

## **Job title: MS-researcher: Justice in Colorado Post-fire Restoration Projects**

A Masters-level graduate student is requested to help with a collaborative research project that combines wildfire, social science and geospatial research methods starting in Fall 2024 at Colorado State University.

### **Project Description:**

Wildfire is a beneficial process that sustains resilient forests in Colorado but can also lead to negative post-fire hazards for society and natural resources, such as flash floods, soil erosion, and debris flows that impact municipal water supply infrastructure and water quality. Restoration projects are commonly implemented immediately after wildfire to reduce these impacts and will continue to be needed for decades to come. The effectiveness of a restoration project may be assessed from multiple perspectives such as economic, physical or social. While some research has been conducted on the social and community dimensions of pre-fire planning and mitigation, little is known about how impacted communities perceive the effectiveness of post-fire projects.

The student researcher will combine quantitative and qualitative methods to assess the effectiveness of post-fire restoration efforts in Colorado over the past 10 years using a justice lens. The work will involve GIS mapping and database compilation of post-fire impacts to water supply systems, stakeholder mapping, document analysis and community-based interviews with water utilities, watershed coalitions and other stakeholders. Field work for collection of qualitative data (e.g., interviews) will be conducted primarily during the summer of 2025.

**Location:** Department of Ecosystem Science and Sustainability, Colorado State University, Fort Collins, CO, USA

**Start Date:** Fall 2024

**Stipend:** The Research Assistant stipend is \$2,529/month monthly (subject to change at the University level) based on part-time work (20 hours/week) on the project, plus health insurance for two years. Summer funding will also be provided for at least 20 hours/week of work on the project (more if funding allows).

### **Required Experiences and Skills:**

- Bachelor's degree in related subject (including but *not limited to*: geography, environmental studies or sciences, ecology, sociology, urban planning, political science);

- Intermediate knowledge-level of GIS;
- Good communication skills;
- Desire to systematically examine equity and justice in hazard response;
- Interest or experience in building interdisciplinary skills;
- Ability to travel within the state of Colorado to conduct interviews and engage stakeholders; and,
- Proficiency in English (TOEFL minimum score of 80 if applicable).

### **Desired Experiences and Skills:**

- Experience with community engagement, e.g., interacting with stakeholders, natural resource uses, or community groups;
- Experience conducting interviews or surveys;
- Prior knowledge or experience in data management;
- Knowledge of agencies involved in wildfire mitigation and/or restoration in Colorado;
- Experience conducting geospatial analyses; and,
- Experience writing scientific documents, such as journal articles.

Position description: The MS position comes with 2 years of Research Assistant (RA) support. As an RA, the student will be responsible for working 20 hours/week toward the research project in addition to completing graduate program requirements including their thesis project and coursework. The student's thesis should be closely aligned with the research project. Summer support will also be provided (rates subject to change at the University level). The student will be advised by faculty in the Department of Ecosystem Science and Sustainability and mentored by a group of interdisciplinary researchers in the Department of Ecosystem Science and Sustainability and the Colorado Forest Restoration Institute.

### **Application details:**

To apply, please send the following documents (as a single pdf) **by April 17, 2024** to [tamee.albrecht@colostate.edu](mailto:tamee.albrecht@colostate.edu):

- Cover letter describing your interest in the position, your relevant skills and experience, and how the position relates to your career goals (max 2 pages)
- CV or resume
- Name and contact information for two professional references
- Writing sample as sole or lead author (*optional but encouraged*)

## Graduate Program in Ecosystem Science and Sustainability

Many physical, ecological and social factors interact to shape the future of our ecosystems and societies. CSU's innovative graduate program in Ecosystem Sustainability enables students to develop core competencies in ecosystem science—the study of organisms and the environment from a systems perspective—and apply that knowledge to address real-world issues. We help develop leaders in sustainability science: a new generation of practitioners able to address complex, integrated social and ecological problems, in collaborative partnerships with researchers, resource users and decision-makers.

Our graduates have the tools to understand complex scientific questions in sustainability, and the leadership and collaborative skills required to address current and future issues in sustainability. The program serves as a foundation for a wide range of careers, including academic and scholarly professions, and work in government agencies, non-governmental organizations, and corporate and entrepreneurial environments.

Join us, and you will work at the cutting edge of new research on ecosystem sustainability. Collaborating with some of the world's leading ecosystem and sustainability scientists, you will explore solutions to global problems related to water resources, food supplies, energy, greenhouse gas management, land use change, climate change, and environmental justice, amongst others.

The Department of Ecosystem Science and Sustainability in the Warner College of Natural Resources is committed to inclusion in our instruction, research, service, and outreach. Warner College and ESS members hold themselves accountable for fostering a college community rooted in inclusive mindedness. Warner and ESS students, faculty, and staff uphold and embrace CSU's principles of community: respect, inclusion, integrity, social justice and service. Everyone is welcomed. The Warner and ESS communities recognize the disparities that exist within the field of natural resources and therefore call on individuals whose passions and work align with our college's effort to make change. Warner College and ESS supports an environment where identities, cultures, experiences, and ideas are recognized, valued, and appreciated.

Additionally, the successful candidate will need to submit an official application to CSU's Graduate School at <https://gradadmissions.colostate.edu/apply/>. Each applicant can decide when to start their application to CSU's Graduate School. However, the successful candidate will be expected to submit their application to CSU's Graduate School as soon as possible after notification of selection for a start in Fall 2024. We recommend that applicants hold off on submitting the application until they are notified of selection to avoid unnecessary costs.

Please visit <https://warnercnr.colostate.edu/ecosystem-sustainability-apply/> to view full application instructions. The successful candidate will be expected to provide proof of language proficiency (if applicable) and recommendation letters as part of their application package. Please note that the GRE requirement has been lifted for the time being.

Any questions can be addressed to Dr. Tamee Albrecht ([tamee.albrecht@colostate.edu](mailto:tamee.albrecht@colostate.edu)).