

What's Beneath the Surface Tension?

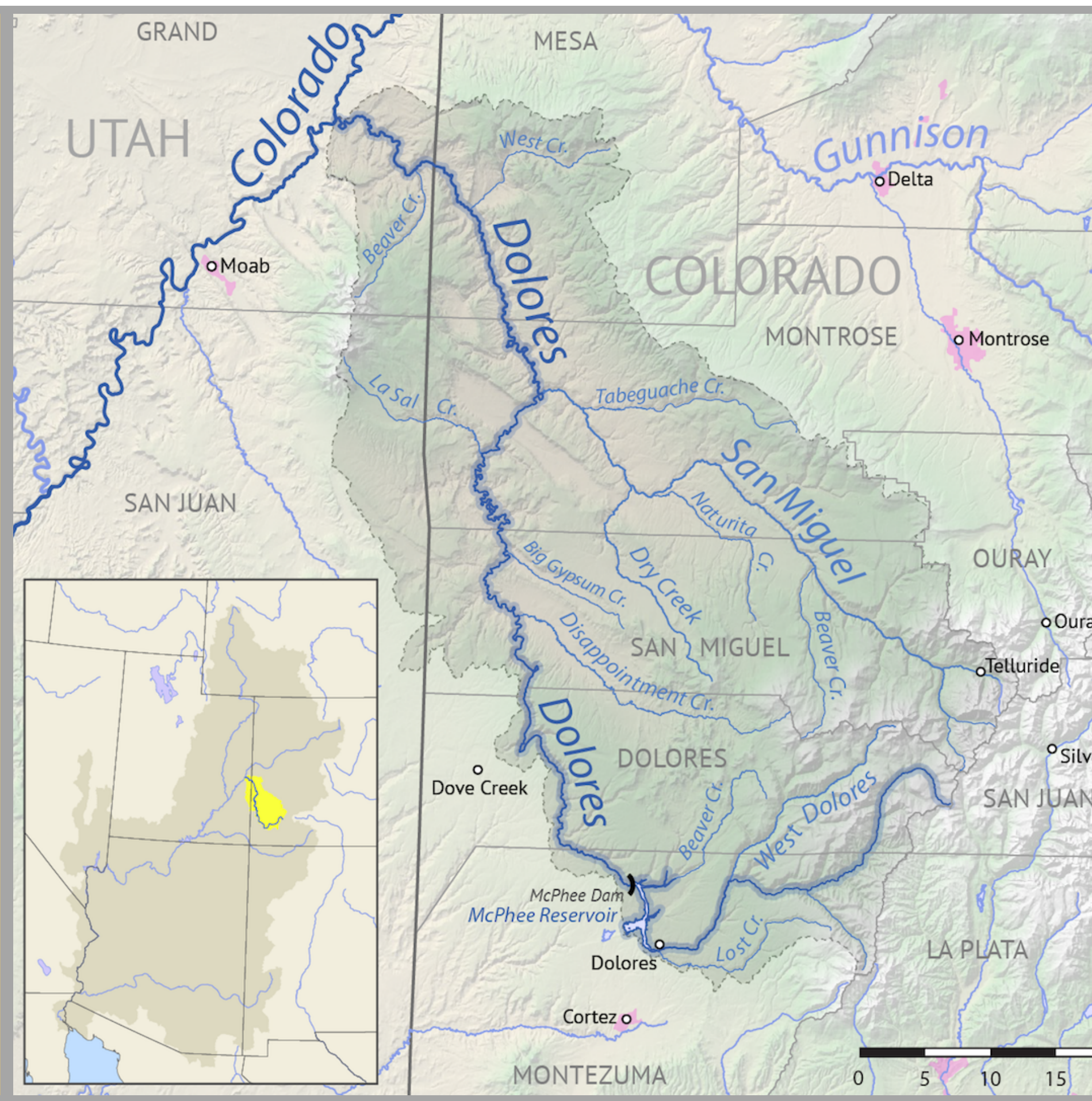
A case study of watershed management and changing populations in southwest Colorado

