



# WESTERN WATER ASSESSMENT

A NOAA CAP TEAM

## October 2024 Newsletter

### In this newsletter...

- Welcome Colorado Water Fellows
- 2023-2024 Annual Report
- Building Climate Resilience Within Mobile Home Park Communities
- Research Article Highlight
- Climate Event
- Featured Articles

### From RISA to CAP


Sharp-eyed readers may notice a slight name change for the WWA program. Congress has directed NOAA to change the name of the Regional Integrated Sciences and Assessments (RISA) program to **Climate Adaptation Partnerships (CAP)** to reflect that the teams in the program work directly with community decision makers. Our mission remains the same: to conduct innovative research in partnership with decision makers in the Rocky Mountain West, helping them make the best use of science to manage for climate impacts.

### Welcome Colorado Water Fellows

Western Water Assessment is excited to host the Colorado Water Fellows Program for the first time at CU Boulder. Welcome to the 2024-2025 CU Boulder Water Fellows: Evelyn Hoffman, Kiara Bonilla, Ethan Durham, Mark Irby-Gill, and Mauricio Mendez! Program director Aditi Bhaskar is leading the program at CU Boulder, along with WWA's Ethan Knight as the program coordinator, and graduate student Gabrielle Dunn as program associate. The Colorado Water Fellows Program







advances the next generation of water leaders by training and connecting undergraduate students of all majors to careers and opportunities in the water field. Water Fellows are also hosted by other universities, including CSU Fort Collins and CU Denver. This academic-year-long program is designed to prepare students for careers in the water field and connect them to opportunities. The program includes attendance at water conferences, field trips, and monthly meetings that delve into critical topics such as climate change, water law, water equity and justice, Tribal perspectives, and one-water approaches encompassing graywater, stormwater, and recycled water. The emphasis on a holistic, interdisciplinary understanding of water-related issues prepares the Water Fellows to navigate the complexities of the field. This approach ensures that they not only expand their theoretical knowledge but also gain practical experience, enhancing their readiness for impactful contributions in the water sector.

Learn more about the program: <https://wwa.colorado.edu/water-fellows-program>

---

**Survey:** CU Boulder professor **Aditi Bhaskar** is currently conducting a study with the Water Research Foundation to investigate how various Stormwater Control Measures (SCMs) perform in cold weather conditions. She and her collaborators created this [form](#) to gather insights from stormwater professionals. Please feel free to share this link with anyone you think might have relevant knowledge or experience.

---

## Research and Products

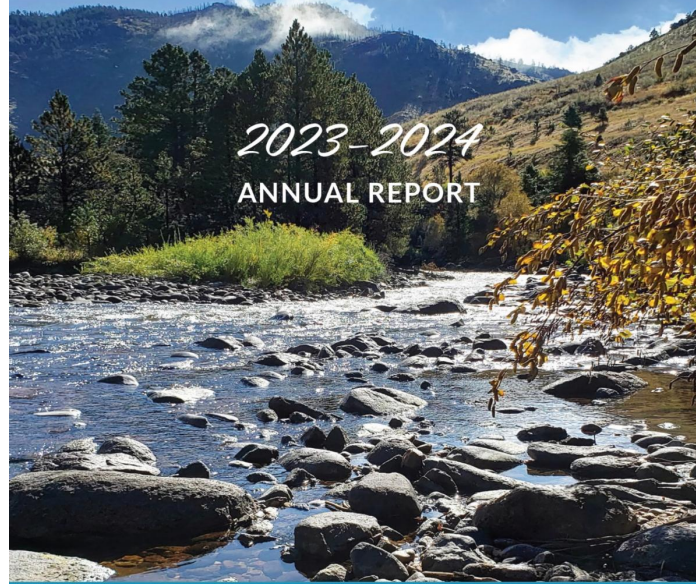
Our 2023-2024 Annual Report is available now on our website!





# WESTERN WATER ASSESSMENT

BUILDING CLIMATE RESILIENCE BY DESIGN



2023-2024  
ANNUAL REPORT



[Read Report](#)

## Building Climate Resilience Within Mobile Home Park Communities

This summer, Western Water Assessment postdoc **Skye Niles** and Sociology Ph.D. student **Valentina Serrano Salomón** started collecting data for WWA's research project on climate risks in mobile home communities. **Niles** and **Serrano Salomón** conducted in-depth interviews with English and Spanish-speaking mobile home residents in Boulder County to learn more about their experiences with extreme heat and wildfire risks. In addition, they installed temperature monitors and PurpleAir air quality monitors inside mobile homes within two different Boulder County mobile home parks to gather quantitative information on indoor temperatures and air quality.

