



NATURAL RESOURCES AND  
THE ENVIRONMENT

## University of Connecticut

**Position Description:** The UConn NRE Ecohydrology lab (<http://www.jamesknightonhydrology.com/>) and Applied Forest Ecology Lab (<https://faheylab.weebly.com/>) and are recruiting one full time PhD or Master's level student with possible start dates of **January or June, 2024**. The position is fully funded to carry out research on forest water use and ecological modeling.

**Overview:** The graduate student will work under the supervision of James Knighton and Bob Fahey. Our research project will involve the collection of measurements in mixed-species forests and development of ecological models to study how drought impacts different tree species. This project will advance ecohydrological modeling techniques to better simulate the interactions between plants and climate. Field research will involve collecting plant and soil samples in the UConn Forest and Hubbard Brook Experimental Forest over two years. The student will then analyze these data in a laboratory and use the resulting data to improve models of forest water use. These models will be used to study resilience change of US forests under climate change.

We will communicate our research findings to key stakeholder organizations. The meetings will be used to discuss the potential for integration of this research into state and federal policy on forest management. The prospective student will also gain experience in teaching and grant writing.

### Requirements:

- BA/BS degree in hydrology, forestry, environmental science, agricultural engineering, civil engineering, environmental engineering, geography, or a related field.

### Preferred qualifications:

- Prior coursework in ecology, hydrology, and environmental science
- Experience with R, Matlab, or Python.
- MS degree if applying for PhD position.

**To Apply:** Please submit the following to [james.knighton@uconn.edu](mailto:james.knighton@uconn.edu) and [robert.fahey@uconn.edu](mailto:robert.fahey@uconn.edu). Applications will be reviewed as they are received.

- Statement of research interests (no more than 1 page)
- A complete Curriculum Vitae or Resume
- Contact information for two professional/academic references (name, phone, email)