



**Position Title:** Research Associate II, Assistant Program Manager, Spatial Analyst and Decision Support Specialist

#### Location: Fort Collins, Colorado

**Nature of Appointment:** This is a full-time, salaried, Administrative Professional Research Associate II position, 12-month, annually renewable with continuation contingent upon satisfactory performance and availability of funds.

Preferred Start Date: November 1, 2023.

**Salary and Benefits:** \$65,000 to \$75,000. Positions include an attractive benefits package including health care coverage through Colorado State University and paid annual and sick leave. For a full list of benefits visit the CSU Human Resources Benefits website: <u>http://www.hrs.colostate.edu/benefits/</u>

**To Apply:** We will begin reviewing applications on August 15, 2023, and will continue to review applications until a suitable candidate is found. Please submit all application materials online at <u>https://jobs.colostate.edu/postings/129420</u>. Required documents to apply: Cover letter addressing qualifications, Resume, unofficial transcript, and contact information for three professional references. References will not be contacted without prior notification of candidates.

**Position Summary:** The Colorado Forest Restoration Institute is involved in multiple initiatives that require the customized development and application of spatial data analysis and modeling methods and tools to support stakeholder decision-making. These include spatial wildfire planning frameworks and processes (i.e., Potential Operational Delineations), quantitative wildfire risk assessments, vegetation condition analysis, watershed assessment and modeling, and spatial valuation, optimization, and prioritization modeling of potential wildfire mitigation and response actions. When developed, customized, and applied in a collaborative setting, stakeholders are often able to identify priority areas for actions. Spatial-analytical methods and tools are also used for tracking, assessing effectiveness, and communicating the outcomes of those treatments. Because of the collaborative nature of these initiatives, the incumbent also should have a general knowledge of the social and political dynamics surrounding western US forest ecology and forestry issues. The spatial analyst is expected to contribute to collaborative planning efforts and to the publication of peer-reviewed journal papers and non-technical products for diverse audiences.

This Research Associate II position is specifically tasked with contributing geospatial technical and analytical skills towards developing and customizing decision support tools that help advance collaborative forest restoration, integrated natural resource planning, and wildfire risk mitigation, response, and recovery decision-making in Colorado and the Interior West. The incumbent will be responsible for spatial data production using remote sensing and field-based technologies (GPS), spatial data management, spatial analysis to support science and planning initiatives, and written and oral communication of spatial data and results of spatial analyses to diverse audiences.



### **Required Qualifications:**

- M.S. degree in forestry, ecology, natural resources, wildland fire science, geography, or a related field of study.
- Experience producing, managing, analyzing, modeling, and communicating geospatial data within the ESRI GIS software.
- Must have a valid driver's license or the ability to obtain a driver's license or access to a licensed driver by the employment start date.

## **Preferred Qualifications:**

- 1+ years of applicable professional experience, or a Ph.D. degree in a related field of study.
- Programming experience, such as Python and/or R, for spatial data processing and analysis.
- Experience automating spatial analysis workflows with remote sensing, multiple data types (spreadsheets, databases, raster and vector spatial data), big data, or spatial analysis across multiple software platforms.
- Experience with fire behavior modeling programs (e.g., FlamMap, FSIM, etc.) and techniques to support collaborative planning and decision-making (e.g., quantitative wildfire risk assessments).
- Knowledge of western US forest and fire ecology, wildfire management, and/or wildfire experience.
- Demonstrated ability to communicate effectively across cultural boundaries and work harmoniously with diverse groups of students, faculty, staff, and stakeholders outside the university setting.



# Job Duty Responsibilities:

### Program and Project Development (10%):

- Contribute to CFRI data analysis, spatial wildfire planning, and wildfire risk assessment and decision support programs and project development by initiating ideas, communicating with CFRI team members to refine ideas, and contributing to internal CFRI strategic and operational action plans.
- Establish and maintain communication with project partners to identify project goals, tasks, and deliverables, timeframe for completion, and estimated budget for carrying out project tasks and completion of deliverables, including estimates for personnel, travel, materials & supplies, and services.
- Contribute to internal Colorado Forest Restoration Institute organization, coordination, and communication to align personnel, resources, and activities to meet strategic and operational action plan goals, tasks, and deliverables.

