

Arizona WUI Post-Wildfire Flood and Debris Flow Modeling Postdoc Northern Arizona University

Position Highlights:

We seek a postdoctoral researcher to work as part of a collaborative, interdisciplinary team to better understand and quantify the impacts of post-wildfire floods and debris flows to Arizona's wildland urban interface (WUI). The postdoctoral researcher will work with novel fuels data to produce maps and predict magnitudes of potential flooding and debris flow risks following fire under the different fire and fuels reduction scenarios. The research is expected to culminate in fact-sheets for managers and policy-makers, conference presentations, and peer reviewed publications. This is a two-year funded position, although re-appointment is contingent upon performance. The researcher will be primarily supervised by [Dr. Salli Dymond](#) (Northern Arizona University), but will work closely with [Dr. Luke McGuire](#) (University of Arizona) and [Dr. Ann Youberg](#) (Arizona Geological Survey), and with an interdisciplinary team of researchers from the Arizona WUI Fire Fuel Mitigation Team led by [Dr. Andrew Sanchez Meador](#) (Ecological Research Institute; NAU).

Duties & Responsibilities:

1. Acquire, summarize, and analyze publicly available hydrologic and geomorphic datasets.
2. Apply hydrologic models using novel fuels data to simulate post-wildfire flood and debris-flow responses in Arizona watersheds.
3. Participate in collaborative efforts to integrate results of hydrologic and/or geomorphic models into existing hazard and risk assessment frameworks.
4. Publish results in fact sheets and peer-reviewed papers.
5. Present findings at conferences.

Minimum Qualifications:

- PhD in hydrology, geology, climate science, forestry, or related field that is conferred upon hire.
- Familiarity with at least one programming language and a demonstrated ability to apply quantitative models for hydrologic and/or geomorphic processes.
- Demonstrated ability to communicate results of scientific work through peer-reviewed publications and/or conference presentations.

Preferred Qualifications:

- The preferred candidate has experience working with GIS and/or remote sensing data.
- The preferred candidate has demonstrated experience working in a collaborative setting.

Applications close on **October 3, 2023**. To apply, visit [NAU Careers](#) and reference Job ID 607418. The anticipated start date is January 1, 2024, but is open to negotiation.