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Abstract

This research is an ethnographic case study analysis of McPhee Reservoir on the Dolores River, a tributary of the Colorado River in Southwest Colorado. The purpose is to investigate how intersecting scales of governance, changing populations, and increasing aridity affect relationships and water priorities in the Dolores River community. The goals are to learn about successes and challenges faced by the people who depend on dammed and diverted Dolores River water, including the Ute Mountain Ute Tribe, in order to understand parallel political, social, and environmental water challenges within the Colorado River Watershed and across the Basin as a whole.

Map of the Dolores River Watershed, a tributary of the Colorado River, which originates in the San Juan Mountains of Colorado and flows mostly north 230 miles before its confluence with the Colorado River near Moab, Utah. Note McPhee Dam in Montezuma County.



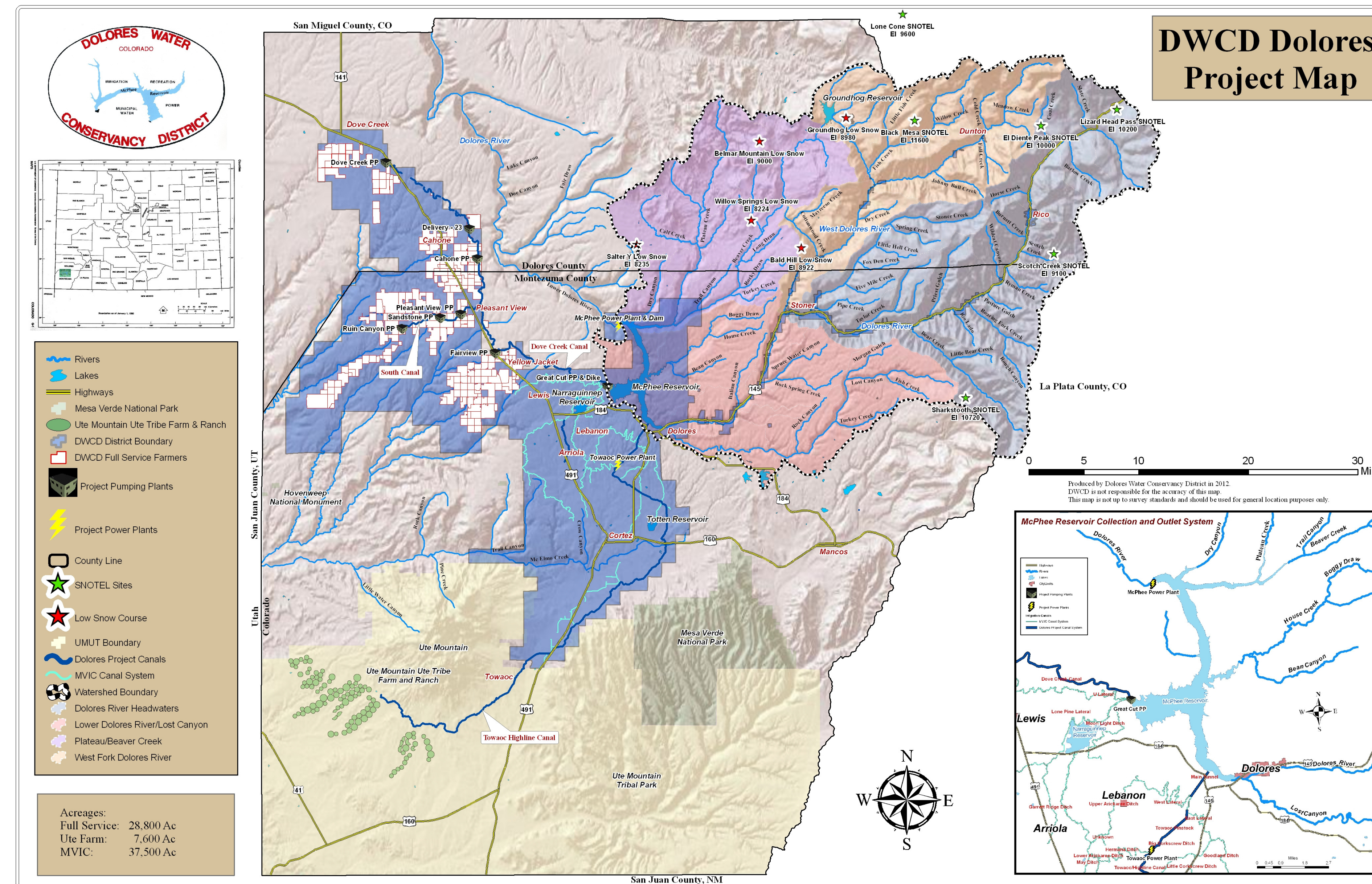
Context

The Dolores Project: The U.S. Bureau of Reclamation's Dolores Project in southwest Colorado, which encompasses McPhee Reservoir on the Dolores River and associated delivery canals and pipelines to the neighboring San Juan River watershed is the subject of my ethnographic case study. This case study will illuminate my **central question** in Western water management: *Who holds authority, legitimacy, and power to make decisions over the management and allocation of water, and how have locals attempted to make water decisions in the context of federal power and the legal institution of prior appropriation water rights?*

National Conservation Area and Community Conflict: The community dependent on the Dolores Project for water storage and diversion has been in conflict over how water should be prioritized around proposed National Conservation Area (NCA) legislation. The proposed NCA legislation is meant to create native fish and recreation protections on the Dolores River downstream from McPhee Dam. The majority of agricultural and municipal livelihoods in the region depend on water taken out of McPhee Reservoir and diverted south and