

Integrated Planning and Permitting

Opportunity Reference Code: EPA-REG3-2023-16

Organization U.S. Environmental Protection Agency (EPA)

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<u>Store</u> or <u>Google Play Store</u> 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 <u>here</u> for detailed information about recommendations.

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

## Application Deadline 3/1/2023 3:00:00 PM Eastern Time Zone

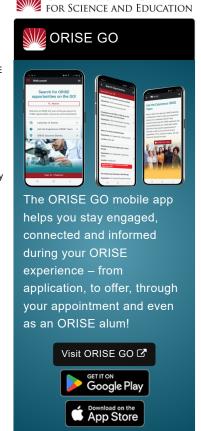
Description \*Applications may be reviewed on a rolling-basis and this posting could close before the deadline. Click <a href="here">here</a> for information about the selection process.

**EPA Office/Lab and Location**: A research opportunity is available with the Environmental Protection Agency (EPA), Region 3 located in Philadelphia, Pennsylvania.

Research Project: EPA Region 3 is striving to reduce nitrogen, phosphorus, and sediment loads from stormwater operations to meet obligations under the Chesapeake Bay Total Maximum Daily Load (TMDL). One of the main sources of these pollutants to the Bay occurs as runoff from urban areas and impervious surfaces comes into contact with surface water.

This project will focus on improving stormwater management and analyzing best management practices to achieve nutrient reductions and it includes a focus on regional integrated planning efforts. The study area includes each of the Mid-Atlantic jurisdictions in EPA Region 3 (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia). The primary emphasis for the project will be on NPDES Phase I and Phase II municipal separate storm sewer system (MS4) permits, and other construction and industrial stormwater permits issued by both EPA and its authorized state partners.

The project involves researching opportunities for stakeholder engagement, as well as public outreach and education, to advance permit compliance. It also involves sharing information to compile a regional knowledge base so that integrated planning can be more wholly incorporated into future municipal planning efforts. The ORISE Participant will gain knowledge of



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numerous regulatory programs related to the Clean Water Act (non-point source, point source, source water protection, NPDES, TMDL, Chesapeake Bay, State Revolving Loan Fund Program, etc.) and gain exposure to federal, state, and local partners

Learning Objectives: Under the guidance of a mentor, the selected candidate will participate within the Water Division to conduct research in the study area with a majority of focus on activities in the stormwater sector. Assignments will involve researching NPDES permits submitted by Region 3 States. Activities related to this project include, but are not limited to:

- Research MS4 public outreach and education communications strategies for each Region 3 jurisdiction and provide the results of that research to EPA. The research will focus on opportunities to share best practices and other relevant information.
- Research impaired waters listings and GIS mapping to identify surface
  waters impaired by nutrients (nitrogen and phosphorus) and sediments
  and provide the results for the research to EPA so that to target
  outreach areas and communities.
- Research NPDES program regulations and state programs for stormwater management and permitting and provide the results of that research to EPA that will be used to identify opportunities to improve NPDES permits and regulatory compliance and to integrate green infrastructure planning into communities.
- Research stormwater management plans and provide the results of the research to EPA to determine the effectiveness in meeting Chesapeake Bay Total Maximum Daily Load (TMDL) and local TMDL requirements.
- Survey and evaluate conventional Best Management Practices (BMPs) and green technology used to manage stormwater.
- Research small communities in the Chesapeake Bay and recommend the characteristics from the research that will be provided to EPA to identify communicates that need assistance with the Chesapeake Bay TMDL requirements.
- Research opportunities and provide the results of that research to EPA
  to determine the technical assistance to the regulated community in the
  areas of innovation of communities for regulatory requirements, control
  technologies options used by communities, and best practices in
  program implementation.
- Conduct a literature search and evaluate state program guidance manuals for stormwater program implementation to highlight best practices that can be shared Regionally.
- Research characteristics of effective communication and provide the results of the research to EPA that will focus on communication with both internal and external partners regarding NPDES permit requirements.

<u>Mentor(s)</u>: The mentor for this opportunity is Elizabeth Ottinger (<u>ottinger.elizabeth@epa.gov</u>). If you have questions about the nature of the research, please contact the mentor(s).



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Anticipated Appointment Start Date: March 1, 2023. All start dates are flexible and vary depending on numerous factors. Click here for detailed information about start dates.

Appointment Length: The appointment may initially be for one year and may be renewed 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. 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 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.REG@orau.org and include the reference code for this opportunity.

Qualifications The qualified candidate should have received a bachelor's or master's degree in one of the relevant fields, or be currently pursuing one of the degrees with completion before June 30, 2023. Degree must have been received within five years of the appointment start date.

Preferred Skills:

- Environmental Science with knowledge of
  - o Soil science
  - Chemistry
  - Biology
- · Engineering with knowledge of
  - Environmental Engineering
  - Construction and design



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- Water quality and/or general engineering Geographic Information Systems and scientific computing Technical Writing
- · Good oral and written communication skills
- · Strong interpersonal skills
- · Analytical capabilities
- Attention to details and planning

## Eligibility

- Citizenship: U.S. Citizen Only
- Requirements
- **Degree:** Bachelor's Degree or Master's Degree received within the last 60 months or anticipated to be received by 6/30/2023 11:59:00 PM.
- Academic Level(s): Graduate Students, Post-Bachelor's, Post-Master's, or Undergraduate Students.
- Discipline(s):
  - Chemistry and Materials Sciences (12.
  - Communications and Graphics Design (6.●)
  - Computer, Information, and Data Sciences (8\_●)
  - ∘ Earth and Geosciences (21 ●)
  - Engineering (<u>27</u> ●)
  - Environmental and Marine Sciences (<u>14</u> ●)
  - Life Health and Medical Sciences (6 ●)