Riparian Plant Ecologist Position Available at Applied River Sciences, Arcata, CA
February 23, 2024

Applied River Sciences (formerly McBain Associates) is seeking a Riparian Plant Ecologist that will be responsible for leading the design and implementation of vegetation studies to develop instream flow management recommendations, lake bed recovery following dam removal, revegetation design performance, and woody riparian recruitment modeling; developing and implementing vegetation inventories that include mapping and classification; assisting with revegetation design development; and assisting with invasive plant species management plan development.

Applied River Sciences is a professional consulting corporation applying fluvial geomorphic and ecological research to river preservation, management, and restoration. Our company has 20 employees with offices in Arcata, California and Reno, Nevada. For over 27 years, we have provided our clients with solutions to highly complex environmental problems in aquatic ecosystems using objective and clear science, in a timely and efficient manner. Our primary interests are: (1) maintaining, or attaining, river ecosystem health in regulated rivers; (2) assessing impacts of land use activities on stream ecosystems, and (3) recommending management strategies that improve those ecosystems. Applied River Sciences provides a variety of services in hydrology, fluvial geomorphology, and fisheries, general aquatic and riparian ecology, as well as GIS and AutoCAD. We have a broad client base that includes state and federal agencies, Native American tribes, non-profit organizations, utility companies, water districts, and private consulting firms.

Position duties and responsibilities may include:

- Leading the design, implementation, and reporting of riparian and wetland ecologic studies related to instream flow management
- Leading the design, implementation, and reporting of woody riparian plant recruitment studies and modeling
- Leading the design, implementation, and reporting of vegetation mapping and classification
- Leading vegetation monitoring design and implementation
- Supporting riparian revegetation design development
- Conducting riparian woody plant recruitment modeling
- Communicating complex ideas to a diverse stakeholder and clients including public speaking, technical writing, and working with landowners
- Writing R-script to support modeling analyses and conducting complex statistical analyses in R
- Working independently within a GIS platform including digitizing, finalizing layers, managing spatial data and conducting simple analyses and queries
- Conducting vegetation classification PCA analyses
- Preparing study plans, scopes of work, and budgets
- Field data collection, data entry and management, analysis, and technical writing
- Identification of difficult plant groups (grasses, sedges, rushes, willows etc.)

Desired skills and abilities:

- Familiarity with plant and restoration ecology concepts including vegetation sampling methodology, experimental design, statistical analysis, and reporting
- Ability to understand and integrate various model outputs (hydraulic, topographic and recruitment)

- Experience with vegetation mapping, natural community identification and special status plant surveys
- A background in botany including plant physiology, and plant anatomy and morphology
- Familiarity with hydrology and fluvial geomorphology
- Proficiency with Microsoft Excel for data organization and basic data analysis
- Ability to use R-Stat
- Ability to use QGIS or similar GIS platform
- Proficiency with dichotomous keys to identify plants
- Ability to multitask
- Excellent written and verbal skills
- Well-organized, detail oriented, and able to prioritize tasks
- Self-motivated and ability to work independently
- Strong collaboration skills with clients and staff

Candidates should have completed at least a graduate degree in plant ecology, botany or similar field or have a bachelor's degree in plant ecology, botany or similar field and at least 10 years of experience working in riverine and wetland environments. Coursework must include plant taxonomy, plant ecology, GIS, and statistics classes. Coursework in hydrology, and fluvial geomorphology is desired but not required. Candidates should have prior vegetation sampling field experience and a familiarity with ecological restoration.

Our working environment requires an ability to work independently, take responsibility, and develop supporting logic that serves as a basis for resource decision making. Candidates should have some prior experience working in and around streams and rivers. Field work often includes long days in difficult terrain and diverse climatic conditions and could require travel and work up to 7 days without returning to the office or home station. Many field locations have no cell service or internet. Candidates should be comfortable around water and a strong swimmer. A valid California Driver's license with a good driving history is required.

The position will be based in Arcata, CA, and initial salary will be $40/hr to $50/hr depending on experience. The position is initially part-time and would transition to full-time (with a generous benefits package) after a 90-day introductory period. The position is available immediately and will remain available until March 31 or until filled. Please e-mail a resume with references to jobs@riversciences.com. Please include Riparian Plant Ecologist in the email subject line, at least one letter of recommendation, and an example of written work as the sole author.