

## JOB DESCRIPTION/ANNOUNCEMENT

- Position Title:** Water Program Research Associate
- Job Category:** This is a full-time exempt position.
- Salary & Benefits:** \$55,000 - \$60,000 based upon experience and qualifications. Full benefit package including health, dental, vision, and life insurance; paid vacation, holidays, sick leave, and an opt-in 403(b) retirement plan with employer match after one calendar year of employment.
- Timeline:** This position will begin in April-May 2024 with a six-month evaluation period and review.
- Location:** This position will be based in Silverton, Colorado or Durango, Colorado.
- To Apply:** Please submit cover letter, resume, and three references as a single PDF document titled "LastName\_MSI\_WaterRA" to [apply@mountainstudies.org](mailto:apply@mountainstudies.org) by March 31, 2024.

### Position Summary:

Mountain Studies Institute (MSI) is looking for a motivated and dedicated individual to become a research associate in MSI's Water Team. This position will support the MSI water team's research initiatives related to riparian and wetland restoration, geospatial analysis, hydrology and water resources, water quality, aquatic life; and incorporating water-focused elements into broader efforts in landscape ecology, ecosystem services, and watershed management. The position will be split between project management, and programmatic work including field, lab, analysis, and reporting duties. The position will support on-going research in the San Juan Mountain region related to ecohydrological geostatistical and spatial analysis; watershed restoration; water resources; benthic macroinvertebrate assessment; the influence of legacy mine sites on water quality and hydrology; ecosystem and climate resiliency; and will assist in the development of new initiatives. The expectation is that this individual will be able to independently complete projects with limited assistance from program directors.

The position will interact with MSI staff across programs and contribute to MSI education and outreach efforts.

### Job Duties:

- Lead research projects including geospatial analysis and reporting.
- Assist with project management including assisting with contracting and grant administration, budgeting, and project tracking.
- Oversee and participate in the collection of field data and maintain monitoring equipment.
- Oversee quality assurance and quality control of data collection and field procedures.
- Oversee collection of climate station data and maintain monitoring equipment.
- Design projects and planning initiatives in line with MSI's mission.
- Draft and administer work plans and sampling plans for field staff.
- Responsible for reporting deliverables including monthly progress reports, annual summary of activities, and interpretive reporting.
- Assist with drafting proposals, grant applications, and budgets.

- Maintain effective relationships with partners and community.
- Manage seasonal field crews.
- Assist in peer reviewed publications.
- Assist with other MSI project work as needed; both field and general support.

## PERSONAL CHARACTERISTICS

The successful candidate will be driven by a passion for mountains, mountain communities, and solution-oriented science; adept at both field and office tasks; and demonstrate the ability to make sound decisions in a mountainous field setting across all seasons. They will desire to work with a diverse group of people and ages in isolated small mountain communities. They will thrive in situations where multiple and diverse demands are involved, adjust to changes in a growing organization, and be comfortable with an evolving list of job duties in many facets of non-profit function. Occasional long days, evenings and weekends are required. A successful candidate will be highly organized, detail-oriented, self-directed, team player, and resourceful with ability to take initiative and follow-through on independent projects.

## MINIMUM QUALIFICATIONS

- Education: Bachelor's Degree in Hydrology, Ecology, Biology, Geography, Environmental Science, Geology, Chemistry, Earth Sciences, Snow Science or relevant field
- Experience conducting independent research
- 1-3 years in similar or related field directly relevant to mountain research and education
- 1-3 years of project management experience
- Experience with wetland and stream restoration concepts, principles, and design
- Highly experienced in writing technical reports
- Highly experienced with geographic information systems (can include ESRI ArcGIS Pro, Survey 123, Q GIS, python, R, Google Earth Engine) and spatial data management
- Experience with tribal, state, and federal government agencies (Southern Ute Tribe, Ute Mountain Ute Tribe, EPA, BLM, USFS, CDPHE, DRMS, USACE), and government programs and regulations (CERCLA, NEPA, Clean Water Act, etc.)
- Highly experienced with the Microsoft Office Suite, particularly Excel and Access
- Experience with multi-mode backcountry travel in all seasons. Demonstrated ability to make situational decisions while in a field setting based on personal/group/team safety: terrain, weather, conditions, etc.
- Wilderness First Aid or higher. Minimum AIARE Avalanche 1 or equivalent, or ability to obtain
- Experience following QAPP, SOP, and Field Sampling Plans
- Experience with database management (Access, R, MatLab, SharePoint, and/or other cloud platforms)
- Experience with field hydrology techniques including cross-sectional discharge measurements, and the installation and operation of stream gages
- Experience with field data collection via field notes, tablet, GPS, Survey 123, and field computers
- Experience with benthic macroinvertebrate collection and identification
- Experience with dataloggers and remote data collection equipment
- Team player that is highly adaptable and able to problem solve while in a field setting



- Ability to carry a 30+ pound pack while hiking on uneven terrain in elevations ranging from 5,000 to 13,000 feet
- A valid driver's license, personal automotive insurance, and experience operating a manual transmission, four-wheel drive vehicle in mountain and winter conditions

#### PREFERRED QUALIFICATIONS

- Masters or PhD in Hydrology, Ecology, Biology, Geography, Environmental Science, Geology, Chemistry, Earth Sciences, and/or Snow Science or relevant field
- Experience publishing in peer-reviewed journals
- Experience with experimental design
- Experience in snow science including snow surveys, snow courses, snow stability, and measuring snow water equivalent
- Experience with the operation and maintenance of In-Situ, Onset, HydroLab, or other dataloggers
- Experience with various types of handheld instruments including flow meters, pH/conductivity/temperature probes, etc.
- Experience with geospatial and remote sensing analysis using Google Earth Engine, ESRI ArcGIS pro, ArcOnline, ArcCollector, Survey 123, and ESRI StoryMaps
- Experience with statistical analysis and associated software packages (R, python, JMP, SAS, etc.)
- Experience in database creation, data QA/QC, and database management
- Experience teaching and leading groups of all ages in the field for environmental education
- 24 Hour OSHA HAZWOPER training

**About Mountain Studies Institute:** MSI is a 501 (c)(3) non-advocacy, mountain education and research center established in 2002 to develop the capacity of southwest Colorado mountain communities to thrive and live sustainably. To accomplish MSI's mission and vision, we engage scientists, citizens, and land managers in collaborative efforts to put science into action. As MSI is a growing research and education center, we are looking for candidates with the ambition and passion for mountain research to help grow the Institute, explore new ways to communicate and share information, and apply our research for the betterment of the region and the world.

**Equal Opportunity Employer:** All qualified applicants will receive consideration for employment without regard to race, national origin, age, sex, religion, disability, sexual orientation, marital status, veteran status, gender identity or expression, or any other basis protected by local, state, or federal law. This policy applies to all aspects of one's employment, including hiring, transfer, promotion, compensation, eligibility for benefits, and termination. MSI is a drug free workplace and complies with ADA regulations as applicable. MSI believes in a collaborative and supportive work environment that encourages and inspires professional growth.

*For more details about this position, contact Scott Roberts at [scott@mountainstudies.org](mailto:scott@mountainstudies.org) AND Dr. Jake Kurzweil at [jake@mountainstudies.org](mailto:jake@mountainstudies.org)*

*For questions about the application process, contact [apply@mountainstudies.org](mailto:apply@mountainstudies.org)*