

Opportunity Title: Coastal Water Quality Research and Data Analysis

Opportunity Reference Code: EPA-Water-2019-0047

Organization U.S. Environmental Protection Agency (EPA)

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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@orau.org. Please include the reference code for this opportunity in your email.

Application Deadline 9/9/2019 3:00:00 PM Eastern Time Zone

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

A postgraduate research opportunity is currently available at the U.S. Environmental Protection Agency's (EPA) Office of Water (OW), Office of Wetlands, Oceans, and Watersheds (OWOW) located in Washington, DC.

The participant will be located in the Monitoring and Analysis Branch and support activities related to the National Aquatic Resource Survey (NARS) program, with a focus on the National Coastal Condition Assessment (NCCA; <https://www.epa.gov/national-aquatic-resource-surveys/ncca>). NCCA is a statistically based survey designed to characterize the ecological condition of estuaries and the nearshore Great Lakes of the conterminous United States every 5 years. It is a component of the NARS program and a key activity in EPA's efforts to achieve national water-quality goals under the Clean Water Act.

Throughout the appointment, the selected participant will be trained to research and to learn about EPA's efforts to monitor and assess estuarine and nearshore Great Lakes and other aquatic resources via large-scale, statistically-based studies such as the NCCA. Most of the focus will be to support scientific research activities related to indicators of estuarine and nearshore Great Lakes condition, including analyses of data collected in NCCA. Training may include:

- Analyzing NCCA data and presenting results to State, federal or Tribal partners
- Learning techniques to compile and perform quality assurance checks of indicator data collected in NCCA
- Research into potential indices (e.g., coastal acidification, microplastics, harmful algal blooms, marine debris) to assess emerging concerns about estuarine or Great Lakes nearshore condition
- Collaborating with EPA scientists and partners on preparations for the next



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NCCA survey in 2020

The selected participant will gain an understanding of EPA's Clean Water Act programs and observe how EPA coordinates with States, Tribes, and other federal agencies to meet national water quality goals. The participant will have the opportunity to interact with resource managers and scientists from other agencies and across the country. The participant will be trained to generate reports, analyze data, create outreach materials, and have opportunities to submit and present research and project results to interagency groups, professional societies and conferences, and scientific publications. At the end of the appointment, the participant will have increased knowledge and experience on:

- Principles and practices used in statistically-based analysis of condition data collected in estuaries and the Great Lakes
- Using various data and spatial analysis tools (including GIS, python, and R statistical software)
- Collaborating with a broad and diverse group of partners to accomplish water-quality assessment objectives
- Communicating results of scientific analysis to diverse audiences of estuarine and Great Lakes scientists, managers, policy makers and the public

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 educational level: \$57,510 (Masters), \$69,581 (PhD), \$83,398 (PhD +2 years of related post graduate work). Funding may be made available to reimburse the participant's travel expenses to present the results of his/her research at scientific conferences. No funding will be made available to cover travel costs for pre-appointment visits, relocation costs, tuition and fees, or a participant's health insurance. 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 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:




- Field experience collecting water, sediment, fish or aquatic macroinvertebrate samples. Laboratory experience analyzing those samples.
- Knowledge of estuarine science and emerging concerns in coastal ecosystems
- Proficiency in the review of scientific resources, e.g., scientific publications and databases, to allow compilation and documentation of information and data describing estuaries (e.g., water chemistry characteristics, algal toxins, fish community assemblages)
- Strong organizational, oral, written, and electronic communication skills
- Proficiency with Microsoft Excel, PowerPoint, and Word; and ArcGIS
- Strong computational skills and experience using the R statistical program for

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data management and analysis

**Eligibility
Requirements**

- **Citizenship:** U.S. Citizen Only
- **Degree:** Master's Degree or Doctoral Degree received within the last 60 month(s).
- **Discipline(s):**
 - **Earth and Geosciences** (1 )
 - **Environmental and Marine Sciences** (9 )
 - **Life Health and Medical Sciences** (7 )