

Postdoctoral Research Scholar –Hydrologic modeler

The Mountain Hydrology Laboratory (<http://www.mountainhydrologylab.com/>) in the School of Natural Resources at West Virginia University seeks applicants for a Postdoctoral Research Scholar to investigate climate change impacts on freshwater ecosystems in the Appalachian Mountains region of the eastern US. The area of research will be focused on modeling the terrestrial water cycle under varying future scenarios and integrating physical and virtual water flows into coupled human-water framework to evaluate regional water security.

This position is part of the NSF-funded Appalachian Freshwater Initiative (AFI), an exciting new multidisciplinary project that aims to understand the complex interactions between society, climate, and mountain ecosystems.

The ideal candidate must have:

- A Ph.D. in Hydrology or related science with a experience in process based hydrologic modeling and demonstrated ability to produce peer-reviewed journal publications
- Demonstrated strong programming skills (i.e. Python, Fortran, Shell scripting) on multiple platforms (Unix/Linux, Mac); strong experience working with data science approaches (e.g. NetCDF processing programs, big spatial datasets)
- Strong verbal and written communication skills
- Willingness and ability to conduct independent research while contributing to a larger, multidisciplinary team of earth and social scientists.

The successful candidate will serve as the hydrologic modeler on a team comprised of hydrologists, ecologists, engineers, and social scientists and will collaborate with colleagues at the Appalachian Freshwater Initiative at West Virginia University and FEWSION (<https://fewsiion.us/>) at Northern Arizona University. The successful candidate's responsibility will be to develop high-resolution historic and future ensemble hydrology datasets for human-water systems modeling applications; to develop and conduct research exploring the role of freshwater provisioning from mountain regions, dependencies, and feedbacks with society; to develop additional projects and proposals building on the strengths, interests, and expertise of the candidate; and to publish in peer-reviewed literature.

The position is available immediately and will be for an initial 12-month appointment with the possibility of renewal pending satisfactory performance.

To express interest in this position, send a cover letter indicating how your qualifications and experience have prepared you for this position and a CV that includes the names of at least three professional references, their e-mail addresses, and telephone contact numbers to Dr. Nicolas Zegre (nicolas.zegre@mail.wvu.edu), with "AFI hydrologic modeler" in the subject line.