west into the neighboring basin. Moving water from one drainage to another within a major watershed is called an interbasin transfer. Conflict arises when people advocate for potential downstream releases from the reservoir that could subtract from water that irrigators need diverted. I am investigating this conflict with results that will connect directly to the larger picture of Western water management.

Ute Tribal Water Rights: Importantly, the Dolores Project was made possible by the efforts of the Ute Mountain Ute Tribe to have their water rights honored. The Dolores Project provides the infrastructure to deliver legal water allocations to the Ute Mountain Ute Reservation located in the very southwest corner of Colorado. Even so, the Ute Mountain Ute Tribe is one of 13 Colorado River Basin Tribes who have not had their water rights fully recognized and quantified out of 29 Federally recognized Tribes in the Colorado River Basin. Studying the process and dynamics of Ute people receiving some of their rightful water claims may shed light on the legal water dynamics that Tribes are navigating across the Colorado River Basin.

Field Research Site



Map of the Dolores Project managed by the Dolores Water Conservancy District (DWCD), which works with the Bureau of Reclamation to store and allocate water to Dolores Project users. McPhee Reservoir is centrally located in the map and captures the majority of the Dolores Mainstem drainage denoted by colored polygons upper right, and can store 229,000 acre-feet (1 acre-foot = 1 acre under 1 foot of water). The blue highlighted area is the DWCD district boundary serving agriculture and several municipalities in Montezuma and Dolores Counties. Nearly the entire district is outside the Dolores River Basin. The DWCD district boundary abuts the Ute Mountain Ute Reservation highlighted in light tan. Mesa Verde National Park also abuts the Reservation highlighted in a green/grey tone. Note the long canal in dark blue which provides running water to the Ute Mountain Ute Tribal seat, Towaoc, and makes agriculture possible on the Ute Mountain Ute Reservation. Source: Dolores Water Conservancy District, Cortez, CO.

