negotiations between the US and Mexico (Cortez Lara, Kaplowitz, & Kerr 2014). Water managers remembered high turnout for meetings, and support in the boycotts among local communities (Cortez Lara 2014). Interviews with water managers from this period cite strong local leadership as the driver of community involvement (Cortez Lara 2014).

Vertical integration of farmer demands to federal negotiators provided some of the most lasting impacts of farmer activism in the Salinity Crisis period, the amendments to the 1944 Water Treaty. Spurred by the boycotts, local and federal politicians became involved in the farmers' cause. The president Luis Echeverría spoke about the farmers' struggle in Mexicali to elevate their agenda. Union members eventually were represented in the talks that established standards on salinity levels in 1973 (Cortez Lara 2014).

Ultimately farmers gained "significant weight as key social actors" through unions, social networks and vertical integration (Cortez Lara 2014: 59). Farmers' actions influenced government objectives to address salinity issues. They established standards for water quality as an amendment to the 1944 Water Treaty (IWBC 1973).

The All American Canal Lining Project, 1998-2009

In contrast to the Salinity Crisis, the All-American Canal Lining Project demonstrates a time when farmers had lost their collective power. Following structural adjustment programs in the 1980s and neoliberal reforms in the 1990s, farmers' ability to collectivize diminished. Overall, a change to professionalized water management undercut farmers' ability to work together. The process of privatizing *ejido* properties also undermined collective action. I provide examples of farmers' actions during the All-American Canal

conflict. These examples show a change from an ability to collectively push an agenda to "social disarticulation among irrigation water users, as well as a lack of vertical and horizontal coordination among the users themselves, the productive sectors, and the different levels of government" (Cortez Lara 2014:76).

In 1998, the U.S. secretary of interior authorized the concrete lining of an existing canal that ran along the U.S. side of the border (IID 2019). The canal lining would prevent seepage and increase water availability on the U.S. side (IID 2019). Conflict arose because of the ramifications for farmers on the Mexico side. Initial construction of the canal in the 1930s caused flooding on Mexican border farms. To manage flooding, farmers constructed canals to take advantage of the seepage and to protect their crops. The canal lining project would eliminate seepage as a source of water supply, a source many came to rely on (Navarro 1998). Furthermore, estimates showed that seepage from the All-American Canal provided up to 31% of total aquifer recharge before adding the concrete lining (Navarro 1998).

Instead of the grassroots unions that farmers created in the 1960s, farmers were represented by two primary organizations, the Agricultural Water Users Association (WAU) and the Irrigation District (SDL). These organizations were instituted following restructuring guidelines from the International Bank for Reconstruction and Development, the World Bank, and The Inter-American Development Bank, 1991 for the WAU and 1998 for the SDL (Cortez Lara 2014). Cortez Lara (2014) argues that top down management left behind the grounding social behaviors, leadership, economic and political power created in the union period. Where farmers' unions were based on farmers' ideas and interests, engineers and water professionals typically managed WAUs. The social aspect of managing water was diminished as the process of delivering water became the responsibility of professionals, not farmers. Also, farmers interviewed about the conflict said there was a lack of accountability to farmers' interests. WAUs are accountable to upper level agencies, but farmers referenced a frequent lack of accountability to farmers' needs (Cortez Lara 2014).

Privatization of land also contributed to farmers' sense of separation from one another. Following reforms from the Ley de Aguas Nacionales in 1992, a majority of farmers in the Mexicali Valley signed up to privatize their water use rights. During the Salinity Crisis period, water rights were distributed by *ejidos*. In contrast, water rights during the All-American Canal conflict were individually held. Individual holdings did not necessitate that farmers work together; water was delivered by professionals. Consequently, people protesting the All-American Canal lining project in the north received little support from the central and southern parts of the Mexicali Valley. Many southern farmers perceived little connection to the conflict (Cortez Lara 2014).

Separating water rights also enabled more interests to enter the water user pool in the Mexicali Valley, further splitting water user interests. The process of privatization introduced industry and simultaneously reduced the number of people actively farming. Before the reforms from the *Ley de Aguas Nacionales* (1992) farmers were unable to legally sell water rights. Opening this opportunity to farmers enabled the growth of industry throughout the valley. In my interviews, several farmers referenced this as a positive change because it enabled farmers working less productive land to sell and do something else. Other interviewees recalled selling water as their children decided not to continue farming the land. Some farmers referenced that the water market helped them manage risk. As prices for inputs like seeds and gas increased, and government support for these products decreased, many farmers saw increasing risks in continuing to farm in the Mexicali Valley (Wright 2012). Selling water rights was a secure option that enabled some to pursue other options besides farming. As a consequence of privatization, farmers' near exclusive control over water use in the valley was spread to industry and a growing urban interest (Garcia Acevedo 2001).

Overall, individual agency increased while collective agency decreased for farmers in the Mexicali Valley. This section demonstrated that neoliberal reforms promoting

professionalized institutions and individual property rights diminished farmers' ability to work together to seek solutions to complex, binational conflicts. The following section shows how farmers took up opportunities in the 2017 *gasolinazo* protests to reclaim a sense of agency that seemed eroded through the 1990s and the 2000s.

Finding political success in new alliances

In response to the construction of the Constellation Brands Brewery, farmers utilized a populist narrative, the *defense of water*, to unify diverse actors and incorporate various demands. The narrative created a collective identity among protesters within the Mexicali Valley by equally representing diverse and divergent demands. Newfound unity enabled stronger and larger protests against Constellation Brands. Three organizations exemplify this union: *Mexicali Resiste,* the *Comité Ciudadano de Protección del Agua,* and the *Resistencia Civil de Baja California*. These organizations by no means represent all of the protestors, but do provide a diverse range of actors and perspectives.

Mexicali Valley protesters fit Laclau's (2005) social and historical context because these groups of people expressed that their demands are not effectively being addressed by their institutions and join as one movement (NPR 2018). I have shown how this was the case for farmers in the All-American Canal lining conflict. Joining together in an empty signifier, farmers and other dissatisfied groups represent their unmet demands in unison (Laclau 2005). Examples from these groups show how the defense of water became the empty signifier to unify all of these organizations under a new identity. Interviews and field notes taken in the summer of 2018 support this claim. The diversity of demands, some not directly related to the use of water, all used the *defense of water* narrative to pushback against the brewery and broader processes.

Mexicali Resiste is an urban activist collective that formed out of the *gasolinazo* protest. The organization exemplifies of the diverse actors and ideas that have been incorporated under the *defense of water*. The collective is made up of primarily Mexicali city residents; teachers, government workers, students, and retired people from middle and lower classes. Their website features a photo with about 100 people in front of a sign that reads "*Justicia a los defensores del AGUA*" (Mexicali Resiste, 2018). They operate several social media sites, produce weekly news videos, have biweekly assemblies, and weekly protests. Their website catalogs videos of protests, includes Constellation Brands environmental impact statement, protest graphics, timelines and analyses of events. Throughout the city, one can see large murals of Marx and Zapata saying "*No se vende el agau, Mexicali Resiste*." Weekly activities hoover around 20 to 60 participants, but they have organized protests that mobilized hundreds.

When asked about their goals, leadership responded that they were primarily resisting Constellation Brands and the privatization of water. Leaders said also they had ambitions to join with other like-minded groups to resist global capitalism and neoliberalism. Other members also talked about diverse topics including, but not limited to water. Members referenced goals about transparency, anti-corruption, dignity, border inequality, energy price concerns and cultural changes. One assembly meeting was about whether or not the group should take an official position on abortion. Yet when *Mexicali Resiste* protested, their message was focused by the *defense of water* narrative. They brought banners that denounced Constellation Brands and the governor Francisco Vega for enticing the corporation to establish in Mexicali. *Mexicali Resiste* is a diverse group, with diverse demands represented under the *defense of water* discourse.

Comité Ciudadano de Protección del Agua also formed at the same time during the *gasolinazo* protests, but is represented by a more rural population. The group contains *ejido* members, farmers, lawyers and engineers. They also participate in protests. Actors from the group have systematically collected documents about Constellation Brands to develop a court case against them. Members participate in rallies, frequent leadership

meetings, and agreement documents. A leader of this group has written support from two thirds of all of the *ejido* leaders in the valley to resist the brewery construction.

