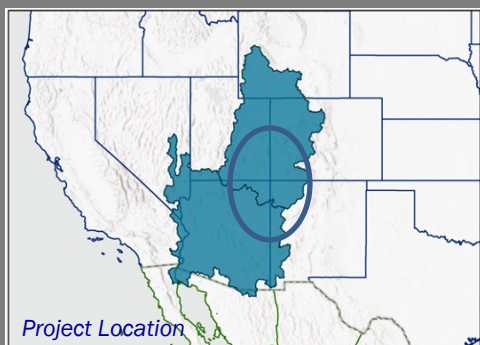


# COMMUNITY ENGAGEMENT AND COLLABORATION

## Understanding Sense of Place to Support Drought Resiliency in the Intermountain West



Drought has transformed the Colorado River Basin, leading to aridification across the Intermountain West. Reservoirs shrink, impacting nearby communities' emotional well-being, recreation, and business. These changes are interconnected with individual and collective sense of place—the emotional, experiential, and cultural connections people have with environments. Consequently, a disrupted sense of place can drive climate adaptations that improve community resilience. A research team at the University of Colorado Boulder's (CUB) Western Water Assessment conducted interviews to understand these dynamics in order to help local managers develop strategies to sustain both environments and sense of place.



USDA Southwest Climate Hub  
U.S. DEPARTMENT OF AGRICULTURE



Flaming Gorge Reservoir is a Hub for Recreation/Shadia Nagati/CUB

### KEY ISSUES ADDRESSED

Changes to hydrological systems significantly impact sense of place in reservoir gateway communities (RGCs), where recreational lifestyles and economies rely on full reservoirs. Economic losses, temperatures, and water levels are measurable, but the intangible nature of sense of place makes psychological effects difficult to quantify. Visible loss of beloved landscapes leads to sadness and grief for those who attach emotions and memories to their environment. Climate adaptation is essential to preserving RGCs' qualities, with the psychological impacts motivating communities' willingness and capacity to adapt; however, social scientists have not fully identified the links between affected sense of place and climate adaptation.

### PROJECT GOALS

- Identify relationships between economy, environmental change, and sense of place in RGCs
- Qualitatively understand sense of places and changes in RGCs through interviews
- Determine how sense of place influences adaptation behavior and cooperation across other drought-stricken RGCs and groups

## SENSE OF PLACE INSPIRES ADAPTATION

In many reservoir gateway communities, partners' strong emotional connections to their environment didn't just cause them heartbreak at seeing it change – they now seek community-led initiatives to preserve special places.



Blue Mesa Reservoir is Full of Scenic Hiking Trails/Shadia Nagati/CUB

## PROJECT HIGHLIGHTS

**Interviews Identify Tangible Impacts:** Partners described sadness and grief from drought. Emotional impacts highlight the importance of sense of place for well-being and need to preserve place-based cultural characteristics in decision-making. Interviews offered insights into the psychological impacts of climate hazards.

**Qualitative Methods Connect Physical to Psychological:** Qualitative methods reveal findings that quantitative approaches miss. Personal accounts help researchers understand the deep ties between physical surroundings and sense of place, informing adaptation strategies that partners willingly adopt.

**Partners Adapt to Preserve Identities:** Partners place high importance on effective water management to maintain reservoir levels and preserve sense of place. They link their environments to their identities, experiences, and livelihoods, driving their need to maintain their natural surroundings in a sustainable manner.

**Community-Driven Solutions for Sustainability:** Partners mistrust federal and state agencies' lack of transparency but feel that local leaders' ideals and senses of place align with their own. Increasing local communities' influence in decision-making could therefore strengthen sustainable adaptation.

## Collaborators

- University of Colorado Boulder
- Western Water Assessment

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## LESSONS LEARNED

Partners in RGCs hold a strong sense of place related to ecosystem services, recreation economies, and community characteristics. Climate hazards, migration, development, and water policies can threaten this way of life. Shared challenges across partners or other RGCs can open opportunities for collaboration to solve unique problems.

Emotional and financial bonds to landscapes drive communities' commitment to protecting environments and personal interests. RGCs rely on tourism revenue while also lamenting the challenges newcomers pose to the areas' landscapes and character. RGCs aim to adapt to changes to preserve local culture and ecosystem services.

All partners benefit from collectively addressing contentious issues. This study included most local interests but lacked significant input from the agricultural sector, a key actor in the water industry. Research limitations also unfortunately prevented Indigenous groups' input, a major exclusion. Actively including these two communities in future discussions will be beneficial for collective action on water issues and environmental stewardship.

## NEXT STEPS

- Establish communities of practice in RGCs so partners can share expertise and collaborate on drought and water management
- Focus on sustainable adaptation and maintaining sense of place
- Uplift Indigenous decision-makers and tribal sovereignty by applying decolonial approaches for climate adaptation and water management

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Minerals Deposited as the Water Level Dropped in Lake Powell/USGS