

**Opportunity Title:** EPA Fellowship in Water Quality Valuation

**Opportunity Reference Code:** EPA-OW-IOAA-2023-01

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

**Reference Code** EPA-OW-IOAA-2023-01

**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** 3/13/2023 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:** Two research opportunities are available at the U.S. Environmental Protection Agency (EPA), Office of Water (OW), Immediate Office of the Assistant Administrator (IOAA), Water Economics Center (WEC) in Washington, DC.

The Water Economics Center is tasked with supporting EPA on economic analyses related to the Clean Water Act, Safe Drinking Water Act, and other water-related economic issues, as well as developing methodologies and models to support the valuation of water quality and aquatic ecosystems.

**Research Project:** The goal of this research project is to conduct research on methodology and tool development aimed at a better understanding of the ecological and/or human health benefits of improved surface water quality, including contributing to the development of the Benefits Spatial Platform for Aggregating Socioeconomics and H2O quality (BenSPLASH). In addition to research on surface water quality valuation approaches, the research project may include investigating the extent of the market for water quality improvements, and how the distance decay of willingness to pay may vary by waterbody type and size, baseline water quality, level of improvement, and other factors. The research project may also investigate improved



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ways to link environmental impacts to valuation endpoints (e.g., water quality index, ecosystem services, human health endpoints). The policy context for the above research may include PFAS contamination, nutrients, and climate change water impacts.

**Learning Objectives:** Under the guidance of a mentor, the research participant may be involved in the following training and team activities:

- Join relevant EPA teams to learn about the status quo of water quality valuation activities, knowledge and data gaps, challenges and issues at EPA and within OW
- Apply microeconomic theory and benefit-cost analysis principles to develop sound approaches to value environmental impacts on surface water quality.
- Adapt methodologies for inclusion in benefits valuation tools such as BenSPLASH (Benefits Spatial Platform for Aggregating Socioeconomics and H2O Quality)
- Collaborate on developing and applying integrated assessment models related to the social cost of water pollution.

**Mentor(s):** The mentor(s) for questions about this opportunity is Todd Doley ([doley.todd@epa.gov](mailto:doley.todd@epa.gov)). If you have questions about the nature of the research, please contact the mentor(s) directly.

**Anticipated Appointment Start Date:** As soon as a qualified candidate is identified. All start dates are flexible and vary depending on numerous factors. Click [here](#) for detailed information about start dates.

**Appointment Length:** The appointment will 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 degrees is ~\$64,957 and doctoral degrees is ~78,592.** Click [here](#) for detailed information about full-time stipends.

**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

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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).

The successful applicant(s) will be required to comply with Environmental, Safety and Health (ES&H) requirements of the hosting facility, including but not limited to, COVID-19 requirements (e.g. facial covering, physical distancing, testing, vaccination).

**Questions:** Please see the [FAQ section](#) of our website. After reading, if you have additional questions about the application process, please email [ORISE.EPA.OW@ornl.gov](mailto:ORISE.EPA.OW@ornl.gov) 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 one of the relevant disciplines or be currently pursuing one of the degrees with completion before March 31, 2023. Degree must have been received within the past five years.

Preferred skills:

- The ideal candidate will demonstrate coursework in environmental economics, and environmental policy especially as related to water quality or the Clean Water Act.
- A strong applicant would have a technical background and familiarity with valuation techniques such as hedonics, cost of illness, averting behavior, stated preference, choice modeling, and benefits transfer.
- Strong quantitative and programming skills, including:
  - Econometrics, and use of common econometrics software (e.g., R, SAS, Stata, MatLab, GAUSS)
  - Geographic information system (GIS) data management, analysis, and mapping
- Strong writing and oral communication skills
- Prior experience with water quality or environmental quality issues





## 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 3/31/2023 11:59:00 PM.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (2 )
  - **Engineering** (3 )
  - **Environmental and Marine Sciences** (4 )

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- **Life Health and Medical Sciences** (4 )
- **Mathematics and Statistics** (11 )
- **Other Non-Science & Engineering** (1 )
- **Social and Behavioral Sciences** (8 )