Research Questions

To investigate the central question mentioned previously, my dissertation research seeks to answer the following sub-questions focused on the Dolores Project:

- 1) I will research the history of the Dolores project, asking: *Were the residents of the Dolores community ever in agreement about resource management?*
- 2) In addition, I will research contemporary issues, asking: *How does the Dolores River community characterize the current conflict in NCA negotiations?*
- 3) By investigating Ute Mountain Ute history and Tribal perspectives of the Dolores Project, I hope to fill a gap in public awareness about Indigenous people and their water rights, which are often ignored, unseen and/or hidden in the Colorado River Watershed. This leads me to my third set of topic questions: *What are the ramifications of the hidden nature of Ute Mountain Ute Tribal history in Dolores Project decision making? Why don't people know or talk about the historical importance of the Tribe to the local economy? What are other examples of hidden Indigenous history in the Colorado River watershed and what are the implications of omitted Indigenous histories to the larger Colorado River condition and conversation?*

Methods

I am conducting an **ethnographic case study** of the community dependent on the Dolores Project. According to David M. Fetterman (1998), **ethnography** is the "art and science of describing a group or culture." According to Robert K. Yin (2013), a "**case study** is an empirical inquiry that investigates a contemporary **phenomenon** in depth and within its real-life context," especially when the specific context must be understood in order to make sense of the phenomenon.

My ethnographic work will consist of at least 25 semi-structured interviews with people from the following groups:

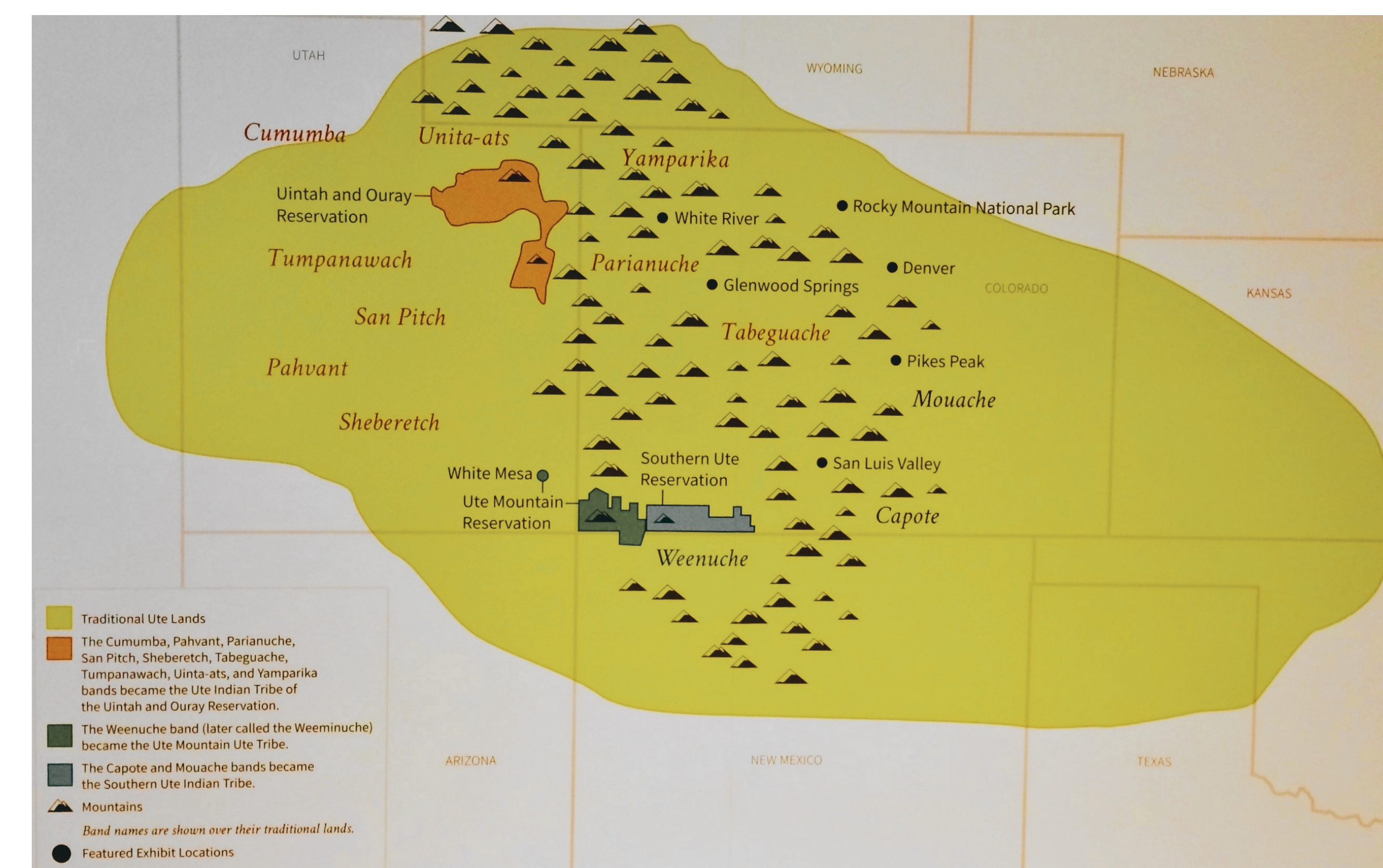
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- 1) **"Old-Timers":** Non-Indian people in the community who have lived in the area since before McPhee Dam was constructed in 1984 and/or are at least a second generation living in the area, and/or have water rights to the Dolores Project.
- 2) **Newcomers:** People who have moved to the area since all Dolores Project construction was completed in 1999 and/or are the first generation to live in this area, and may or may not have water rights.
- 3) **Ute Tribal Members:** The original old-timers in this region who live on or off the Ute Mountain Ute Reservation, and may or may not have water rights.