As a part of this research project, WWA has been developing relationships with local government and nonprofit advocacy groups working to better support the climate adaptation and resilience needs of mobile home residents. In July, **Niles** and **Serrano Salomón** partnered with EcoArts Connections, the Sí Se Puede team, and the Colorado Energy Office to provide an extreme heat awareness and preparedness workshop for mobile home residents. The workshop provided information on understanding extreme heat risks and steps that can be taken to reduce the risks of heat-related illnesses and impacts.

The purpose of this WWA study is to provide greater insights into climate risks in mobile home communities, and to identify practices and policies that can help reduce these risks and impacts and to increase climate resilience.



This fall, WWA will extend our research and community outreach to mobile home residents in Pueblo, Colorado, in addition to Boulder County.

---

## Research Article Highlight

WWA's **Seth Arens** contributed a chapter to [A Watershed Moment: the American West in the Age of Limits](#). The book, published this fall, explores vexing environmental challenges facing the American West and presents practical approaches to land use, land management, and community planning. Contributing authors include policy makers, government employees, land and water managers, urban planners, scientists, writers, and tribal members. In **Arens'** chapter, "A renewed Glen Canyon emerges," he explores the impact of long-term declines in Lake Powell water level on adjacent terrestrial landscapes. Multi-decade drought, water use, and climate change have caused Lake Powell water levels to fall as much as 180 feet, uncovering over 100,000 acres of land that was once submerged. Ecological succession is occurring in desert and riparian landscapes along the nearly 100 tributaries that flow into Glen Canyon/Lake Powell. Within 2-3 years of emergence from Lake Powell, riparian ecosystems dominated by native willows and cottonwoods are taking shape. Many non-native plants (tamarisk, Russian thistle) that flourish immediately after emergence decline in abundance after a few years. This chapter explores a surprisingly positive impact of a drying Lake Powell: Glen Canyon's landscapes and ecosystems that were thought lost forever are now returning as dynamic and thriving systems.