At a meeting of *ejido* leaders, *Comité Ciudadano de Protección del Agua* participants reported that they had formed to resist Constellation Brands, but that it had enabled the group to have other discussion. This particular meeting was about how to improve voter turnout for the July 2018 Mexican Presidential elections. Other actions have been directed towards anti-corruption campaigns. Some of the members participate in an initiative called *Mujeres Sostenibles*, creating a rural market for women to sell local produce and goods. One of the members is running a campaign to gain a Baja California senate seat. At times, the *Comité Ciudadano de Protección del Agua* participates with *Mexicali Resiste* and *Resistencia Civil de Baja California*, but also maintain that they are a different organization with different goals. Despite differences between *Comité Ciudadano de Protección* del Agua and the other groups, their name references what was able to combine these groups together; the *defense of water* binds these protesters' interests.

Resistencia Civil de Baja California is a group that includes people from the major cities of Baja California. It includes diverse actors, rural and urban, farmers, engineers and teachers. The group's primary reason for resisting was the *gasolinazo* and the privatization of municipal water supply that allowed the Constellation Brands brewery to purchase water from the city. Members of this group have occupied an encampment outside of the Constellation Brands construction site, occupied and obstructed construction equipment, and have led long marches and participated in protests.

Similarly to the other two groups, *Resistencia Civil de Baja California* focuses on the *defense of water*, but incorporates other concerns as well. A farmer participating in this group said that a reason for his participation in the group was that rising gasoline prices were increasing the risk for him to grow crops. Members also referenced toll road prices,

and securitization and reasons for protesting. All three of these movements, with different locations, actors and interests are represented under the empty signifier, the *defense of water*.

All three groups referenced work with other groups in the valley in the *defense of water*. One interviewee expressed that despite disagreements about ideology, "we [*the defense of water* movement] are one movement with different fronts. We are a hand, each finger has its own mission."

At a protest over the detention of a *Mexicali Resiste* leader in May 2018, photos taken by the researcher document the presence of *Mexicali Resiste* members, 3 farmers groups, a biker gang, and a group of teachers gathered for the *defense of water* movement. Drivers honked as they drove by in support of the protesters as well. Participants reported that this was not the first time that various groups came together to support this common cause.

CONCLUSION

This chapter argues that the defense of water discourse is an empty signifier, and it enabled farmers and others to regain some collective decision-making power. In the face of a history of undercut agency, taking up a flexible symbol proved powerful in uniting diverse and disempowered actors to influence policies and provide space for discussion about elections. In conclusion, I discuss the implications for the empty signifier, *the defense of water*, and the creation of a populist identity that promotes it.

The most apparent implications of using the *defense of water* as an empty signifier are the protests' successes in moving towards their demands. As a result of the large protests, Governor Francisco Vega rescinded funding for the aqueduct for Constellation Brands Brewery (Martinez 2017). Large numbers of protests, enabled by a populist identity surrounding water, put pressure on government official to act. In comparison to mobilizations in the recent past around water issues, the All-American Canal for example, participation was strong (Cortez Lara, 2014). Where inability to unify and lack of understanding prevented farmers from protesting during the All-American Canal Lining conflict, conversely, the empty signifier centered the most recent protests by holding equally diverse understandings and demands, and incorporating them into a catchall phrase and identity.

Another success of the *defense of water* empty signifier was involving local, state, and national politicians in demands. It is still uncertain how the high level of participation will play into policy decision-making, but there are some indicators. First off, Baja California overwhelmingly voted for López Obrador in the 2018 presidential election, a contrast because Baja California has historically been a PAN stronghold. It is likely that large protests against Francisco Vega, Peña Nieto and their PRI party influenced this opinion. The governorship is up for election in 2019. This will also provide an indication of protest success. From interviews with experts, academics, and water managers, interviewees mentioned that now there is an especially high public interest in water management decisions.

The *defense of water* movement has also successfully challenged the idea of water as solely an economic resource. Many interviewees challenged dominant narratives about water. Water was represented as having inherent value and cultural value. Top down management of water was also challenged. Protesters promoted user led water management decisions. The next chapter addresses the narratives used in the Constellation Brands conflict.

To date, many protesters' main goal of ridding Mexicali of Constellation Brands has yet to happen. Construction continues at the plant. Despite the fact, many protestors have active litigation cases with Derechos Humanos and the NAFTA *Secretariate*. These cases are ongoing. There is a petition with 17,000 signatures supporting a plebiscite on Constellation Brands' operation (4Vientos, 2019).

While the empty signifier enabled many to forefront unmet demands, it has also served to obscure other issues. Water scarcity is a looming challenge for farmers in the Mexicali Valley. The Colorado River does not have enough water every year to fill all of the water claims in its watershed (Conagua 2015, Cortez Lara 2011). This has contributed to the overdrawing of the aquifer in the Mexicali Valley. Conagua (2015) reports that the aquifer is overdrawn by 456 million cubic meters. However, getting rid of Constellation Brands will not address that issue. Water allocated to Constellation Brands is offset from other uses in the valley. In this way, the *defense of water* narrative does not address issues surrounding climate and water quantities in favor of addressing privatization and neoliberal water use.

Many farmers still deal with salinity issues (Judkins & Myint 2012), another concern overshadowed by the *defense of water* narrative. There are still cases when the US delivers water that is over the agreed upon limit (Garcia Acevedo 2001, Cortez Lara 2014). Lack of transparency is another major issue that was referenced by farmers and water managers alike. The intended goals of the *defense of water* movement do not clearly address this as a concern. Additionally, the use of water for non-human use did not meaningfully enter the debate. Therefore, the *defense of water* narrative address many symbolic aspects of water, while obscuring its materiality.

3. LAS AGUAS ESCONDIDAS – EXAMINING NARRATIVES IN WATER POLICY DEBATES

INTRODUCTION

Environmental narrative research is becoming more prominent for environmental social scientists as a way to understand political conflicts. An environmental narrative converts knowledge and experiences into stories. These stories create meaning for experiences and promote a message about a shared reality (White 1987). This article draws on a narrative policy framework developed by Jones and McBeth (2010) to organize and compare the origins and structures of each narrative in a high profile water conflict. Jones and McBeth (2010) state that "narratives matter and that by studying them empirically, positivists and postpositivists can engage in more productive debates over how stories influence public policy." This approach therefore focuses on analyzing narratives to clearly describe them, but furthermore to locate points of agreement and disagreement to unlock potential solutions for policy makers (Washbourne & Dicke 2001; Jones and McBeth 2010; Schön and Rein 1994).

In a conflict surrounding an internationally-owned brewery construction project in Mexicali, a group of protesters has made political gains by advancing a *defense of water* narrative. In this article, I ask two questions. First, how did participants in the Constellation Brands Brewery conflict tell and advance their political narratives? And second, what signifiers of water allowed groups to meet their goals? I show that two main narratives vie for control over water: the *defense of water*, and the *technocratic solution*.

I show that both the *defense of water* and the *technocratic solution* narratives highlight

and obscure different elements of water in the Mexicali valley. They do this by signifying material-symbolic relationships differently. In the case of the *defense of water*, community members who subscribe to this narrative gained political traction by signifying the control of water as Mexican sovereignty. In contrast, those who subscribe to the *technocratic solution* reinforce the dominant approach to water management by portraying water as material.

I title this chapter *Las aguas escondidas,* the hidden waters, because I was struck by the *defense of water*'s efforts to make visible the quantities of water that the brewery would use. They contextualized the brewery's water use with concerns of water scarcity. However, the *defense of water* narrative downplayed their members' own complicity in generating water scarcity. To gain political traction and challenge the dominant narrative, the *defense of water* narrative has hidden a primary driver of water scarcity, agricultural use practices. Instead of focusing on the materiality of water, they focus on a more symbolic use, sovereignty.

To lay out this argument, I review the history of environmental narrative research. This article draws on the structuralist branch of environmental narrative research that looks at the structure of narratives. I describe my research methods and results, which include the development of water narratives in the valley and a brief history of the Constellation Brands Brewery conflict. Then I outline current narratives about water use and provide quotes from participants to support these narratives. Ending with a discussion and conclusion, I address the political gains and the implications for each narrative that has been developed.

ENVIRONMENTAL NARRATIVE RESEARCH

Over the last three decades, a dichotomy has developed within narrative research (Jones and McBeth 2010). On one side, environmental narrative research focuses on

environmental governance strategies that scientists believe will push forward better governance (e.g. Bridge & McManus 2000; Fairhead & Leach 1995; Guldbrandsen & Holland 2001). This group is critical of existing narrative, exposing the inner workings of what constitutes narratives, and then documenting alternatives (Robbins 2012). On the other hand, researchers conceptualize narratives in a post-structural paradigm. In this case, each story is equally valid, forming a part of a structure. This approach is less political by nature. Instead, the research displays how "inner connections between narratives create reality" (Jones and McBeth 2010). These narratives, stories told by individuals and groups, make up environmental politics, and explain how different groups work to overcome differences or undermine alternative strategies (e.g. Arts & Buizer 2009; Emery, Perks, & Bracken 2013: Kleinschmit, Böcher, & Giessen 2009; Medina, Pokorny, & Weigelt 2009; Steffek 2009: Winkel 2014). Both sides have contributed to our understanding of environmental politics. This article primarily draws on the post-structuralist approach. Nevertheless, a combination of the two fields may well be necessary to seek solutions to the water conflict.

