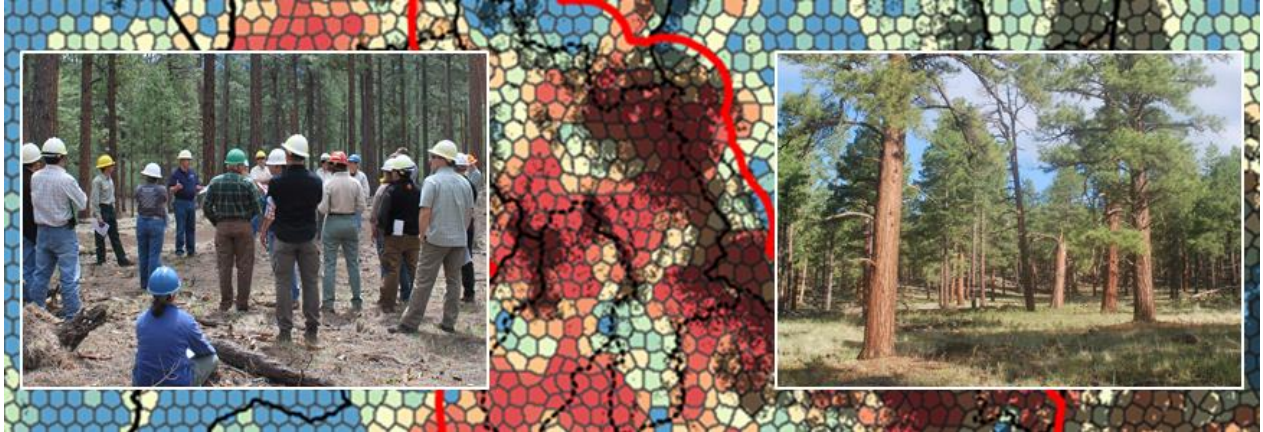


Ecological Restoration Institute

**Graduate Research Assistantship (PhD) Opportunity in strategic
prioritization and restoration at the Ecological Restoration Institute at
Northern Arizona University**



Landscape prioritization and strategic implementation of mechanical forest treatments across both spatial and temporal scales can enable managers and partners to facilitate meeting ecological restoration objectives, more efficiently build landscape resiliency to disturbances, move between projects, and facilitate decision makers' ability to leverage funding. Collectively, this kind of approach can help to address the question, "what ecosystem benefits can obtain and what losses can we avoid if we strategically time and place treatments over the next 10 to 20 years?" This work will inform the "why here, why now" question to better justify restoration and fire risk reduction treatments on public lands and assist with determining metrics of success for attaining ecosystem resiliency.

The [Ecological Restoration Institute](#) at [Northern Arizona University, Flagstaff, AZ](#) is currently seeing applicants for a [PhD graduate research assistantship](#) beginning **Fall semester 2022** focused on collaboratively scoping and compiling information (public perspectives, stakeholder values at risk, previous and current prioritization efforts and resource assessments, etc.) and developing a Strategic Prioritization And Restoration toolKIT (SPARKIT) that could be used to facilitate the sequencing of treatments among and within watersheds across the forest and woodlands of a pilot landscape in north-central Arizona. The information collected will provide a baseline for a Salt River Project and Ecological Restoration Institute partnership and prioritization effort to assess different management scenarios and treatment prioritizations on multi-jurisdictional/multicultural outcomes.

Applications from passionate creatives with a quantitative and analytical approach to solving complex human-ecosystem problems are encouraged. We seek an applicant who has interest in the use of decision support systems in real-world decision making and/or the interest to effectively assess and analyze social perspectives for input into those decision support systems.

Required Qualifications:

- Ability to meet all requirements for admission to the School of Forestry PhD program
- Master's degree in forestry, geography, data science, or a related field.
- Demonstrable research experience, collaboration abilities, and excellent English (written and oral) communication skills.

Preferred Qualifications include a combination of some, but not necessarily all, of the below:

- Working knowledge and/ or proficiency in the use of geographic information systems (GIS), such as ArcGIS or QGIS.
- Interest and knowledge of decision support tools (DST) relevant to forest and woodland systems and communities.
- Experience in spatial and non-spatial modeling, including fire behavior modeling, and/or methods to study trends and predicted changes in forest conditions, forest health and wildfire risk.
- Working knowledge and/ or proficiency in the use of social science techniques for assessing perspectives among diverse partners, as well as analyzing social science data (i.e., surveys or interviews) to identify themes and patterns.
- Knowledge and experience working with tabular data in one or more of the following: MS Access, MS Excel, SQL, R, and/or Python.
- Knowledge and experience using geospatial and remotely sensed data to analyze and visualize natural resource, economic, and community values; includes demonstrated proficiency in one or more of the following: ArcGIS, QGIS, Google Earth Engine, R, and/or Python.
- Interest and familiarity with facilitation.
- Interest and familiarity with collaborative natural resource management.
- Interest and experience working with diverse partners.
- Interest and facility working across biophysical and social science disciplines.

Information about NAU's graduate program, including eligibility requirements, is available at <http://nau.edu/CEFNS/Forestry/Degrees>

Interested candidates are encouraged to contact with Drs. Amy Waltz, Melanie Colavito, and/or Andrew Sánchez Meador as soon as possible using the information provided below or submit your CV, a brief written statement of interest, and copies of unofficial degree transcripts to initiate a dialog via e-mail.

Contact Information:

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