**Application Deadline:** September 23, 2018

**Job Title:** Ecosystem Services Analyst

**Location:** Sacramento, CA

**Position Type:** Permanent/full-time

**Expected Start Date:** November 2018

**Overview:** The Freshwater Trust, a non-profit leader in stream and river restoration, is seeking an Ecosystem Services Analyst with a strong background in water resources or ecosystem analytics. This full-time position will be based in Sacramento, CA and will work closely with other members of the Science and Analytics Team, based in The Freshwater Trust’s Boise, ID and Portland, OR offices. The Analyst will work with the team to develop rigorous systems and protocols to quantify the ecological and economic outcomes of various agricultural management practices, on-farm structural actions and habitat restoration actions. The Ecosystem Services Analyst will receive training in the Portland office at the beginning of their employment.

The Analyst must be a self-starter who is able to work in a dynamic, innovative and fast-paced environment that emphasizes quality, analytical rigor, and critical thinking. This role is ideal for individuals with strong research and analytical skills, a passion for natural resource conservation, and an interest in using data and evidence to drive change. The position will focus on modeling, evaluation and design of water quality improvement strategies and decision-support tools to help increase the efficiency and effectiveness of watershed restoration efforts. The Ecosystem Services Analyst should have a solid understanding of conservation actions, agricultural practices, and other land use changes that can be adopted to reduce both point and nonpoint source impacts and improve water quality.

**Position Responsibilities:**

- Work closely with other members of the Science and Analytics Team to model and track the environmental and water quality benefits of a wide range of agricultural practices and conservation actions.
- Contribute to the development of a quantitative framework for decision-making based on economic effectiveness, environmental benefit and political feasibility.
- Communicate with local experts and practitioners to determine typical land uses and agricultural practices to inform restoration opportunities in new project locations.
- Identify ecologically appropriate conservation actions and on-farm practices for new project locations and develop quality standards that will be used to assess the implementation feasibility and effectiveness of the actions.
- Conduct original modeling to determine the water quality, quantity and ecosystem services improvements associated with conservation practices in new project locations.
- Develop feedback loops to better utilize project data to continue to refine and improve effectiveness of conservation and restoration programs.
Minimum Skills and Qualifications:
- Bachelor’s degree in Environmental Science, Water Resources, Ecology or related field; Advanced degree desirable
- 2-5 years of relevant experience in water quality, ecosystem analysis, or related field
- Ability to work independently and collaboratively in an open-office, team environment
- Problem-solver who is excited to work on highly complex problems and find creative solutions
- Thorough understanding of the principles of data collection and analysis, statistics, and data visualization
- High proficiency with GIS or other spatial analysis and cartography systems and methods
- Familiarity with California agriculture, including common cropping systems and best management practices, and a general knowledge of their impacts on soil and water resources
- Strong research and analytical skills, with a focus on identifying gaps and finding solutions
- Excellent communication skills, both verbal and written

Desirable Skills:
- Familiarity with programming languages such as Python, R, or MATLAB
- Experience automating analytical processes
- Experience building and/or interacting with the outputs of watershed models such as APEX and SWAT, and/or groundwater and surface water models such as MODFLOW or HEC-RAS
- Experience using additional agricultural and ecosystem assessment tools and methodologies, such as RUSLE and SISL
- Knowledge of regulatory parameters related to the Clean Water Act and the Sustainable Groundwater Management Act
- Foreign language skills preferred

Compensation: Competitive and commensurate with experience. Competitive benefits package.

Application Instructions:
- Supply the following documents in a single PDF not to exceed 5MB in the order listed below:
  - Cover letter
  - Resume
  - 3 references
- Submit required information and documentation at: https://app.smartsheet.com/b/form/1d5d82b899024492854e303bd99bed1f

Please, no phone or email inquiries about this position. Applicants must have legal permission to work in the U.S.

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