Early Environmental Narrative Research

Environmental narrative research largely stems from work done in political ecology and environmental sociology. The research targeted outdated or prejudiced narratives with the aim of helping communities make more informed decisions (Leach and Mearns 1996; Moore 1996). Some scientists took responsibility for challenging what they saw as lacking narratives and creating "compelling counter-narratives" (Walker 2006). Counter narratives would serve to promote different governance strategies that challenge the dominant narrative (Roe 1991; 1994). The idea was, that to effectively counter dominant narratives, scientists must understand the social and historical contexts that shaped these narratives. With an understanding of how narratives formed, scientists could create alternatives that are scientifically robust, socially equitable, and can sustain and liberate both humans and nature (Forsyth 2004; Leach et al. 2010: Walker 2006).

This branch of research states that environmental narratives should provide more complete and accurate accounts to develop policy and governance strategies (Luhman & Boje 2001). In this paradigm, narrative research seeks to uncover stories closer to "reality" and assumes that dominant, existing narratives are told to meet the goals of specific powerful groups (Boland & Schultze 1996; Czarniawska 1997; Knorr-Cetina & Amman 19990; O'connor 1999). Normative research allowed researchers to take on dominant narratives and reconstruct new ones to include marginalized groups, nature and people included. Doing so would enable researchers to create societal change.

Early examples of environmental narrative analysis include Fairhead and Leach, (1995) where the authors challenged ideas of the "original" and "traditional" uses of forests to promote more inclusive ecosystem management policy guidelines. Another example is Bridge and McManus's article (2002) describing how narratives of sustainability had been coopted by those wishing to promote forestry and mining development. They show how capitalistic governance can appropriate nature. Guldbrandsen and Holland (2001) also show how environmental narratives in public-private partnerships and hybrid governmental-grassroots groups shifted governmental policy approaches. Yet deconstruction was not the only goal; this body of work grew in concert with the political ecology community emphasizing both the hatchet and the seed approach (Robbins 2012). As Robbins (2012) explained, the goal of the political ecology community is to both "expose the forces at work in ecological struggle and document alternatives in the face of change." While critical, the work provides normative solutions to "social and environmental changes with an understanding that there are better, less coercive, less exploitative, and more sustainable ways of doing things." So understandably, their findings often challenged orthodox nature-society binaries and explained reasons for their persistence (Leach & Mearns 1996, Batterbury, Forsyth, & Thomson 1997: Forsyth 2004).

A key finding within the normative branch of environmental narrative analysis was that all-to-often, dominant narratives and pathways that structure environmental governance

neglect key dimensions and properties of sustainability, often allowing more powerful groups to meet their goals (Leach et al 2010). This brought forward challenges about how best to raise counter narratives and challenge dominant ones to foster better decision making and governance. (Leach et al. 2010; Moseley & Laris 2008: Walker 2006). It was assumed that more robust alternative narratives could replace dominant environmental narratives (Roe 1995). However, there was little research on the process of how supplanting narratives would occur. This research was taking place, but rather peripherally to environmental social science, with a few exceptions (e.g. Bausch et al. 2015; Leach et al. 2010).

Outside of the environmental social sciences in the 1980s and 1990s, narratives were often understood with a more post-structuralist approach. This meant that narratives were a way of ordering relations, which generate their own imaginative spaces (Clifford 1986; Van Maanen 1988). This research was being conducted to provide knowledge of how or when alternative narratives change governance structures. In this paradigm, narratives create stories about possible "realities;" they are not descriptions of real realities (Mink 1978). This position is informed by social constructionist paradigms, the idea that language gives form to reality, instead of the other way around (Alverson & Skoldberg 2000; Berger & Luckmann 1967; Hatch 1997; Linstead 1994).

More recently, social constructionist research has influenced environmental social scientists. Environmental social scientists draw on narrative structure and social constructions to organize political narratives as part of environmental governance (see Arts & Buizer 2009: Emery, Perks, & Bracken 2013: Kleinschmit, Böcher, and Giessen 2009; Medina, Pokorny, & Weigelt 2009: Steffek 2009; Winkel 2014). Walker (2006) sees this approach as necessary to develop scientifically robust and socially equitable counter narratives. Nevertheless, while necessary, the constructivist approach tends to depoliticize environmental politics. This approach is less equipped to offer insight into sustainable communities and natural relationships.

Much of the recent post-structural research on environmental narratives seeks to explain how specific groups advance their agendas. In other words, it describes how coordination may occur among and within groups with different goals rather than making claims about what type of policy or program should be pursued. For example, recent research has sought to explain participatory decision making in water governance (e.g., Cabello, Kovacic, & Van Cauwenbergh 2018), explain complexity in policy documents used to guide climate change adaptation (e.g., Fløttum & Gjerstad 2017), and describe how different groups work to advance their agendas by problematizing existing policy (e.g., Winkel 2014). Within this post-structural framework, narratives are tools used by decision makers to organize complexity and render it governable. Schön and Rein (1994) argue that "policy controversies can only be resolved if the conflicting frames, which the competing parties hold, become a topic of dialogue." Frames, which can be drawn out form narratives, are defined as "generic narratives that guide both analysis and action in practical situations" (Rein & Schön 1996). Post-structuralism does not seek to promote a narrative, but to make clear the logics undergirding them. Alternative narratives alter governance structures by constructing intervention logics, which are problematizations of existing dominant narratives, offering opportunities to reestablish political truths (Stone 2002; Winkel 2014).

Both the normative and post-structural strands of environmental narrative research have grown and provided insights into how to govern environments. This article uses a post-structural approach because it makes visible the positions of a complex, transboundary water conflict. I use the post-structural approach because I position myself as a non-actor in the Constellation Brands Conflict. Elucidating the narratives used by parties involved can help promote decision making involving the event. Nevertheless, as is noted by the normative position, there is a need to remain aware that environmental narratives are inherently political.

RESEARCH DESIGN

I used a grounded theory approach to answer the research questions (Strauss and Corbin 1990). I performed a mixture of qualitative methods: semi-structured interviews, direct observation and extraction from native texts to collect data (Bernard et al. 1986). More specifically, I analyzed (1) fourteen semi-structured interviews about the Constellation Brands brewery conflict and related topics, (2) nine group assemblies related to the conflict, (3) twenty-five newspaper articles, (4) two environmental impact statements from Constellation Brands and from Conagua, (5) and ten videos about the conflict posted on Facebook or YouTube.

I conducted fieldwork in Mexicali and the northern agricultural area during the summer of 2018. The 14 formal interviews and nine group assemblies I attended were in this study area. I identified interview subjects through a snowball method with contacts at organizations including the *Universidad Autónoma de Baja California*, NGO *Mexicali Resiste*, farmer resistance movements, and government water agencies. Ten of the interviewees were male and four were female. The group meetings attended were at the *Procuraduria Agraria* public meeting, a meeting of ejido leaders, *Mexicali Resiste* meetings, a press meeting at *Rancho Mena*, a protest outside the courthouse, a meeting with *Comisión Nacional de los Derechos Humanos*, and a meeting with lawyers involved in the case. I took part in daily life, attending protests, *asembleas*, and social and political events. I also utilized Facebook pages and YouTube posts of interviews. Newspapers and technical water management magazines were incorporated in order to contextualize the research. A map of the research area is included in Figure 3.