I will supplement interviews with a literature review of primary and secondary sources to help me gain understanding of **the case study phenomenon of focus:** conflict in watershed management negotiation in the Dolores Project context. This phenomenon is directly affected by:

- 1) Historical and contemporary climatic circumstances,
- 2) Changing populations caused by colonialism and migration,
- 3) Regulations such as: Prior Appropriation which allocates water based on who put it to use first; the 1922 Colorado River Compact between the seven basin states and Mexico; and the Drought Contingency Plan for sharing water shortage among Colorado River Basin states.

Indigenous Significance



Traditional Ute Territory and Current Ute Reservations: The region marked in yellow denotes the traditional ranges where bands of Ute people lived and travelled seasonally. The 12 bands identified on this map in either red or black are located in the approximate areas of their home ranges. Each band had wintering grounds at lower elevations and would travel with the seasons following food sources for hunting and gathering. Utah is named for the Ute people. By 1880, through a series of treaties broken by the U.S. government, the many bands of Ute people were forced onto three reservations. Bands in red now live on the Uintah and Ouray Reservation in Utah. The Mouache and Capote bands now live on the Southern Ute Reservation, and the Weenuche (also called Weeminuche) band now live on the Ute Mountain Ute Reservation. Ute Mountain and Southern Ute are the only Reservations in Colorado. They occupy a strip of land 110 miles long and 15 miles wide along the New Mexico border. Source: "Written On the Land: Ute Voices, Ute History" Exhibit, History Colorado Museum, Denver, 2019.

Decolonize History: I grew up on former Ute territory in southwest Colorado but never learned about the Ute people or their history while growing up. I have researched Colorado River topics for seven years yet not until I started my PhD researching the Dolores Project did I begin to understand the central and integral role of the Ute Mountain Ute Tribe in Dolores Project dynamics. By learning Ute history I am decolonizing my understanding of Western history.

The colonial efforts of the U.S. to isolate Ute people from nomadic lifeways across vast landscapes to three small reservations in Colorado and Utah, are the same efforts that modified the Colorado River basin to the system of dams and diversions for municipalities and agriculture that we see today.

Contemporary conflicting priorities and rights to water stored in McPhee Reservoir can be given context by looking at change over time in this place.