---

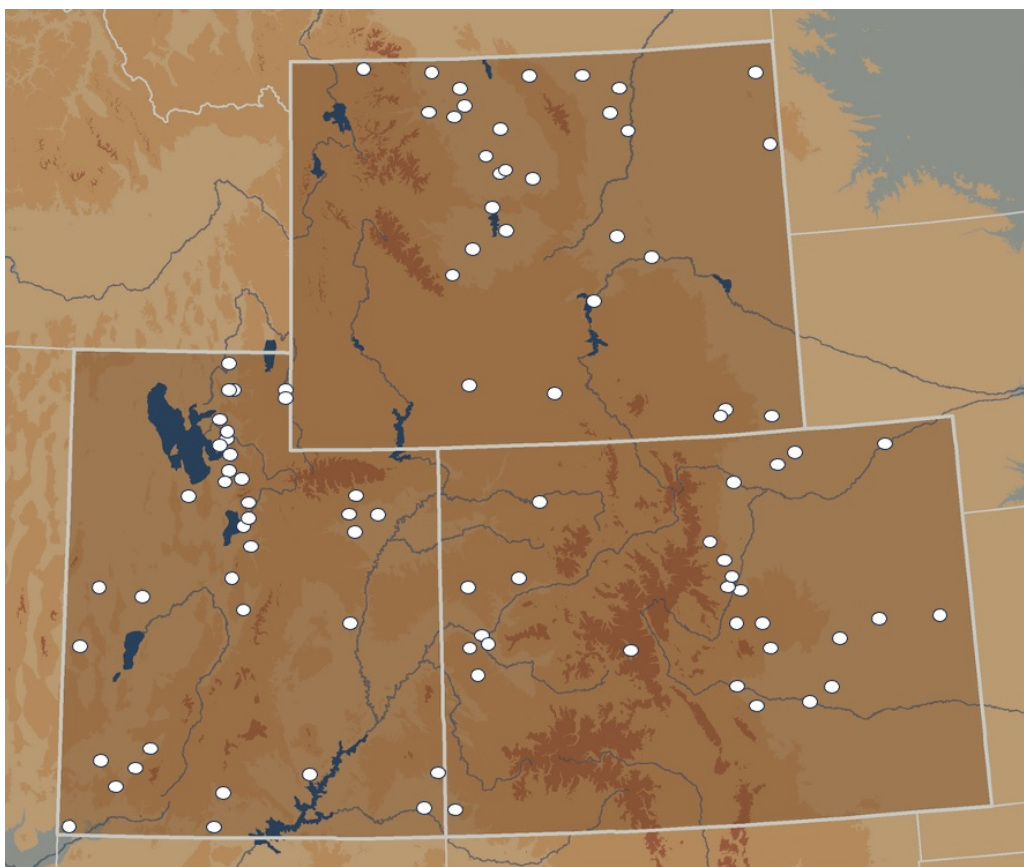
## Climate Event

### Late September Heat Wave

After cooler conditions during mid-September, a significant heat wave settled over the Intermountain West from September 25-30. The six-day period was the hottest on record for many weather monitoring sites with at least 50 years of data. All-time average high temperature records for September 25-30 were set at 28% of long-term weather monitoring sites in Colorado (29 of 105), 38% of sites in Utah (36 of 94), and 43% of sites in Wyoming (34 of 80). The September 25-30 heat was also significant because of the magnitude of heat across the region. The maximum temperatures reached during the heat wave include 104°F in St. George, UT, 102°F in Sheridan, WY, and 97°F in Pueblo, CO, all of which were daily maximum temperature records. Several sites shattered the old all-time average maximum temperature record for September 25-30 including Gillette and Laramie, WY where the previous records were broken by 8.1°F and 5.5°F, respectively. During the heat wave, many sites set daily temperature records on multiple days. Across Colorado, Utah, and Wyoming, 17 sites set daily high temperature records on three days, 18 sites set daily temperature records on four days, and 4 sites set daily temperature records on four days. Neola, UT and Grand Junction, CO set daily high temperature records on all six days. Looking back to August predictions of temperature, the NOAA forecast for September correctly forecasted a 70-80% chance of above average



temperatures during September. Across North America, a series of extreme weather began with an anomalous atmospheric river event in northern British Columbia and southern Alaska which set up a ridging pattern that led to favorable conditions for the late September heat wave and then created conditions that interacted with Hurricane Helene in the southeastern United States.



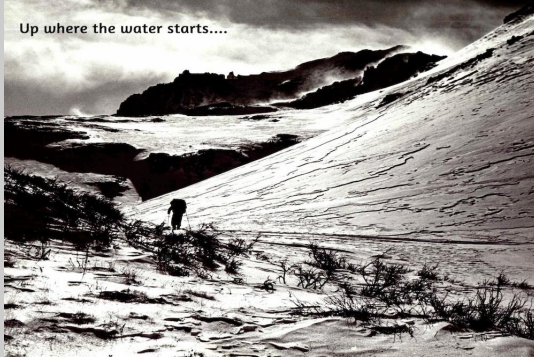
**September 25-30 heat wave in the Intermountain West.** White dots represent sites (sites with at least 50 years of data) where all-time average high temperature records were set for September 25-30. Data from NOAA Regional Climate Centers, xmACIS2.

Site	Degrees F by which temp records were exceeded
Gillette, WY	8.1
Laramie, WY	5.5
Sheridan, WY	4.6
Newcastle, WY	3.6
Grand Junction, CO	3.3
Logan, UT	3.3
Salt Lake City, UT	2.3

Sites where average maximum high temperature records were exceeded by at least 2°F on 9/25 – 9/30/24. Analysis considers sites with at least 50 years of data. Data gathered from xmACIS2, NOAA Regional Climate Centers.



Up where the water starts...



Romancing the River: The Headwaters Challenge

Read article



As Lake Powell shrinks, a thriving desert oasis is coming back

Read article



A Nevada collaborative is looking at how to mitigate the effects of high heat

Read article



The timing of rainfall could help predict floods

Read article

Background photo by [Ethan Knight](#)

Western Water Assessment | [wwa@colorado.edu](mailto:wwa@colorado.edu) | <http://wwa.colorado.edu/>

See what's happening on our social sites:



Western Water Assessment | CIRES University of Colorado | Boulder, CO 80309 US

[Unsubscribe](#) | [Update Profile](#) | [Constant Contact Data Notice](#)



Try email marketing for free today!