



**Post-Doctoral Scholar**  
**(Forest Hydrology/Water Quality/Aquatic Ecology/Spatial Analytics)**  
**Dept. of Forest Engineering, Resources, and Management**  
**Oregon State University, Corvallis, OR**

**Position:** Postdoctoral Scholar

**Location(s):** Corvallis, Oregon State University

**Job Description:** The Department of Forest Engineering, Resources, and Management (FERM) in the College of Forestry at Oregon State University has a funded position available for a Postdoctoral Scholar (1.0 FTE, up to 24 months, starting as available), to begin once a suitable candidate is found. The opportunity will support one Postdoctoral Scholar to develop spatial tools and models that relate aquatic condition and habitat resilience and/or vulnerability to general landscape factors, as well as forest health and wildfire, in the Western US. The research will improve understanding of how natural and/or human disturbances affect water quantity, quality, and aquatic habitat to facilitate future policy and land management decisions.

The Post-Doctoral Scholar will join the Forest Ecohydrology and Watershed Science (FEWS) Lab (<http://fews.forestry.oregonstate.edu/>) in the Department of Forest Engineering, Resources, and Management at Oregon State University (<http://ferm.forestry.oregonstate.edu/>). The FEWS Lab is deeply committed to creating a diverse, equitable, and inclusive environment. The group works primarily in the US West and internationally to study issues related to land use and natural disturbance (e.g., wildfire) impacts on hydrology, water quality, and aquatic ecosystem health from the hillslope to regional scale.

The Scholar will also work as part of a trans-disciplinary team of scientists, including forest hydrologists, aquatic ecologists, geospatial analysts, biogeochemists, and others from Oregon State University (OSU), the US Forest Service (USFS), and the US Environmental Protection Agency (EPA). Collaboration with USFS (Dr. Rebecca Flitcroft) and EPA (Dr. Joseph Ebersole) colleagues will provide unique perspectives and opportunities to engage in research that will help inform policies for managing and protecting water quality, watershed health, and aquatic communities. The position will also contribute to the mission of both the College of Forestry and Oregon State University by (a) conducting distinctive problem-solving research, (b) supporting a continuous search for new knowledge and solutions, (c) educating and engaging practitioners and users of the world's forest resources, and (d) maintaining a rigorous focus on academic excellence.

**Application procedure:** We encourage all interested applicants to apply for this position by sending all application materials to Dr. Kevin Bladon ([kevin.bladon@oregonstate.edu](mailto:kevin.bladon@oregonstate.edu)) by November 30, 2020. Interested applicants should submit: (a) a CV that includes the names of at least three professional references, their e-mail addresses, and telephone contact numbers and (b) a cover letter or email describing their interests and experiences in the topic area, goals, and how they meet the required position qualifications outlined below.

**Required qualifications:**

- The Scholar must possess a PhD from an accredited university by the date of the interview and received it within less than five years.
- Excellent writing and oral communication skills
- Research experience or work experience related to statistical hydrology, spatial statistics, or related fields
- Spatial and statistical analyses in R, MATLAB, Python, ArcGis, QGIS, or similar
- Ability to fit linear and non-linear mixed-effects regression models
- Interests applying spatial and analytical skills to problems in forest hydrology, water quality, and aquatic ecology
- Desire to collaborate on producing peer-reviewed publications and other derived products
- Interest in collaboration in a conscientious and inclusive way

**Preferred qualifications:**

- Experience with Python, Google Earth Engine, HTML markdown language, and Git/GitHub
- Experience with multiple regression, logistic regression, machine learning, hierarchical species distribution models, and other statistical modeling approaches as applied to spatial inference
- Evidence of successful multidisciplinary collaborations
- Experience with individual-based and community-level fish population simulation models
- A demonstrable commitment to promoting and enhancing diversity.