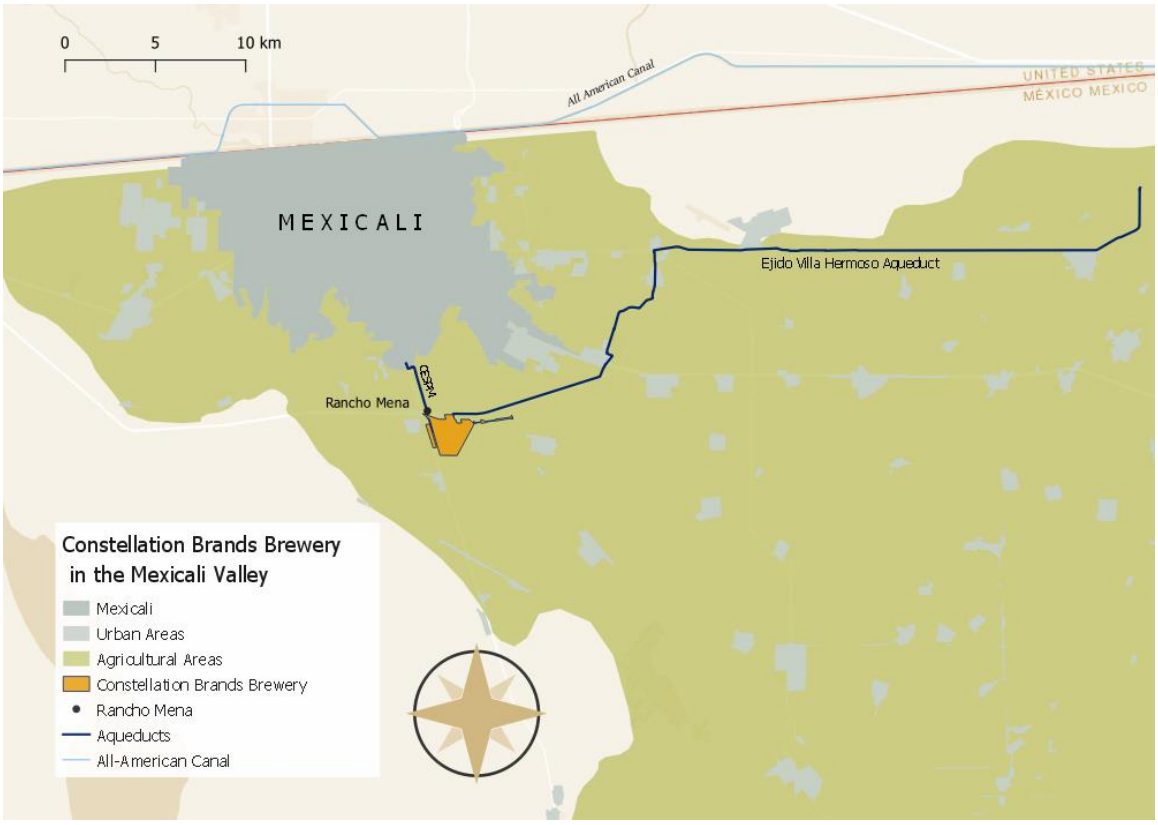

Figure 3.

Historical research consisted of consultation with local historical scholars, books, local museums, magazine publications, internet accessed videos, and scholarly works. While I was not present for the beginnings of the movement, or the ongoing efforts of the movement, these works provided context for understanding events more broadly. Participant observation in May, June and July of 2018 enabled a stronger understanding of both primary and secondary sources.

Interviews included open-ended questions about personal experiences with the Constellation Brands Brewery conflict, interviewees' perspectives on challenges facing the community, the history of water management in the study area, and proposed solutions. Five of the interviews were audio recorded and transcribed. I took notes during the other nine interviews and then followed up by writing field notes of all I could remember immediately following the interviews. Group meetings were documented with

in session note taking followed by field notes afterwards.

A round of coding of the interviews was used to identify three distinct environmental governance narratives in the Mexicali Valley surrounding the Constellation Brands conflict. I draw on Jones and McBeth's framework to organize narratives by (1) origins, (2) a plot providing both the relationships between the framing and structuring causal mechanisms; (3) characters who are portrayed as fixers of the problem (heroes), vilified as causers of the problem (villains or others), or victims (those harmed by the problem); and (4) norms that determine the moral of the story, where a policy solution is normally offered (Jones & McBeth 2010). All of the interviews were conducted in Spanish, and the translation provided from the interviews are my own.

I use Jones and McBeth's (2010) framework because it permits narrative comparisons but does not assume that narratives are entirely relative. My research shows that each narrative has a distinct origin. I describe the differences between the social and historical contexts that each narrative developed.

RESULTS

Water for Cotton 1901 – 1937

Modern water management stems back to the cotton farms, and the irrigation canals that fed them established in 1901 (Sánchez Ogás 2010). Enticed by *Porfiriato* era policies promoting foreign direct investment in the Mexicali Valley, the U.S. owned Colorado River Land Company successfully irrigated some of the largest cotton farms in the world (Kerig 2001). Asian migrants and Cucupah peoples primarily worked the fields (Kerig 2001). Despite contradicting the goals of the Mexican Revolution laid out in 1917, the Colorado River Land Company persisted in owning and operating a foreign owned company along the U.S. border through 1937 (Duncan 1994). However, in 1937, backed

by president Cárdenas, groups of *mestizo*[5] Mexicans from various regions of Mexico militarily took over the lands operated by the company (Sánchez Ogás 2010). Interviewees point to this event, known as the *Asalto de las Tierras*, as the beginning of Mexican water management in the valley.

Water for Mexicans 1937-1982

Following the *Asalto de las Tierras*, water was managed as a means of social development. The land held by corporations in the previous era was split up in to *parcelas* and *ejidos* for *mestizos* to work (Sánchez Ogás 2010). There were a range of social programs that enabled farmers to produce various crops. For example, president Cárdenas' government, elected in 1934, promoted "the formation of credit, marketing, and machine cooperatives, and offered government credit to *ejiditarios*" (Wright 2012: 32). Additionally, the Cáredenas government experimented with agricultural education programs and soil conservation efforts (Wright 2012).

In the 1940s, Mexican agriculture policies shifted focus from the Cárdenas programs to agricultural research initiatives aimed at improving productivity (Wright 2012). This included partnerships with the U.S. to promote fertilizers, pesticides, irrigation infrastructure, and crop variations (Wright 2012).

In 1944, a treaty between the U.S. and Mexico established that 1,500,000 acre-feet would be delivered yearly to Baja California via the Colorado River (IBWC 1944). In a 1973 amendment to the 1944 treaty, farmers had organized to add water quality standards as well as quantity to the agreement (IBWC 1973, Cortez Lara 2014). From 1934 through to 1981, the Mexican government provided credit packages for farmers (Wright 2012). Credit was vital for farmers as many adopted Green Revolution growing techniques that

[5] I use *mestizo* to define a person of mixed race descent.

required pesticides, seeds, fertilizers, and increasing amounts of water (Wright 2012).

Water as a Material 1982 – present

Capitulating to World Bank and IMF recommendations in response to the Latin American Debt Crisis in 1982, Mexico began structural adjustment programs, cutting back on food and fuel subsidies that supported farmers (Goldrich & Carrathurs 1992). Unlike southern Mexico, Mexicali continued to grow economically and in population through the debt crisis because of export-oriented industrialization taking root all along the U.S./Mexico border (Gilbert 1995). This introduced industry as a growing category of water users in the Mexicali Valley. The growth of the maquiladora zone along the border increased the attractiveness of northern Mexico as a place of operation for U.S. firms (García et al. 2011). Low wages, lax environmental regulation and enforcement were additional factors to the growth of industry in Mexicali (Watkins 2013). At the same time, farmers were suffering cut backs in federal support. During this period, it became more challenging for farmers to get credit from the government (Wright 2012). All of these changes supplanted Mexicali farmers as the most privileged water users in the valley.

In 1992, President Salinas' reforms opened up water and land previously under ejido contracts (Schmidt 2005). In the Mexicali Valley, many took up this opportunity and changed over their land and water rights to private holdings (REPDA 2018). This enabled farmers to buy and sell water. Some places with poor land were able to sell their water to other farmers wanting to grow more crops, or to sell to industries. Shifting water and land to private holdings also meant that one no longer needed to work the land in order to keep it, as was the case under *ejido* agreements. This freed people to work elsewhere and still earn income from their water right (Schmidt 2005).

The All-American Canal Lining Project significantly impacted ground water recharge

during this era. The canal runs along the U.S. side of the border. Originally constructed as an earth floor canal, it had flooded border regions' fields and recharged the aquifer since its construction in the 1930s (Munguía 2006). In 2009, construction of the All-American Canal Lining project was completed. The new concrete lining was constructed to prevent seepage and provide higher volumes of water deliveries. This limited the groundwater recharge in the Mexicali Valley by an estimated 14% and altered the way that border farmers irrigated their crops (Cortez Lara 2011).

The most recent major change to international water management policy followed the 2010 earthquake in the Mexicali Valley. Following the earthquake, the U.S. and Mexico boundary water commissions enacted a series of minutes that respond to the earthquake damage of Mexican water infrastructure. One agreement permitted water storage capacity of Mexican allocated water in Lake Mead, in order to prevent flooding the broken canals affected by the earthquake (IBWC 2010). Agreements in the next few years extended this deal so that Mexican water managers could release water when they needed it (IBWC 2012; 2017). Additionally in these negotiations, the U.S. offered to fund water infrastructure repair projects in return for payments in water (IBWC 2012; 2017). The estimated water saved by infrastructure projects would be paid to the U.S. as compensation.

