Yale school of the environment



FELLOWSHIP BRIEF

"Sin Agua, No Hay Vida": Exploring Threats to San Luis Valley, Colorado Water Supply

Cloe Dickson, MESc '23

The Need.

The San Luis Valley ("the Valley") is a high alpine desert roughly 200 miles southwest of Denver. The Rio Grande and its tributaries supply surface water to the Valley's agricultural communities, which are a major national producer of potatoes, barley, quinoa, and beef. New technology in the mid-20th century made groundwater more accessible than ever before, contributing to a rise in irrigation-based agriculture. Aquifer levels have significantly declined, threatening both the future of agriculture in the region and the ability for Colorado to meet downstream obligations per the Rio Grande Compact (1938). Moreover, the Valley continues to reckon with mining's impact on the quality of available water resources. The Summitville Mine and Nelson Tunnel are EPA Superfund sites and are under ongoing remediation efforts to decrease the effects of acid mine drainage near the headwaters of the Rio Grande. The Valley has further become a target for water export to supply water needs to near and far cities and suburbs. The Valley must then contend with both internal and external threats to its water resource supply, all of which is happening in an American West that is dryer, hotter, and thirstier than ever before.

The Project.

Cloe Dickson used qualitative research methods, interviews and participant observation, as well as archival resources and discourse analysis, to help answer the following questions:

- (1) What are the internal and external threats to San Luis Valley water supply?
- (2) What precautions are people taking to safeguard their current water resources?
- (3) What are the implications for water resource management across the American West?



During the summer of 2021, she interviewed agricultural producers, local academics and historians, conservation experts, recreation enthusiasts, and other San Luis Valley citizens on issues related to water. She spent numerous hours with the San Luis Valley Ecosystem Council (SLVEC), a public lands advocacy group based in Alamosa. The SLVEC has been a critical opponent of water export schemes, notably the Baca Ranch controversy, in which Yale Corporation was a 50% investor in a project hoping to sell water to Colorado's Front Range. Cloe also spent dozens of hours volunteering with local organizations, including the Headwaters Alliance, Rio Grande Education and Conservation Initiative, and the Rio Grande Farm Park.

The Findings.

Water in the San Luis Valley is a critical ecological resource, while also having significant social and cultural value. Many families in the San Luis Valley have shared a multigenerational connection to the land and water, contributing to a rich, place-based understanding of the local environment and community. Valley residents and water leaders alike have taken numerous precautions to safeguard remaining water resources, including the formation of a first-of-its-kind groundwater sustainability program, the implementation of past and ongoing remediation efforts near legacy mines, and the placement of numerous farms and ranches under conservation easements that effectively block the ability for water to be sold away from the properties. Community activism, too, has played a significant role in the historical and ongoing organized resistance to transbasin development projects, including the most recent launch of the Protect San Luis Valley Water campaign. "Sin Agua, No Hay Vida," is a popular refrain that elucidates both the Hispanic heritage and community perceptions of water resource stewardship.

The Impact.

Cloe is working on a series of creative nonfiction essays about water and place in the rural North American West, specifically focusing on the San Luis Valley and the Upper Rio Grande Basin. She hopes to use her writing to advocate for keeping water on working lands and for the consideration of non-economic valuation of water in natural resource management and planning. She is currently researching outside investment in San Luis Valley water, including Yale Corporation's funding of the 2002 purchase of the Baca Ranch by Farallon Capital Management. She is also working to document past and ongoing community organizing against water export projects, highlighting activism spanning from across Colorado and all the way to New Haven, Connecticut. She will continue working with local groups and leaders to continue learning about managing water resources in the new social and ecological realities of the North American West.



The Student.

Cloe Dickson, Western Resource Fellow | Cloe is a Master of Environmental Science candidate at the Yale School of the Environment. She earned her BA in Environmental Studies and Ecology and Evolutionary Biology at the University of Colorado Boulder in 2019. As a Western Resources Fellow, her independently-led research looks at the ongoing efforts to keep water on working lands in rural Colorado's San Luis Valley, which will consist of interviews with farmers, ranchers, and community members who have been fighting against water export to the urban and suburban Front Range for decades. Prior to graduate school, she served in AmeriCorps as a Youth Development Coordinator at Alpine Achievers Initiative, where she supported students in southern Colorado schools. In her free time, you can find her somewhere outside, ideally bagging another 4,000-foot peak in New England.