

Opportunity Title: Water Quality Modeling and Economics

Opportunity Reference Code: EPA-OW-IO-2020-0001

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-OW-IO-2020-0001

How to 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. 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

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

If you have questions, send an email to EPArpp@oraui.org. Please include the reference code for this opportunity in your email.

Application Deadline 2/28/2020 3:00:00 PM Eastern Time Zone

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

A research opportunity is currently available in Washington, D.C. in the U.S. Environmental Protection Agency (EPA) Office of Water (OW), Water Policy Staff in the Immediate Office of the Assistant Administrator for Water (IO).

The goal of this research project is to conduct research on water quality modeling and water quality valuation. This research may support the development of tools such as the Hydrologic and Water Quality System (HAWQS), a nationwide Soil and Water Assessment Tool (SWAT) based water quality modeling system, and the Benefits Spatial Platform for Aggregating Socioeconomics and H2O Quality (BenSPLASH), a nationwide water quality valuation model.

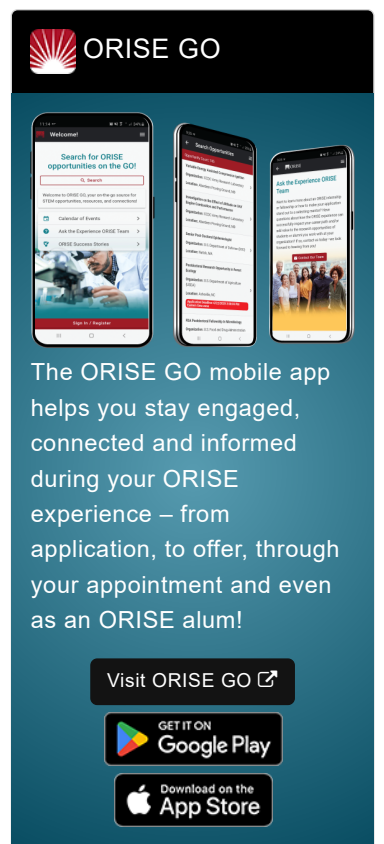
With guidance from the mentor, the research participant may be involved in the following training and team activities:

- Learn and develop experience on HAWQS (<https://epahawqs.tamu.edu/>) and SWAT (<https://swat.tamu.edu/software/>) hydrologic and water quality models through online documentation, training, and weekly HAWQS development meetings and discussions
- Learn and develop experience on BenSPLASH (Benefits Spatial Platform for Assessing Surface Water Hydrology) through BenSPLASH development meetings and discussions
- Collect and analyze water quality data for model calibration and validation using statistical programs, GIS tools, and databases
- Conduct research to explore impacts and outcomes of policy choices and communicate results, including quantifying and valuing changes in water quality
- Collaborate on developing methodologies to incorporate and apply new or existing modeling and valuation approaches and data to HAWQS and BenSPLASH on a national scale

The participant will collaborate with interdisciplinary teams of water quality modelers, environmental assessors, environmental economists, and analysts across EPA, including EPA's Office of Water, Office of Research and Development, and National Center for Environmental Economics.





OAK RIDGE INSTITUTE
FOR SCIENCE AND EDUCATION




ORISE GO

The ORISE GO mobile app helps you stay engaged, connected and informed during your ORISE experience – from application, to offer, through your appointment and even as an ORISE alum!

Visit ORISE GO 

GET IT ON
 Google Play

Download on the
 App Store

Opportunity Title: Water Quality Modeling and Economics

Opportunity Reference Code: EPA-OW-IO-2020-0001

Anticipated Appointment Start Date: Spring 2020

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. The initial appointment is for one year, but may be renewed upon recommendation of EPA and is contingent on the availability of funds. The participant will receive a monthly stipend commensurate with educational level and experience. The annual stipend will be as follows depending on education level: \$59,534 (Master's) and \$72,030 (Doctoral). Proof of health insurance is required for participation in this program. The appointment is full-time at EPA in the Washington, DC area. Participants do not become employees of EPA, DOE or the program administrator, and there are no employment-related benefits.

Qualifications The qualified candidate should be currently pursuing or have received a master's or doctoral degree in one of the relevant fields. Degree must have been received within five years of the appointment start date.

Preferred skills:

- Skills, background or experience in one or more of the following: watershed modeling, in-stream modeling, estuarine modeling, coastal modeling, recreation demand valuation, hedonic property valuation, stated preference valuation, benefits transfer, and/or other environmental modeling/valuation methods
- Familiarity with one or more popular programming languages such as R, Python, and SQL

- Eligibility Requirements**
- **Citizenship:** U.S. Citizen Only
 - **Degree:** Master's Degree or Doctoral Degree received within the last 60 months or currently pursuing.
 - **Discipline(s):**
 - **Chemistry and Materials Sciences** ([12](#))
 - **Computer, Information, and Data Sciences** ([16](#))
 - **Earth and Geosciences** ([21](#))
 - **Engineering** ([27](#))
 - **Environmental and Marine Sciences** ([14](#))
 - **Life Health and Medical Sciences** ([45](#))
 - **Mathematics and Statistics** ([10](#))
 - **Other Non-Science & Engineering** ([2](#))
 - **Social and Behavioral Sciences** ([27](#))