Constellation Brands Conflict

Constellation Brands announced their construction in 2016 and set off a debate about how water should be used in the community. This debate reached its zenith when those protesting the Constellation Brands Brewery joined with the national *gasolinazo* debates of 2017, and then again in 2018 (Animal Politico 2017). Protesters were concerned that municipal water supply was being conceded to Constellation Brands without enough of a benefit for the community. After protests of up to 30,000 people, the state governor rescinded public funding support for the aqueduct providing water to the brewery (Excelsior 2017).

The brewery continued to develop. Instead of receiving state funding, the brewery paid independently for an aqueduct to bring water to their plant (Martinez 2017). The debate continued, with active resistance to various construction projects through 2018. Many pushed for a plebiscite on the matter, an effort that currently has 17,000 petition signatures (4Vientos, 2019).

The defense of water

The basis of this narrative is that water is a way of life; water should be used to promote and benefit both local economic goals and lifestyles. Interviewees describe water use as restricted to applications for traditional crops and beneficial uses for the local community. People promoting this narrative argue that Constellation Brands does not fit into these acceptable categories of water use. They justify this claim that the brewery should not operate in the Mexicali Valley for many reasons, but most importantly, Constellation Brands' water use does not fit into the community's lifestyle and water management goals.

Interviewees advanced ideas that Constellation Brands is bad for the community both materially and symbolically. Materially, they argue that the brewery would cause water scarcity and threaten agricultural users' supply. One interviewee expressed the importance of agricultural water use, seen as the most traditional use in the community: "It's important because we're producing food. And it's not fair, right? that because of water scarcity we stop producing food and supporting our families. We live from that, from agriculture."

One interviewee expressed the material threat as specifically a problem for ground water sources:

> If the brewery operates it will need water apart from the east aqueduct, which comes from the city, water directly from the CESPM, public services of the city of Mexicali. Now, the water they require to work, to produce their beer, their alcoholic beverage, must be water strictly from the Valley of Mexicali, well water; and they are thought to have drilled between 14 and 18 deep wells, quite deep, that is, very deep, and to extract water with better minerals. And by making those deep wells, and such a large number of wells, in a few years they will leave us without water in the aquifer. So? What will happen to agriculture?

The other primary material water use in the Mexicali Valley is industrial use. The interviewees that promote the *defense of water* narrative are not against industrial water use entirely, but emphasize that water should be used for the good of the most possible people in the valley, and conversely not used for outsiders' use. This narrative argues that agriculture and smaller industry do a better job of employing people in the valley than the Constellation Brands Brewery would. The concern that Constellation Brands would use water at an irresponsible rate was expressed clearly in a written document by one of the supporters of the *defense of water* narrative (Martínez Zazueta, 2018).

> With 7 million $m^{3,}$ said [Constellation Brands] plant will consume 81% of the total water currently used by the set of industries installed in Mexicali...That is, Constellation Brands will have a water use rate per worker that is 168 times higher than the rate of all Mexicali industries combined.

Figure 4. This photo was given to me by a protester that occupies an encampment outside of the Constellation Brands Brewery. With the brewery in the background, protesters wave Mexican flags. The sign reads, "Get out bandits, Water is for producing food, not beer."

The brewery additionally posed a problem for these interviewees symbolically. They described the brewery and the privatization of water as an affront to an established way of life. This includes lifestyle goals, development goals, and national identities. Three of the seven interviewees in this category expressed how Constellation Brands did not fit local lifestyle goals as "water is for producing food, not beer." The photo shown in Figure 4 demonstrates this sentiment. The protest sign reads "get out bandits, water is for producing food, not beer." Another interviewee expressed the company's inability to reach local development goals by arguing that more people could be put to work in the farms than in the factories, which he expects to be mostly automated. Others supported this idea that water would be better used elsewhere. Two of the seven interviewees asked rhetorically why they were producing beer in Mexico if all of the beer would be sold in

the U.S. They argued that it was because they could cheaply get access to Mexican water and labor that they could not get in the U.S.

Mexican pride and national unity was also a common theme. Two of the seven interviewees referenced the Mexican constitution, and how Constellation brands was acting in conflict with its proclamations. One interviewee stated, "You cannot buy or sell water" referring to article 27 of the Mexican constitution. While this article was amended in 1992 to allow the sale of water, the interviewee did not agree that the amendment was just. Another interviewee cited that the constitution prioritizes agricultural use over industrial use, and that that should play into decision making. A photo taken at a protest camp visualizes this national sentiment (Figure 5).

Figure 5: This picture, taken at a protest camp across from the Constellation Brands Brewery, shows a Mexican person kicking the Constellation Brands factory across the border to the United States.

Interviewees view themselves as loyal community members with a deep ecological knowledge of the landscape. Interviewees often referenced family histories of farming in the valley. They see themselves as a legacy of both the Mexican Revolution and the *Asalto de las Tierras*, carrying out a vision of "*tierra y libertad*," a reference to Zapata's rallying cry in the Mexican Revolution. Many see themselves connected to the Zapatista movement beginning in 1994 as well. Interviewees expressed resistance to both governmental control and globalization. Interviewees emphasized grassroots efforts, such as "resistance begins at home," or by explicit ideological ties to the Zapatistas. For example, the organization Mexicali Resiste nods to their ideological connection to the EZLN by signing off their communications imitating the distinctive style of the Zapatistas: "from the dessert furthest north of the south."

For the *defense of water* narrative, there are two groups of others, passive people and exploitative governments. The passive participants were seen as people that were ok with the status quo. Interviewees referenced many levels of government being corrupt and taking resources to benefit themselves.

Members of this narrative, a diverse group of farmers, teachers, laborers, and students, see themselves as long-standing authority figures in establishing water policy. This authority grounds the claims they make about how water should be used in the community. Interviewees referenced the Salinity Crisis period in the 1970s as an example of effective water management by their group. This historical case is cited as a time when local people made water decisions successfully.

For this narrative, global powers are the drivers behind change in the valley. Interviewees referenced austerity programs in the 80s, the privatization of the ejidos in the 1990s, the All-American Canal project in the 2000s and the 2010 earthquake as

landmarks of when outside influences exercised power contrary to what they see as local water control goals.

Interviewees argue that water use is representative of other resources in the community. They express a sentiment that air, water, land and labor have been exploited by external forces at the expense of local interests. In a public letter written from prison, the protest leader succinctly expressed this idea.

> Mexicali Resiste remains fixed in its struggle for the defense of the human right to water, which belongs to all and for all; for the defense of our natural resources, which is the defense of our territory; against the privatization and criminal indebtedness of the Public-Private Partnerships (PPP); and, in general, against any act of public power that does not seek to improve working conditions and the quality of life of those who have no more than their work force to have a decent life; as well as for those marginalized from progress and those excluded from the common welfare.

Another interviewee goes into more depth on why this narrative considers water at least partly privatized. He referenced Conagua's different rates at which various users buy water. According to this interviewee, water managers have a greater incentive to sell water to industry than to farmers: "legally, [water] is not privatized, but in practice Conagua is supporting industry because [the industry] can pay more."

This narrative points to corrupt officials, the growth of industry, and the All-American canal-lining project as the drivers of water scarcity. They claim that because industrial water use can be charged a higher rate, that water managers favor them and deliver them more water. The narrative claims this is at the expense of deliveries to farmers.

Interviewees also see the diminishing ground water levels as a result of the All-American canal-lining project.

> The reason is, that in a large part the water of the Colorado River, the bed of the Colorado River is dry, nothing filters to the aquifer; besides that, there was an area here to the southeast, on one side of the dividing line of the United States and Mexico; where the United States has a channel called All-American. That channel was originally earth and allowed several million cubic meters to filter underground, to the Mexican aquifer, to the low part that is the Baja California. The aquifer mantles were maintained, the levels stayed well. But after a few years ago, as a result of some political gentlemen here, I will not mention names because, but I do know them, but they were politicians. They drilled wells to water their lands, some land less than a kilometer away from the dividing line, which should never have been because there is a treaty that wells should not be drilled, neither United States nor Mexico, less than two kilometers from the line divide. And this was done a few meters from the dividing line with the United States. And this caused the United States of America to make the cement channel and prevent water leaks. And the repercussion now is that the aquifers are very low, very deep and are falling more and more.

The *defense of water* narrative includes clear villains, represented by Constellation Brands, Governor Francisco Vega, and the United States. These villains are framed as benefiting from Mexicali's water supply without significantly giving back to the community. Interviewees described the brewery and the government that enabled the brewery as, "monsters," "bandits," and "corrupt." Figure 6 shows Donald Trump represented as a villain in a protest sign.

