

**Opportunity Title:** EPA Postgraduate Research in Watershed Protection and Restoration

**Opportunity Reference Code:** EPA-REG9-WD-2022-01



**Organization** U.S. Environmental Protection Agency (EPA)

**Reference Code** EPA-REG9-WD-2022-01

**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 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, including academic history, employment history, relevant experiences, and publication list
- Two educational or professional recommendations. Click [here](#) for detailed information about recommendations.

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

**Application Deadline** 12/16/2021 3:00:00 PM Eastern Time Zone

**Description** **\*Applications may be reviewed on a rolling-basis and this posting could close before the deadline.** Click [here](#) for information about the selection process.

**EPA Office/Lab and Location:** A postgraduate research opportunity is currently available at the U.S. Environmental Protection Agency (EPA), Region 9 Water Division located in San Francisco, California. This research opportunity is with the Watersheds Section in the Tribal and State Assistance Branch.

**Research Project:** California salmon populations are in decline with multiple runs endangered or threatened, and warming instream temperatures are broadly considered a primary cause or contributor. Scientifically sound temperature thresholds protective for northwest salmon are available. State and federal water and fish agencies historically have relied on them in assessing impacts on California salmon under various federal and state regulations. As with threshold recommendations for other parameters, EPA generally considers that site or regional specific thresholds may be appropriate to address variations in physical conditions of a given location. An ongoing point of discussion in evaluating thermal stress on salmon and identifying scientifically sound temperature thresholds is the types of tests and information that are needed to determine scientifically-sound temperature thresholds, including site-specific thresholds.

The selected participant will research the temperature requirements of west coast salmon (in particular, California salmon) to inform protective temperature regimes and thresholds. In particular, the findings of this research will be used to identify the broad suite of indicators, as well as approaches for assimilating those indicators, in determining temperature regimes and thresholds that are scientifically defensible at the level required for EPA recommendations and actions under the Clean Water Act and federal regulation.

**Learning Objectives:** Under the guidance of a mentor, the participant will increase her/his knowledge of temperature regime and threshold requirements necessary to protect west coast salmon, including knowledge on the types of studies and other information that are critical in determining protection thresholds. The research participant will have the opportunity to collaborate with EPA Regions and scientists, and scientists from state and federal fish protection agencies in researching and evaluating decision-relevant ecological data critical in protecting west coast salmon. Also, this opportunity will provide the participant with exposure to technical and policy issues surrounding watershed protection and restoration.

**Mentor(s):** The mentor for this opportunity is Brian Thompson ([Thompson.brian@epa.gov](mailto:Thompson.brian@epa.gov)). If you have questions about the nature of the research please contact the mentor(s).

**Anticipated Appointment Start Date:** Winter 2021/2022. All start dates are flexible and vary depending on

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numerous factors. Click [here](#) for detailed information about start dates.

**Appointment Length:** The appointment may initially be for one year and may be renewed up to three additional years upon EPA recommendation and subject to availability of funding.

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

**Participant Stipend:** The participant will receive a monthly stipend commensurate with educational level and experience. **At this time the annual stipend for master's degree ~\$68,000/year and doctoral degree ~\$82,000/year. A travel allowance will be provided for pertinent conferences, meetings, and/or trainings, with approval of the project coordinator or mentor.**

**EPA Security Clearance:** Completion of a successful background investigation by the Office of Personnel Management (OPM) is required for an applicant to be on-boarded at EPA.

**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 EPA. Participants do not become employees of EPA, 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.

ORISE offers all ORISE EPA graduate students and Postdocs a free 5 year membership to the National Postdoctoral Association (NPA).

**Questions:** Please see the [FAQ section](#) of our website. After reading, if you have additional questions about the application process please email [ORISE.EPA.REG@orau.org](mailto:ORISE.EPA.REG@orau.org) and include the reference code for this opportunity.





## Qualifications

The qualified candidate should have received a master's or doctoral degree in one of the relevant fields, or be currently pursuing one of the degrees with completion by the end of December 2021. Degree must have been received within the past five years.

Preferred skills/experience:

- Scientific literature review, including experience with data and literature search engines
- Bibliography compilation, including notation
- Data and literature assemblage and evaluation
- Database management and statistical analysis, including spatial and temporal analysis
- Ability to communicate research findings and technical expertise to science/policy workgroups

## Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Master's Degree or Doctoral Degree received within the last 60 months or anticipated to be received by 12/31/2021 11:59:00 PM.
- **Discipline(s):**
  - **Environmental and Marine Sciences** (15 )
  - **Life Health and Medical Sciences** (47 )
  - **Mathematics and Statistics** (11 )
  - **Other Physical Sciences** (12 )
- **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).