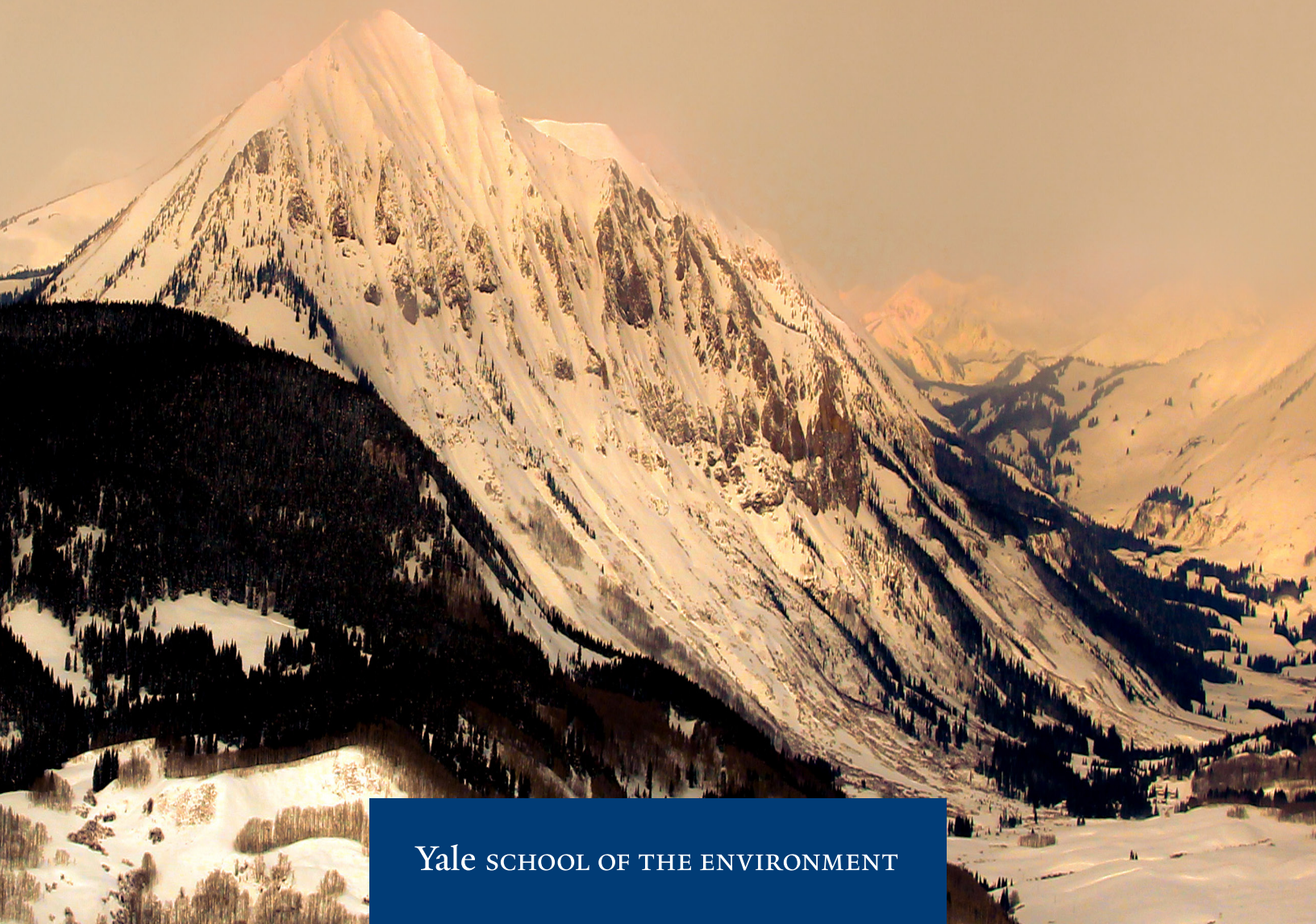




Ucross High Plains
Stewardship

2024 ANNUAL REPORT



Yale SCHOOL OF THE ENVIRONMENT

IMPACT SUMMARY

45

Partners engaged

31

Stewardship and conservation deliverables completed

28

Students involved

IMPACT AREA

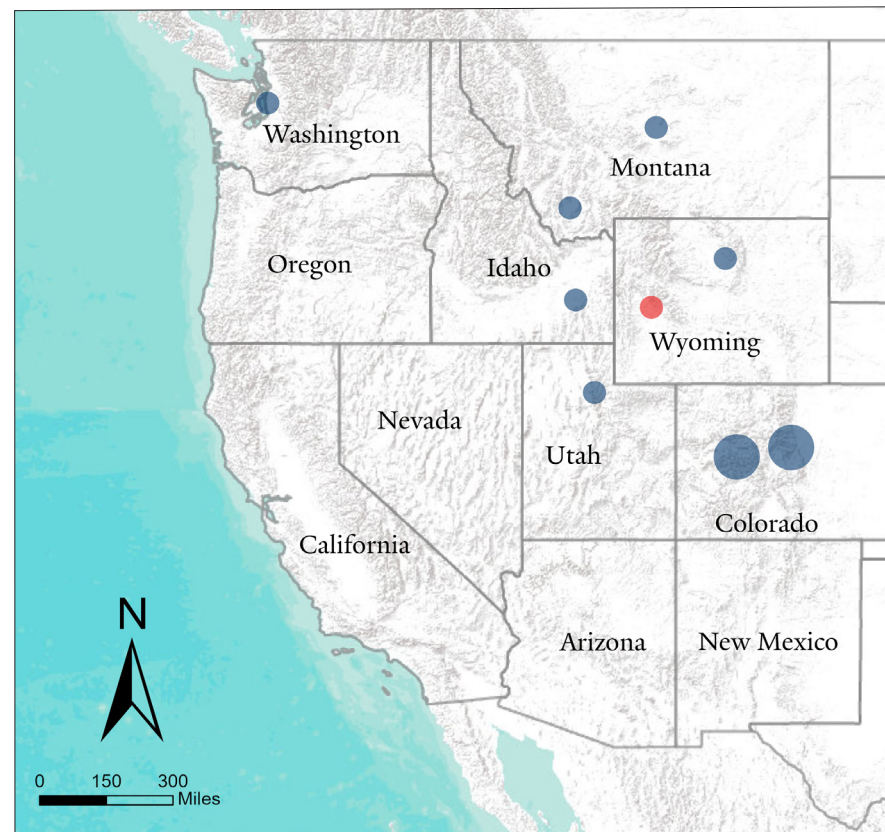
We provide students with opportunities to develop the skills needed to be leaders in land stewardship and conservation by supporting hands-on field courses, research, and collaborative conservation projects in the American West. This map illustrates where our work has impacted conservation during 2024.

Project Type

- Field Course
- Student Project

Number

- 1
- 2



OUR MISSION

Fostering land stewardship and conservation in the American West through teaching, research, outreach, and leadership.



In this report, we celebrate a year of transformative learning, research, and conservation efforts driven by our students, faculty, and partners. From watershed restoration in Colorado's Roaring Fork Valley, to innovative energy solutions in Idaho, or addressing beaver conflict resolution in Montana, students have applied their academic knowledge to tackle critical challenges in land stewardship and sustainability.

Through collaborative field courses, leadership in conservation projects, and immersive research, our students have explored ecological, social, and economic issues across the Western United States. Initiatives such as the "Western Connections and Community" series further demonstrate the power of fostering dialogue and connection to create lasting conservation solutions.

These successes are a testament to the support of our alumni, partners, and collaborators. As you delve into this report, we hope you are inspired by the creativity and leadership of the individuals shaping the future of conservation and land management in the West.



HIGHLIGHTS

Field Trip to Western Lands and Communities

Dr. Justin Farrell's field clinic brought together students from diverse fields: social research, humanities, natural sciences, and conservation management—all to explore the challenges in Western U.S. landscapes and communities. A key focus of the course was mastering writing and publishing skills, culminating in a self-directed project tailored to each student's academic and career goals. The highlight was a field trip to Wyoming during spring break, where students engaged in experiential learning and research amidst the Rocky Mountain West. Through this immersive experience, students examined ecological, economic, and social equity issues in the region. By semester's end, students submitted their polished projects to outlets such as scholarly journals, media platforms or presses, enhancing their expertise and professional profiles.