Figure 6: This picture, taken outside a farm in the northern Mexicali Valley, shows two protest signs. The one on the left says "DONALD TRUMP - you took away the companies Carrier and Ford, so also take your fucking brewery. We don't want it here." The banner on the right says "Not for beer do we change [or trade] our water."

(La Jornada 2017)

The community's farmers are framed as the victims. They see Constellation Brands as a threat to their lifestyles and the economic base of the valley as a whole. The narrative describes farmers as a driving economic force for the rest of the city. The quote below lays out a list of problems that the Constellation Brands Brewery has come to represent:

> Right now we have a lot of problems, such as the high cost of the products. In other words, the inputs, such as energy, gasoline, diesel, we need to work the land, to prepare the land we need large quantities of diesel and diesel is very expensive, the cost is very high, more than gasoline; and fertilizers, they are also very high; and the water, besides that it is already expensive, it's very expensive

> to irrigate - water; There is also a shortage of water, we do not have water in time to irrigate our crops, and if the plant is not watered as it should be at the right time, the roots do not develop as they should.

Transparency and accountability from government institutions was seen as the way to solve the community's water problems. They see open information, as a way to keep politician accountable. One interviewee stated that "information is the best tool" to address these problems.

The technocratic solution

From this perspective, water is a material, to be used as a resource and not a political tool. The premise of the narrative in the case of Constellation Brands is that the brewery has been operating within the established laws, and therefore is not exacerbating water scarcity issues. Their identity is couched in a professional and technical understanding of water management. Many water managers and engineers subscribe to this narrative as well as officials form Constellation Brands. One interviewee explained this perspective of water use.

> The history of what has been managed in this district of Mexicali is that there was plenty of water. There was no water problem; today there begins to be. But more than anything I think that the water problem is political, or that people have been made to believe that it is political... My perspective [on Constellation Brands] is that if the company acquires the water rights it needs, I do not see why there is going to be a water shortage problem.

This group perceives others as having a misunderstanding of water management and causes of scarcity. This group implicates farmers' long-term inefficient use of water as the source of water scarcity. They spoke about political issues as having separate

solutions from water management. They do not frame water control as the way to achieve political change. As an example, one interviewee shifted the blame for the primary cause of the community tensions to low crop prices instead of water shortages. This interviewee described the cost of water for a water manager in relationship to low crop prices.

> I think that [cost] is the biggest challenge between the modules, and as you said at the beginning, it's a chain; we pay a service to the SRL [the irrigation district], to the district and we pay a fee to the CONAGUA [federal water authority]; So, the district, I think, also pays a fee to CONAGUA. So if the user does poorly, the module does poorly; if the module does not do well, the district does poorly; If the district does not do well, then your money does not reach CONAGUA either. So, I believe that one of the main challenges for farmers and modules, would be if agriculture has a future, so to speak, a future; because in these times, water is worth more than harvesting a ton of wheat.

This group blames inefficient water use and informal, under-regulated groundwater pumping, and shifting river channels as the primary drivers of water scarcity. One interviewee talked about "vampires" illegally taking water from the canals at night, or people using crude water gauges to water their fields. Another referenced channels drifting away from old infrastructure as a challenge to delivering water. This happens when the water level is lowest in the summer.

This group points to technical solutions to current and looming water scarcity issues. One interviewee remarked, "I think we should get to that point in saving water, in having good harvests with the least amount of water, in technifying the use of water."

Strategies revolve around becoming more efficient, such as concrete lining, more

accurate metering, more efficient water practices, and adapting to changes in use. They describe themselves as adaptive, and responsive to various community needs as well as changes in global economics and climate. They talk about shifting water to whatever uses are able to pay for the water services. In this example, an interviewee talks about how Constellation Brands could have bought up water rights from ejido communities with community development in mind.

> I think a very good strategy could have been that [Constellation Brands] would have bought the water rights of those conurbation plots and gave them the possibility, through agreement with the state government, the possibility that those areas could be developed for housing.

The policy solution for this group is twofold. One side is to measure and manage water in more efficient ways. One interviewee suggested that crop rotation could be better managed to rest fields while others could use their water. The other side is that political solutions could be sought in areas other than water. This narrative talks about crop and fuel prices, along with trade agreements as possible solutions for farmers' struggles.

Table 1: Environmental Narratives in the Constellation Brands Conflict

		Environmental Narratives	
		Defense of Water	Technocratic Solution
		N=7	N=6
Origins		Historical, 1937 Asalto de las Tierras and the Mexican Revolution	Historical - 1992 Water reforms
Frame Components	Defining socio-ecological norm	Water is a way of life	Water is material
	Perception of themselves	Loyal defenders of water and lifestyles for local people	Practical and progressive community members with a global perspective
	Perception of "others"	Us versus them perception of others, others are passive	Others have a misunderstanding of a complicated issue, sympathetic
	Decision making authority	Transparent and democratic process should make decisions	Experts, water managers should promote policies that the community can follow
Narrative Components	Plot that introduced a temporal element	Globalization and changes in centralized	Outdated practices and low global

		government enable exploitation of community resources	food prices have left the community struggling to maintain its lifestyle
	Structuring causal mechanisms	The government, including water irrigation districts, doesn’t serve the people	People's practices and technology need to update to address changes
	Relationships between the context and agents	Water management is the responsibility of the local people	Experts have the responsibility to manage water for the good of everyone
	Fixers of the problem (heroes)	Community members	Water managers and politicians
	Causers of the problem (villains)	Constellation Brands and Systematic dysfunction	Global change
	Victims	The community is the victim	The community is the victim
	Moral of the story/ policy solution	We must have transparent, accountable, and democratic local water management	We must have politicians and experts work together

DISCUSSION

The above section answers the research question surrounding how farmers frame their narratives. This section answers my second question: what signifiers of water allowed groups to meet their goals? I point to actions taken in response to narratives, commonalities among narratives, and examine what has been obscured or privileged by each narrative.

The *defense of water* narrative highlights that water is more than a material good. Ideationally, they wish to make more visible water's role in shaping communities in the Mexicali Valley. Additionally, the *defense of water* group wants people to know how much water Constellation Brands Brewery is planning on using to operate its facility, volumes that the brewery has made vague and minimized in its reports (Constellation Brands 2016; Constellation Brands 2014; Cortez Lara 2019). However, the way that *the defense of water* narrative is framed minimizes the role farmers have played in creating water scarcity. While the *defense of water* narrative wishes to address water scarcity, it has prioritized challenging the symbolic nature of water over addressing the community's own role in creating water scarcity.

One of the successes of the *defense of water* narrative was limiting the Baja California government's financial incentives for the company to establish in the Mexicali Valley. Because of the popularity of the *defense of water* narrative, there was enough pressure on the government to rescind state funding for the aqueduct. As shown in the first chapter, the focus on privatization of water enabled a broad coalition of interests to come together under the name *defense of water*. This was a significant challenge to the dominant paradigm, the assumption that foreign direct investment is a general boon to the community.

The *defense of water* narrative also mobilized citizen investigations into Constellation Brand's water supply (e.g., Martínes Zazueta 2018). This brought more attention to how water is managed in the valley, creating a dialog between the *technocratic* view of water management and the *defense of water* narrative (Schön and Rein 1994). In March 2019, there were 17,000 signatures from Mexicali Valley residents to host a plebiscite on the issue of the brewery's operation. Again, these actions challenge assumptions about who should manage water decisions. The *defense of water* narrative has pushed the community towards a democratic instead of technocratic view of management.

Another effect of the *defense of water* narrative, is that it positions water scarcity as the fault of a political system and a corporate institution. This minimizes that farmers are by far the greatest users of water, and historically have contributed the most to the overexploitation of the aquifer (Conagua 2015). This may pose a challenge for those managing water scarcity in the future. The proposed solution of the *defense of water* group, preventing Constellation Brands from operating, will likely not effect water scarcity in the valley. The water that Constellation Brands plans to use is concessioned from other farmers in the valley. The *defense of water* narrative represents Constellation Brand's water use as an increase, where the *technocratic* narrative represents it as a transfer.

The *technocratic solution* narrative serves to reinforce the dominant water resource management paradigm. It does not solely maintain the paradigm, as it has allowed Constellation Brands to develop and operate against social opposition. The brewery is still being built and is scheduled to start operations in late 2019 (Constellation Brands, 2016). The brewery paid to construct the aqueduct after the state rescinded funding for it. The company received police and security support to accomplish the brewery construction. Indeed, to meet the demands of people on the *defense of water* side, a fundamental change in how water is currently managed in the valley would need to take place. Water continues be bought and sold freely for various purposes in the Mexicali Valley. The *technocratic solution* downplays water's historic role in the creation of

community while fore fronting water's economic uses. This practice is now in open debate because of the contestation of the *defense of water* narrative.

