

**Opportunity Title:** USFS Postgraduate Research Opportunity in Post-Fire Watershed Dynamics

**Opportunity Reference Code:** USDA-USFS-2021-0114



**Organization** U.S. Department of Agriculture (USDA)

**Reference Code** USDA-USFS-2021-0114

**How to Apply** *Connect with ORISE...on the GO!* Download the new ORISE GO mobile app in the [Apple App Store](#) or [Google Play Store](#) to help you stay engaged, connected, and informed during your ORISE experience and beyond!

A complete application package consists of:

- An application
- Transcript(s) – For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. Selected candidate must provide proof of completion of the degree before the appointment can start. All transcripts must be in English or include an official English translation. Click [Here](#) for detailed information about acceptable transcripts.
- A current resume/CV
- Two educational or professional recommendations. At least one recommendation must be submitted for the mentor to review your application.

All documents must be in English or include an official English translation.

**Application Deadline** 6/24/2021 3:00:00 PM Eastern Time Zone

**Description** \*Applications will be reviewed on a rolling-basis.

**USFS Office/Lab and Location:** A postgraduate research opportunity is available with the U.S. Forest Service (USFS), Pacific Southwest Research Station (PSW) located in Arcata, California. The appointment may begin remotely due to COVID19 restrictions.

**Research Project:** The participant will collaborate with science staff of the USDA Forest Service's Pacific Southwest Research Station (PSW), the California Department of Forestry and Fire Protection (CAL FIRE), and other partners. The participant will join the watershed sciences research team to contribute to watershed hydrology and sediment delivery studies in fire-impacted forests of the western U.S. Specifically, the participant will perform activities to review and synthesize data collected from past experiments and participate in new or ongoing field projects as opportunities arise.

Under the guidance of a mentor, the participant will apply their knowledge of hydrology, sediment production and delivery, statistics, and data visualization to review and analyze meteorological, hydrological, and geomorphological data from research conducted on the Rim Fire and Valley Fire in California. Other opportunities may be available with our partners. Activities will include using software to review and adjust electronic data based on other field records, developing algorithms to review data, analyzing and interpreting results, and communicating results via written and oral presentations. Occasional field work or other travel may be necessary.

**Learning Objectives:** Learning objectives include demonstrating understanding of quality assurance methods for field experiments, data processing, analysis, review, and archiving techniques, and technical and scientific communication.

**Mentor:** The mentor for this opportunity is Joe Wagenbrenner ([joseph.wagenbrenner@usda.gov](mailto:joseph.wagenbrenner@usda.gov)). If you have questions about the nature of the research please contact the mentor.

**Anticipated Appointment Start Date:** June 2021. Start date is flexible and will depend on a variety of factors.

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**Appointment Length:** The appointment will initially be for one year, but may be extended upon recommendation of USFS and is contingent on the availability of funds.

**Level of Participation:** The appointment is full-time.

**Participant Stipend:** The participant will receive a monthly stipend commensurate with educational level and experience.

**Citizenship Requirements:** This opportunity is available to U.S. citizens, Lawful Permanent Residents (LPR), and foreign nationals. Non-U.S. citizen applicants should refer to the [Guidelines for Non-U.S. Citizens Details page](#) of the program website for information about the valid immigration statuses that are acceptable for program participation.

**ORISE Information:** This program, administered by ORAU through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and USFS. Participants do not become employees of USDA, USFS, DOE or the program administrator, and there are no employment-related benefits. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE.

**Questions:** Please visit our [Program Website](#). After reading, if you have additional questions about the application process please email [USForestService@orise.orau.gov](mailto:USForestService@orise.orau.gov) and include the reference code for this opportunity.





## Qualifications

The qualified candidate should have received a master's or doctoral degree in a watershed or water resources science related field.

Preferred skills:

- Coursework in hydrology, calculus, physics, soils, and graduate level statistics
- Graduate level training in hydrology, watershed science or water resources, or civil engineering with an emphasis on hydrology
- Experience implementing and analyzing data from field-based forest hydrology experiments

## Eligibility Requirements

- **Degree:** Master's Degree or Doctoral Degree.
- **Discipline(s):**
  - **Earth and Geosciences** (2 )
  - **Engineering** (4 )
  - **Environmental and Marine Sciences** (6 )
  - **Life Health and Medical Sciences** (1 )