

Opportunity Title: Integrated Water Management

Opportunity Reference Code: EPA-ORD-NHEERL-AED-2018-01

Organization U.S. Environmental Protection Agency (EPA)

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How to Apply A complete application consists of:

- An application
- Transcripts – [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 references

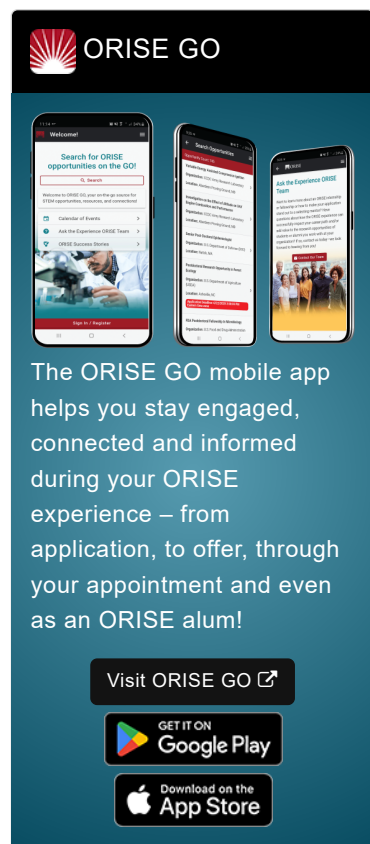
All documents must be in English or include an official English translation.

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

Description A postgraduate research opportunity is currently available at the U.S. Environmental Protection Agency's (EPA) Office of Research and Development (ORD)/National Health and Environmental Effects Research Laboratory (NHEERL). This appointment will be served with the Atlantic Ecology Division (AED) in Narragansett, RI, and/or Philadelphia, PA, with possible travel to Baltimore, MD.

Water quality monitoring is an essential component for scientists to understand the health of an ecosystem and to identify what specific trends or interventions designed to help achieve water quality standards are driving these changes. Although monitoring is grounded in very specific scientific and technical methodologies, the focus is also directed toward engaging the public in these efforts through citizen science monitoring and educational initiatives. This research project is intended to help clarify what specific monitoring-related information is most effective in engaging and educating the public about the ecological value and health of the Baltimore Harbor. The research participant will be involved in the following project activities:

1. Documenting the public's hierarchy of interests and how it ranks water quality as a valued commodity with respect to well-known media (air, water, land) and environmental issues (air, endangered species, trees, parks, fishing, open space, etc.). Employing community-level analyses to identify the disparate ways demographic groups perceive environmental information to better target messaging, including qualitative valuation of ecosystem services.
2. Understanding how to foment public value for local water resources by determining mechanisms to establish water and water quality monitoring as community assets. Examining strategies including which water quality monitoring data delivery mechanisms are most successful in engaging the public. This involves looking at current marketing and educational approaches to determine if information is being presented in ways that are easily understandable, accessible, and resonate most



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with the public.

3. Determining what modifications to these delivery mechanisms are necessary in order to increase the efficacy of the information to stimulate public engagement.
4. Determining whether the delivery of information stimulates positive environmental action, behavior changes, participation, or interest in obtaining additional information.
5. Exploring whether there are ways to measure and document success in achieving research objective number 3, and if so, how can this be translated into indicators of success that can be replicated in other watersheds.

This program, administered by ORAU through its contract with the U.S. Department of Energy to manage the Oak Ridge Institute for Science and Education, was established through an interagency agreement between DOE and EPA.

This appointment is part time for one year and may be renewed upon recommendation of EPA and contingent on the availability of funds. The participant will receive a monthly stipend. 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 participant's health insurance. The participant must show proof of health and medical insurance. **The participant does not become an EPA employee.**

The mentor for this project is Marilyn ten Brink (tenbrink.marilyn@epa.gov). The desired start date is March 5, 2018.

Qualifications Applicants should have received a master's or doctoral degree in environmental engineering, earth and geosciences, environmental and marine sciences, physical sciences, or social sciences within five years of the desired start date, or completion of all requirements for the degree should be expected prior to the start date. Experience with statistical analysis, network analysis, and geographic information systems (GIS) is desirable..

- Eligibility Requirements**

- **Degree:** Master's Degree or Doctoral Degree received within the last 60 month(s).
 - **Discipline(s):**
 - **Communications and Graphics Design** ([1](#) )
 - **Earth and Geosciences** ([21](#) )
 - **Engineering** ([1](#) )
 - **Environmental and Marine Sciences** ([14](#) )
 - **Other Non-Science & Engineering** ([5](#) )
 - **Social and Behavioral Sciences** ([28](#) )

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