

Opportunity Title: USFS Postdoctoral Fellowship in Ecosystem Service

Benefits

Opportunity Reference Code: USDA-USFS-2022-0168



Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-USFS-2022-0168

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. 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. Applications need at least one recommendation submitted in order to be viewed by the mentor.

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

Application Deadline 6/6/2022 3:00:00 PM Eastern Time Zone

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

USFS Office/Lab and Location: A research opportunity is available at the U.S. Department of Agriculture (USDA) Forest Service (USFS), Pacific Southwest Research Station located in Riverside, California. **The appointment will begin remotely, and transfer to a physical location within California at the beginning of 2023.**

Research Project: Minimizing the risk of catastrophic wildfire while sustaining multiple environmental and societal benefits on forested lands is essential to the Forest Service's mission. While management has demonstrated the ability to effectively achieve individual benefits (e.g., wood products, water), the ability to improve ecological resilience while meeting market needs across multiple benefits remains elusive. Satisfying such a need will require long-term support for landscape restoration through sustained monetary investments in the goods and services management actions will provide. This is in line with the Forest Service's Conservation Finance Program, which aims to accelerate the pace and scale of priority work through raising capital to cover project costs. By evaluating ecosystem services with respect to existing and potential new markets, and constructing a portfolio of these benefits, the Forest Service can develop partnerships to facilitate conservation investments to fund future projects, while targeting equitable ecosystem service provision and minimizing natural disturbance risks. This study seeks to quantify and value ecosystem services in a manner that facilitates market investments in funding new and existing restoration projects on National Forest lands by constructing and utilizing a portfolio of ecosystem service benefits.

Through the support of Region 5's Conservation Investment program, this study will develop and quantify a suite of metrics that could be marketed to investors across the 2.5 million-acre Tahoe Central Sierra Initiative (TCSI) landscape. We will define a set of ecosystem service opportunities and management constraints that will be inputs into a spatial decision support tool (DST) currently under development by Dr. Povak for TCSI. This project will enhance the utility of the tool by spatially representing opportunities to defray management costs through financial incentives on services provided by management.

In support of these efforts, we are seeking a participant with experience in statistics and computation to aid in the development of a tool to assess the ecosystem service impacts of conservation efforts.

Opportunity Title: USFS Postdoctoral Fellowship in Ecosystem Service

Benefits

Opportunity Reference Code: USDA-USFS-2022-0168

Learning Objectives: Under the guidance of a mentor, learning outcomes for the participant include an understanding of the conservation finance process from the perspective of a government entity, information that would be useful in positions related to academia, private conservation work, or public service. The selected candidate will also learn how to collaborate with a large, interdisciplinary team of academic and government collaborators to address relevant questions concerning conservation, environmental management, and environmental markets. Furthermore, the candidate will learn and participate in advances in ecosystem service valuation projects, concerning but not limited to water resources. The selected candidate will be able to contribute to original research and statistical models with respect to the costs and benefits of conservation finance.

Mentor: The mentor for this opportunity is Matthew Sloggy (matthew.sloggy@usda.gov) If you have questions about the nature of the research please contact the mentor.

Anticipated Appointment Start Date: **May 1, 2022.** Start date is flexible and negotiable, and will depend on a variety of factors.

Appointment Length: The appointment will initially be for one year but may be renewed 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. **The current stipend for this opportunity ranges from \$55,000-\$70,000 per year.**

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 and include the reference code for this opportunity.

Qualifications The qualified candidate should have received a doctoral degree in one of the relevant fields or be currently pursuing the degree with completion by the appointment start date.

- Eligibility Requirements**
- **Degree:** Doctoral Degree.
 - **Overall GPA:** 3.60
 - **Discipline(s):**
 - **Computer, Information, and Data Sciences** (17 )
 - **Environmental and Marine Sciences** (4 )
 - **Mathematics and Statistics** (2 )
 - **Social and Behavioral Sciences** (29 )