CONCLUSION

The *defense of water* and the *technocratic solution* narratives symbolize water differently, highlighting and obscuring material and symbolic natures of water. Each promotes a different social, economic, and environmental element of water use. The *defense of water* narrative symbolizes the control of water as an issue of Mexican sovereignty. In doing so, they challenge the *technocratic* narrative's view that water is neutral and apolitical. By focusing on sovereignty, the *defense of water* narrative has shifted the conversation away from drivers of scarcity, and towards acceptable uses of water, even though water scarcity is expressed as a concern by the *defense of water* narrative. This finding adds to a body of work that shows how narratives can be constructed to undermine a dominant paradigm (e.g. Arts & Buizer 2009; Emery, Perks, & Bracken 2013; Winkel 2014). In this case, the *defense of water* narrative seems to have challenged the dominant narrative in a Faustian bargain. The narrative has limited a conversation about water scarcity, and promoted one about sovereignty. They have traded the materiality of water for symbolic control of water.

Additionally, this narrative analysis provides a framework to look for commonalities. One of the commonalities among the three narratives is that they all call for more measurement and transparency. Each narrative sees these interventions as a way to build trust between community members and water managers. While measurement and transparency does not address each groups concerns regarding Constellation Brands' operation, this could be a moment when the Mexicali Valley community expands how they collect and share information about water to make future decisions. This could involve a neutral third party measuring water for irrigation districts. Water is seen as political by some and a resource by others; however, both groups talked about food, gas,

and labor prices as political. Negotiations between the *defense of water* and the *technocratic* solution could discuss these elements to mutual benefit.

4. CONCLUSION – DRINKING MONUMENTS

Summary

This thesis deals with dreams about possible realities, and how water can be used to create new futures. The Mexicali Valley has been the site of various dreams throughout its history. Mexicali hosted the worlds' largest cotton farm, became a manifestation of the Mexican Revolution, and most recently transformed into a globalized agricultural and industrial market. My interest is in how people create landscapes and who has the power to do so. I study resistance and negotiation as strategies for creating possible futures. Chapters two and three ask questions that speak to the inner workings of water and power in shaping space.

In chapter two of this thesis, I asked two questions, (1) What are the tensions underpinning the struggle in an arid, transboundary water setting? (2) And, what enabled these tensions to change into action? I answered question one with a study of historical transboundary water conflicts in the Mexicali Valley. I showed that the tensions are many, ranging from rising gas prices, wage inequality, pollution, lifestyle changes and water concerns. Institutional changes in water management, industries, and lifestyles undermined farmers' ability to collectively act. Without ways to address these concerns, tensions built. Yet, farmers have recently been able to organize large protests that they were unable to manage in the early 2000s. In answering question two, I explain why farmers were able to unify diverse groups in this moment. I argued that water was used as an empty signifier, a flexible symbol that enables various non-traditional alliances to collectively resist a history of undercut agency. I used Laclau's (2005) theory on empty signifiers to contextualize current resistance strategies. I pointed to some of the groups' successes, notably, the rescinding of state funding for the Constellation Brands aqueduct. The *defense of water* narrative address many symbolic aspects of water, while obscuring its materiality. I discuss this chapter's contribution to the literature in the following *Drinking to Remember* section.

For chapter three, *Las aguas escondidas,* I ask, how did participants in the Constellation Brands Brewery conflict tell and advance their political narratives? And second, what signifiers of water allowed groups to meet their goals? I responded to the first question by outlining narratives involved in the debate using a narrative analysis framework developed by Jones and McBeth (2010). Supported by analysis of quotes from my interviews, I answered the second question, arguing that to gain political traction and challenge the dominant narrative, the *defense of water* narrative has hidden a primary driver of water scarcity, agricultural use practices. Instead of focusing on the materiality of water, they focus on a more symbolic use, sovereignty. This is important because the *defense of water* group has likely limited their ability to address looming water scarcity in favor of challenging the dominant *technocratic* paradigm. This finding contributes to the literature by demonstrating a unique way that a group has challenged a dominant paradigm.

Limitations

There are inherent limitations to this qualitative study. The sample size of interviewees was limited by time and geographic scope. Most of the interviews were conducted in the northern part of the Mexicali Valley. Interviewees were also identified by a snowball method instead of a random sampling. A different sampling method could have led to more varying perspectives. A larger sampling size would ensure that saturation was reached (Corbin and Strauss 2008). Ideally, I would have been able to speak to representatives or employees of Constellation Brands, but I was denied requests to do so. Nevertheless, with access to formal documents, videos, and newspapers, I felt able to contextualize the interviews that I conducted within the broader context.

***

Drinking to Remember

On a Thursday evening, a group from *Mexicali Resiste* went out for a beer at a local bar.

"Hey, which beers can we drink?" One member asked to another. They were boycotting Constellation Brand's beers: Corona, Pacifico, Modelo.

Another responded, "Tecate is always fine."

This was a conversation about what was just, what was appropriate, about how society should be. Through personal choices, they were signaling what kind of world they wanted to live in. Nevertheless, like Constellation Brands, Tecate is also owned by an international brewery, Heineken, and is produced with Baja California water in the town of Tecate 85 miles away. What made it different from Constellation Brands?

Turning this over, how were any of the *maquila* industries different from Constellation Brands? Mexicali hosts about 180 maquiladoras and they employ around 75,000 people in Mexicali (James, 2018). These factories utilize lower Mexican wages and more lax environmental laws to assemble U.S. products for less than it would cost in the United States (Eades 2018). Constellation Brands is doing this too. Yet, many Mexicali residents use *maquiladora* products, like air conditioners, medical supplies, auto parts, and beer made in Mexicali.

The protesters have many reasons to claim that Constellation Brands is different from other companies (Martínez Zazueta 2018). Some of the reasons have to do with Constellation Brands' scale, the way the company was established with state government incentives, and the ways that security has treated protestors (Martínez Zazueta 2018). However, the relationship between industry, the U.S, and global markets in Mexicali is complex to say the least. Farmers also participate in a global market. The second largest crop is alfalfa, which largely supports the meat production industry (Brun et al. 2010). SuKarne, one of the world's largest meat exporters also operates in Mexicali (SuKarne 2019).

The conversation at the bar is somewhat representative of the complicated issues that Mexicali residents commonly deal with. Living at the border in some ways gives them access to a globalized market, and in some ways makes them a victim of it. Because so many people in Mexicali experience both benefits and exploitation from globalized economies, it makes it difficult to point to the problem, and to have a conversation about what to change.

I argue that Constellation Brands Brewery became a material site that overcame the dialectical tensions inherent in living with the benefits and exploitation of a globalized economy. Constellation Brands became a monument that for many, embodies all of the negative processes happening in Mexicali, without being attached to the positive ones. I label this material site a monument because *monere*, the Latin root of monument means to warn, and to remind. Marking Constellation Brands as a monument is significant because it fixes an element of the *defense of water* narrative in to a more permanent place. Connection to a place gives the narrative "an enduring capacity to shape and reshape historical memory, place, identity and power relations" (Price 2005, 192). As a monument, it can bring private and sacred assumptions about who we are and how we create society into debate (Giesen & Seyforth 2016; Price 2005).

Using an empty signifier made possible the marking of the monument. The *defense of water* narrative operated as an empty signifier, enabling the creation of a populist identity. The populist identity created protagonists an antagonist. In this case, one antagonist is a physical space, Constellation Brands Brewery.

Within the literature on empty signifiers, I propose a connection between the work of Price (2005), Alvarez et al. (2018), and Giesen and Seyfert (2016). Each describe that empty signifiers can serve as a mediator of what is right and wrong, or what is acceptable in society. Most similarly to the Constellation Brands case, Price (2005) shows that by naming a chapel after a Robin-Hood-like bandit, ideas about good moral behavior can be

contested; so too is Constellation Brands marked as a site for debate about acceptable societal behavior. The *defense of water narrative*, by developing an identity and a populist movement, created a dichotomy of us versus them. Constellation Brands has now been marked as an extreme end of neoliberal water use. As an extreme end, it serves as a warning and a reminder of what neoliberal water use enables on the landscape.

My contribution to the literature is that the *defense of water* narrative separated the brewery from the dialectical tensions in the Mexicali Valley, enabling protesters to disconnect their own complicated relationships with neoliberal activities, and talk about symbolic issues important to them. The symbolism placed on the brewery enabled them to criticize neoliberal practices without criticizing themselves. The idea that water is more than a material resource is chief among the conversations that was enabled. Metaphorically, creating a physical symbol of all that is wrong in the community is what enabled the beer bottle to burst.

