Images courtesy of USDA and NWS

Seeking 7 PhD students and 1 postdoc for NSF-Funded Project

Using big data approaches to assess ecohydrological resilience across scales

University of Vermont; Penn State University; Brigham Young University; University of Nevada, Reno

Funded Positions Available: We are seeking diverse and creative candidates for 7 PhD/MS positions and 1 postdoc position starting in spring or summer of 2021. Join our new NSF project to help understand ecosystem resilience in this time of unprecedented environmental change.

Applications are requested by Friday November 20th. Position details below:

Location	Adviser	Type of position and general topic
UNR	Adrian Harpold	**PhD or MS:** Catchment hydrology, mountains, ecohydrology, forest management, remote sensing
Penn State	Li Li	**PhD:** Catchment hydro-biogeochemistry, reactive transport, water quality, carbon, nutrients, modeling
UVM	Byung S. Lee	**PhD:** Scientific data management. Data repository. Database design, development, and query interface. Data preparation, cataloging, mining, analysis, and integration
UVM	Kristen L. Underwood	**PhD:** Data science, complex systems tools, machine learning, trend analysis
BYU	Ben Abbott	**PhD, MS, or Postdoc:** Continental-scale ecosystem resilience to disturbance (e.g. wildfire, agriculture, hydrological modification, climate change)

Project Background: Land-cover transformation, amplification of biogeochemical flows, and climate disruption are triggering transitions in the Earth system that are unprecedented on human timescales. To ensure biosphere integrity and continued human flourishing, we need to understand the factors that determine ecosystem resilience to these diverse disturbances. This project brings together researchers from across the country in a Critical Zone Network, combining data science, ecology, hydrology, and biogeochemistry. Students, researchers, and outreach partners will work in dynamic teams to create new knowledge through field and lab work, and improve education, policy, and participation in STEM fields.

To Apply: email your CV and letter of intent to the adviser above who best matches your interests.