

## **Graduate Assistantship Position Description:**

The Cultural and Environmental Resource Management (CERM) Master's Program at Central Washington University and the US Forest Service are seeking a master's student interested in natural resources and wildfire. This is a 2-year graduate assistantship appointment, which includes a partial tuition waiver and 9-month salary for academic years 2022-23 and 2023-24.

The project involves investigating the weather conditions that contribute to the largest wildfires (Fires of Unusual Size, FOUS), and the large-growth days on those fires. It seeks to understand how the weather conditions during these large fires and large-growth days differ from the weather conditions on other, less extreme fires. Previous work has shown that overall weather conditions on the FOUS are more moderate, but individual days of more fire-conducive weather drive the fires' exceptional growth. The student for this project will use spatial and temporal analysis techniques to look at weather patterns in space and time as associated with these fires and events.

Central Washington University is located in Ellensburg, WA, on the east side of the Cascade Mountains. It is in the heart of the wildfire region of Washington State. The student selected for this project will be enrolled at CWU in the CERM Master's Program. They will work closely with faculty at CWU and research meteorologists from the US Forest Service's Pacific Wildland Fire Sciences Laboratory, in Seattle. The expectation is that the student will develop a master's thesis based on this work, ideally leading to co-authored, peer-reviewed publications.

Student qualifications:

### **Required:**

Undergraduate degree in physical sciences (e.g., meteorology, geology, physical geography, physical environmental sciences)

Differential and integral calculus coursework

Statistics coursework

Must have experience in **at least one of:** GIS **or** time series analysis **or** spatial composite analysis

### **Preferred/Desirable:**

Basic meteorology knowledge

Experience with scripting and/or a computer language (linux, C++, python, FORTRAN)

Interest in natural resource management

Experience with large data sets (> 1 GB)

Operational experience with wildland fire

Operational experience in meteorology/weather forecasting

Application Instructions:

Interested individuals should contact the project leads, Megan Walsh ([megan.walsh@cwu.edu](mailto:megan.walsh@cwu.edu)) and Brian Potter ([brian.potter@usda.gov](mailto:brian.potter@usda.gov)) for more information. To apply, submit a 1-page letter of interest and resume. Interested individuals must also complete the regular graduate admission and assistantship applications (see <http://www.cwu.edu/masters/prospective-cwu-graduate-students>).

Information about the CERM program is available at <https://www.cwu.edu/resource-management/resource-management-program>

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