

**Opportunity Title:** USDA-FS Avoided Wildfire Emissions from Fuel Treatment

**Opportunity Reference Code:** USDA-FS-RMRS-2026-0134

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

**Reference Code** USDA-FS-RMRS-2026-0134

**How to Apply** *To submit your application, scroll to the bottom of this opportunity and click **APPLY**.*

A complete application 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. Click [here](#) for detailed information about acceptable transcripts.
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- Two educational or professional recommendations. At least one recommendation must be submitted in order for the mentor to view your application.

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

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**Application Deadline** 4/10/2026 3:00:00 PM Eastern Time Zone

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

**USDA Forest Service Office/Lab and Location:** A fellowship opportunity is available with the US Department of Agriculture (USDA) Forest Service (FS) within the Rocky Mountain Research Station (RMRS) located in Missoula, Montana.

The successful applicant will be stationed at the Missoula Fire Sciences Laboratory in Missoula, Montana. The Fire Lab is world-renowned for its work ranging from fire simulation modeling to experiments in the wind tunnel and burn chamber. <https://research.fs.usda.gov/firelab>

At the heart of the USDA Forest Service's mission is their purpose. Everything they do is intended to help sustain forests and grasslands for present and future generations. Why? Because their stewardship work supports nature in sustaining life. This is the purpose that drives the agency's mission and motivates their work across the agency. It's been there from the agency's very beginning, and it still drives them. To advance the mission and serve their purpose, the USDA Forest Service balances the short and long-term needs of people and nature by: working in collaboration with communities and our partners; providing access to resources and experiences that promote economic, ecological, and social vitality; connecting people to the land and one another; and delivering world-class science, technology and land management.

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**Research Project:** This project focuses on avoided wildfire emissions due to fuel treatment. We model carbon emissions from prescribed fire during the treatment, and the effect of the treatment on terrestrial vegetation carbon/biomass left onsite after the treatment. Fuel treatments change the behavior of future wildfires, typically resulting in reduced fire intensity and rate of spread on and near the site of the treatment. We use fire simulation modeling to calculate changes in burn probability and fire intensity following treatment. We use the Forest Vegetation Simulator to estimate the amount of emissions from subsequent fires following treatment. An actuarial risk framework is leveraged to calculate changes in expected emissions and expected carbon remaining.

The successful applicant will collaborate closely with research scientists and analysts at the Missoula Fire Sciences Lab on this project. The participant will learn or further their skills in using the Large Fire Simulator, FLAMSTAT, the Forest Inventory and Analysis Datamart, the TreeMap dataset, the FuelMap dataset, ArcGIS Pro, R, and/or Python.

**Learning Objectives:** The participant will learn or add to skills/expertise in:

- Handling forest plot data,
- Modeling wildland fire,
- Modeling prescribed fire and wildfire emissions, and;
- Modeling tree mortality from prescribed fire and wildfire.

**Mentor:** The mentor for this opportunity is Karin Riley ([karin.l.riley@usda.gov](mailto:karin.l.riley@usda.gov)). If you have questions about the nature of the research, please contact the mentor.

**Anticipated Appointment Start Date: March 2026.** Start date is flexible and will depend on a variety of factors.

**Appointment Length:** The appointment will initially be for one year and six months but may be extended upon recommendation of USDA Forest Service and is contingent on the availability of funds.

**Level of Participation:** The appointment is part time.

**Participant Stipend:** The participant will receive a monthly stipend commensurate with educational level and experience. **The anticipated stipend range is \$63,795 - \$79,012 annually.**

**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. Foreign national candidates may have a mandatory in-person requirement depending on visa status.

**ORISE Information:** This program, administered by ORAU through its contract with the U.S. Department of Energy (DOE) to manage the Oak

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Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and USDA Forest Service. Participants do not become employees of USDA, USDA Forest Service, 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 [ORISE.USFS.RMRS@orau.org](mailto:ORISE.USFS.RMRS@orau.org) and include the reference code for this opportunity.

**Qualifications** The qualified candidate should be currently pursuing or have received a master's or doctoral degree in the one of the relevant fields.

**Preferred skills:**

- Experience with field plot datasets such as Forest Inventory and Analysis,
- Experience with using the Forest Vegetation Simulator,
- Experience in fire modeling, for example, with FLAMMAP or FSim,
- Experience in analyzing large spatial and tabular datasets,
- Experience in GIS using ArcPro or R Terra, and;
- Experience coding in R and/or Python.

**Stipend** \$63,795.00 – \$79,012.00 Yearly

**Point of Contact** [Michele](#)

**Eligibility** • **Degree:** Master's Degree or Doctoral Degree.

**Requirements** • **Discipline(s):**

- **Computer, Information, and Data Sciences** (5👁)
- **Environmental and Marine Sciences** (3👁)
- **Life Health and Medical Sciences** (2👁)
- **Mathematics and Statistics** (3👁)