References

Alverson, M., & Skoldberg, K. (2000). Reflexive methodology: New vistas for qualitative research. London: Sage.

Animal Politico. (2017, 1 17). Dan marcha atrás a la ley que permitía privatizar el agua en Baja California ante las protestas. *Animal Politico*.

Arts, B., & Buizer, M. (2009). Forests, discourses, institutions: A discursive-institutional analysis of global forest governance. *Forest policy and economics, 11*(5-6), 340-347.

Batterbury, S., Forsyth, T., & Thomson, K. (1997). Environmental transformations in developing countries: hybrid research and democratic policy. *Geographical journal*, 126-132.

Berger, P., & Luckmann, T. (1991). *The social construction of reality: A treatise in the sociology of knowledge.* Penguin Uk.

Boland, R., & Schultze, U. (1996). Narrating accountability: cognition and the production of the accountable self. *Accountability: Power, ethos and the technologies of managing*, 62-81.

Bridge, G., & McManus, P. (2000). Sticks and stones: environmental narratives and discursive regulation in the forestry and mining sectors. *Antipode, 32*(1), 10-47.

Cabello, V., Kovacic, Z., & Van Cauwenbergh, N. (2018). Unravelling narratives of water management: Reflections on epistemic uncertainty in the first cycle of implementation of the Water Framework Directive in southern Spain. *Environmental science & policy, 85*, 19-27.

Clifford, J., & Marcus, G. (1986). *Writing culture: The poetics and politics of ethnography.* Univ of California Press.

Cortez Lara, A. (2011). Gestión y manejo del agua: el papel de los usuarios agrícolas del Valle de Mexicali. *Problemas del desarrollo, 42*(167), 71-95.

Cortez Lara, A. (2019). *Manifestación de Impacto Ambiental*. Retrieved from Facebook: https://www.facebook.com/pg/mexicaliresiste/posts/

Czarniawska, B. (1997). A four times told tale: Combining narrative and scientific knowledge in organization studies. *Organization, 4*(1), 7-30.

Emery, S., Perks, M., & Bracken, L. (2013). Negotiating river restoration: The role of divergent reframing in environmental decision-making. *Geoforum, 47*, 167-177.

Fairhead, J., & Leach, M. (1995). False forest history, complicit social analysis: rethinking some West African environmental narratives. *World development, 23*(6), 1023-1035.

Fløttum, K., & Gjerstad, Ø. (2017). Narratives in climate change discourse. *Wiley Interdisciplinary Reviews: Climate Change, 8*(1), e429.

Forsyth, T. (2004). *Critical political ecology: the politics of environmental science.* Routledge.

Garcia-Acevedo, M. (2001). The confluence of water, patterns of settlement, and construction of the border in the imperial and Mexicali valleys 1900–1999. *Reflections on water: New approaches to transboundary conflicts and cooperation*.

Goldrich, D., & Carruthers, D. (1992). Sustainable development in Mexico? The international politics of crisis or opportunity. *Latin American Perspectives, 19*(1), 97-122.

Guldbrandsen, T., & Holland, D. (2001). Encounters with the super-citizen: neoliberalism, environmental activism, and the American Heritage Rivers Initiative. *Anthropological Quarterly*, 124-134.

Hatch, M. (1997). Irony and the social construction of contradiction in the humor of a management team. *Organization Science, 8*(3), 275-288.

IID. (2019). *All-American Canal*. Retrieved from Imperial Irrigation District: https://www.iid.com/water/water-transportation-system/colorado-river-facilities/all-american-canal

Jones, M., & McBeth, M. (2010). A narrative policy framework: Clear enough to be wrong? *Policy Studies Journal, 38*(2), 329-353.

Judkins, G., & Myint, S. (2012). Spatial variation of soil salinity in the Mexicali valley, Mexico: Application of a practical method for agricultural monitoring. *Environmental management, 50*(3), 478-489.

Kleinschmit, D., Böcher, M., & Giessen, L. (2009). Discourse and expertise in forest and environmental governance—An overview. Elsevier.

Lara, C., Alfonso, A., Donovan, M., & Whiteford, S. (2009). The All-American Canal lining dispute: an American resolution over Mexican groundwater rights? *Frontera norte, 21*(41), 127-150.

Leach, M., & Mearns, R. (1996). Environmental change and policy. *The lie of the land: Challenging received wisdom on the African environment*, 1-33.

Leach, M., Stirling, A., & Scoones, I. (2010). *Dynamic sustainabilities: technology, environment, social justice.* Routledge.

Lindero NorteTV. (2017). *Cuarta Manifestación de Mexicali, pide juicio político a "Kiko" Vega*. Retrieved from Lindero NorteTV: https://www.youtube.com/watch?v=PXdj9rFARwI

Linstead, S. (1994). Objectivity, reflexivity, and fiction: Humanity, inhumanity, and the science of the social. *Human Relations, 47*(11), 1321-1346.

Luhman, J., & Boje, D. (2001). What is complexity science? A possible answer from narrative research. *Emergence, A Journal of Complexity Issues in Organizations and Management, 3*(1), 158-168.

Medina, G., Pokorny, B., & Weigelt, J. (2009). The power of discourse: Hard lessons for traditional forest communities in the Amazon. *Forest policy and economics, 11*(5-6), 392-397.

Mexicali Resiste. (2018). *Mexicali Resiste*. Retrieved from Mexicali Resiste: https://mexicaliresiste.org/wp/

Mink, L. (1978). Narrative form as a cognitive instrument. *The writing of history: Literary form and historical understanding*, 129-149.

Moore, D. (1996). Marxism, Culture and Political Ecology: Environmental struggles. Liberation Ecologies—environment, development and social movements: Zimbabwe's Eastern Highlands. New York, US-NY: Peet, R. & Watts, M. *Zimbabwe's eastern highlands. New York: Routledge*.

Moseley, W., & Laris, P. (2008). West African Environmental Narratives and Development-Volunteer Praxis. *Geographical Review, 98*(1), 59-81.

Oyarzabal-Tamargo, F., & Young, R. (1977). The Colorado River Salinity Problem: Direct Economic Damages in Mexico. *Western Journal of Agricultural Economics, 1*(1), 7-14.

REPDA. (2019). *Registro Público de Derechos de Agua*. Retrieved from REPDA: https://www.gob.mx/conagua/acciones-y-programas/registro-publico-de-derechos-de-agua-repda-55190

Roe, E. (1991). Development narratives, or making the best of blueprint development. *World development, 19*(4), 287-300.

Roe, E. (1994). *Narrative policy analysis.* Duke University Press.

Salinas de Gortari, C. (1992). *Ley de Aguas Nacionales.* Mexico City: Diario Oficial.

Sánchez Munguía, V. (2006). *Water Conflict Between the US and Mexico: Lining of the All-American Canal.* Human Development Report Office (HDRO), United Nations Development Programme ….

Schön, D., & Rein, M. (1994). Frame reflection: Toward the resolution of intractable policy controversies. New York: Basic Books.

Steffek, J. (2009). Discursive legitimation in environmental governance. *Forest Policy and Economics, 11*(5-6), 313-318.

SuKarne. (2019). *Historia Y Éxito*. Retrieved from SuKarne: https://www.sukarne.com/historia

Swyngedouw, E. (2009). The Political Economy and Political Ecology of the Hydro-Social Cycle. *Journal of Contemporary Water Research & Education*.

Swyngedouw, E. (2015). *Liquid Power: Contested Hydro-Modernities in Twentieth-Century Spain.* Cambridge: MIT Press.

Van Maanen, J. (2011). *Tales of the field: On writing ethnography.* University of Chicago Press.

Vanguardia. (2018, 8 24). Gasolinazo de 2018, superó al del 2017; se dispara el precio de la gasolina y diésel. *Vanguardia*.

Walsh, C. (2008). *Building the borderlands: a transnational history of irrigated cotton along the Mexico-Texas border* (Vol. 22). Texas A&M University Press.

Washbourne, N., & Dicke, W. (2001). Dissolving organization theory? A narrative analysis of water management. *International Studies of Management & Organization, 31*(3), 91-112.

Watkins, R. (2013). Meeting the China challenge to manufacturing in Mexico. *China and the New Triangular Relationships in the Americas: China and the Future of US-Mexico Relations*, 37.

White, H. (1987). The Content of the Form: Narrative. *Discourse and Historical Representation []*.

Winkel, G. (2014). When the pendulum doesn't find its center: Environmental narratives, strategies, and forest policy change in the US Pacific Northwest. *Global Environmental Change, 27*, 84-95.