## Program and Project Management (75%):

- Apply technical expertise as appropriate to carry out and complete tasks in coordination and collaboration with other CFRI staff to produce, analyze, and communicate results of spatial data analysis.
- Evaluate and communicate knowledge from CFRI spatial wildfire decision support and research programs through oral presentations to project partners and professional audiences, and through written products, such as refereed journal article submissions, technical reports, project briefing papers, and popular media.
- Develop and ensure timely implementation of work plans specifying tasks and timelines for completion towards project deliverables.
- Identify "critical path" of tasks that require other CFRI staff contributions and communicate with them about timeframes for completion.
- Conduct necessary travel to carry out project tasks.
- Assist the Director and Assistant Directors in hiring, training, and supervising CFRI staff to conduct tasks and produce products contributing towards project deliverables.
- Submit expenses to WCNR Business Office in a timely manner.

# Applied Research (15%)

- Co-author scientific journal papers, technical reports to managers and collaboration stakeholders, and non- technical briefing papers to policy-makers and the general public.
- Contribute to discussions with CFRI team members and research partners about basic and applied research opportunities and approaches that support CFRI programs of work and strategic directions.





**About the Colorado Forest Restoration Institute:** The Colorado Forest Restoration Institution (CFRI) is a Congressionally authorized program within the Department of Forest & Rangeland Stewardship at Colorado State University with the mission to develop, compile, synthesize, and apply locally-relevant science-based knowledge to achieve forest restoration and wildfire mitigation goals. The geographic focus of the Institute is the State of Colorado, the U.S. Southwest, and the U.S. Intermountain West. Visit the CFRI website for more info about our mission and work. <u>https://cfri.colostate.edu</u>

About the Department of Forest & Rangeland Stewardship: The Department of Forest and Rangeland Stewardship at Colorado State University is interdisciplinary with programs of emphasis in forestry, fire science, fire management, natural resource policy/planning, rangeland ecology, and restoration ecology. The Department's faculty and staff support the Warner College of Natural Resources (WCNR) and the University in fulfilling the Land Grant Mission in these programmatic areas. The Department offers undergraduate majors in Forestry, Rangeland Ecology, and Natural Resources Management in addition to Master of Science and Doctor of Philosophy degrees, and a Master in Natural Resource Stewardship degree. The Warner College is home to five academic departments and several centers and institutes such as the Colorado Forest Restoration Institute, the WESTFIRE Research Center, the Colorado State Forest Service, Natural Resource Ecology Lab, the Center for Environmental Management of Military Lands and the Colorado Natural Heritage Program. These programs, institutes and centers provide a foundation for research, education and outreach in this field.

**EEO Statement:** Colorado State University is committed to providing an environment that is free from discrimination and harassment based on race, age, creed, color, religion, national origin or ancestry, sex, gender, disability, veteran status, genetic information, sexual orientation, gender identity or expression, or pregnancy and will not discharge or in any other manner discriminate against employees or applicants because they have inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. Colorado State University is an equal opportunity/equal access/affirmative action employer fully committed to achieving a diverse workforce and complies with all Federal and Colorado State laws, regulations, and executive orders regarding non-discrimination and affirmative action. The Office of Equal Opportunity is located in 101 Student Services. The Acting Title IX Coordinator is the Vice President for Equity, Equal Opportunity and Title IX, 123 Student Services Building, Fort Collins, CO. 80523-0160, (970) 491-1715, <u>titleix@colostate.edu</u>. The Section 504 and ADA Coordinator is the Vice President for Equity, Equal Opportunity and Title IX, 101 Student Services Building, Fort Collins, CO 80523-0160, (970) 491-5836.





COLORADO STATE UNIVERSITY

**Diversity Statement:** The Warner College of Natural Resources recognizes that a sustainable natural environment is essential to human well-being and our common good. The natural environment is essential in providing material, psychological, and physical health benefits to all. Thus, we strive toward providing voice for all those affected by natural resource policies to ensure that diverse perspectives are considered in decisions that affect the natural environment. This inclusionary philosophy is embedded in our instruction, research, service, outreach, and interactions as a community. Warner College members hold themselves accountable for fostering an atmosphere that is welcoming and accepting of diverse perspectives. Warner students, faculty, and staff uphold and embrace CSU's principles of community: respect, inclusion, integrity, social justice and service. Everyone is welcomed. The Warner community recognizes 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 supports an environment where identities, cultures, experiences, and ideas are recognized, valued, and appreciated.

**Background Check Policy Statement:** Colorado State University strives to provide a safe study, work, and living environment for its faculty, staff, volunteers and students. To support this environment and comply with applicable laws and regulations, CSU conducts background checks. The type of background check conducted varies by position and can include, but is not limited to, criminal history, sex offender registry, motor vehicle history, financial history, and/or education verification. Background checks will also be conducted when required by law or contract and when, in the discretion of the University, it is reasonable and prudent to do so.