Continuing to Build Community and Foster Learning

Our event series, Western Connections and Community, launched in 2022 and has grown significantly. This series continues to bring students, staff, and faculty who research, work in, or care about the West together. The four students leading this effort have hosted 23 events that served 750 people during the last year. Events span from informal community breakfasts to educational lectures given by guest practitioners or our own faculty. Fostering connections among individuals with diverse backgrounds, experiences, and interests in the West enhances our ability to create lasting conservation solutions.

“Every time I travel out West, I’m amazed by the people, lands, and culture. For this East Coaster, Western Connections provides both a welcoming community and a source of inspiration that would be hard to find elsewhere.”

Daniel Morgan, MEM '25



STUDENT IMPACTS

Watershed Restoration in National Forests and Beyond

This summer, our fellow Alex Wells ('25 MEM) worked with the National Forest Foundation (NFF) on initiatives to restore streams in Colorado's Roaring Fork Valley. To help evaluate the benefits of these and other NFF restoration projects, Alex developed a tool to measure how much water volume increases as a result of stream restoration. Additionally, Alex conducted a stakeholder assessment and designed outreach materials to strengthen relationships with landowners and water rights holders – an essential step to accelerating the pace and scale of watershed restoration. Alex's contributions have provided the foundation with valuable tools to improve the region's waterways and support its communities.



Exploring Nuclear and Renewable Energy Solutions

Aya Ochiai, a summer fellow, dedicated her summer to studying energy options and their environmental and human impacts. She researched the Snake River Plain of Idaho, a hub for U.S. nuclear energy research since 1949, to explore how scientific facilities can responsibly support surrounding ecosystems and communities. Aya also interned at the National Renewable Energy Laboratory in Colorado, where she designed an innovative mechanism



for a tidal turbine to harness energy from tidal and river currents. Her engineering contributions advanced the pursuit of clean, dependable energy sources.

Mapping Beaver Conflicts and Solutions in Montana

Xiaofan Shen, one of our student researchers, collaborated with the Montana Beaver Conflict Resolution Program at the National Wildlife Federation to develop interactive mapping tools that showcase beaver conflicts and highlight successful mitigation strategies across Montana. These tools aim to foster coexistence between landowners and beavers while enhancing understanding of beaver ecology and sustainable land use practices.



Climate Resilience in Washington

This summer one of our student fellows, Ingrid Thy, interned at the Executive Climate Office in King County, Washington. She worked on an online heat mapping tool for local jurisdictions, assisted with updating the county's drafted 5-year climate action plan, and researched options for a climate dashboard that will track and communicate climate action progress. Ingrid's work will play a crucial role in advancing King County's leadership in climate resilience and ensuring sustainable solutions for its communities.



ALUMNI CONNECTIONS



“My work focuses on improving ecological and agricultural values on conserved agricultural lands. I am working on a watershed-scale fire mitigation project in northwestern Colorado and I am supporting the Colorado Soil Health Program. I am also supporting CCALT’s Agricultural Resiliency Fund (ARF), which funds landowner-led projects focused on irrigation improvements, grassland health, and wildfire mitigation. As a Ucross Research Assistant, I assisted with the development of CCALT’s ARF, which is now on its second annual funding round! Through my work with Ucross, I developed the knowledge and relationships that inspired me to pursue this work.”

KATHLEEN VOIGHT, '24 MEM
ADDITIVE CONSERVATION MANAGER
COLORADO CATTLEMEN’S AGRICULTURAL
LAND TRUST

ADDITIONAL PROJECTS

Read more about these projects at highplainsstewardship.com

- Building a Monitoring Plan for Beaver Populations and Hydrologic Impacts in Wyoming
- Local Payment for an Ecosystem-Service-Model for Working Lands Restoration in Colorado
- Capturing Outdoor Recreation and Ecological Patterns along a Multiple Use Mountain Stream
- Understanding the Landscape Factors that Influence Habitat Selection and Movement for Pronghorn (*Antilocapra americana*) in southwestern Montana
- Reimagining Public Transit in Crested Butte, Colorado for a Sustainable Future

