Opportunity Title: EPA Stream and Wetland Regulatory Program
Opportunity Reference Code: EPA-OW-OWOW-2021-04

Organization	U.S. Environmental Protection Agency (EPA)
Reference Code	EPA-OW-OWOW-2021-04
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.

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!

Application Deadline	10/25/2021 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: A postgraduate internship project is available at the U.S. Environmental Protection Agency's (EPA) Office of Water (OW) in Washington DC. The internship will be served with the Office of Wetlands, Oceans and Watersheds (OWOW).

Research Project: The participant will learn about the role of a headquarters agency, its individual programs, and the Clean Water Act. The participant will develop a main research project with their mentor(s) which will be focused on Clean Water Act section 404, regulation of discharge of dredge and fill material, specifically on compensatory mitigation (replacement aquatic resources), four example research projects are listed below. Research may also focus on permitting, program tracking and analysis.

1. Compensatory Mitigation Review: This research will explore the intersection of past and proposed 404 Program permit actions and the tools used to facilitate their efficient and effective review. Compensatory mitigation projects will be evaluated to identify the best practices and where cross training is needed to achieve optimal environmental outcomes and programmatic efficiencies.
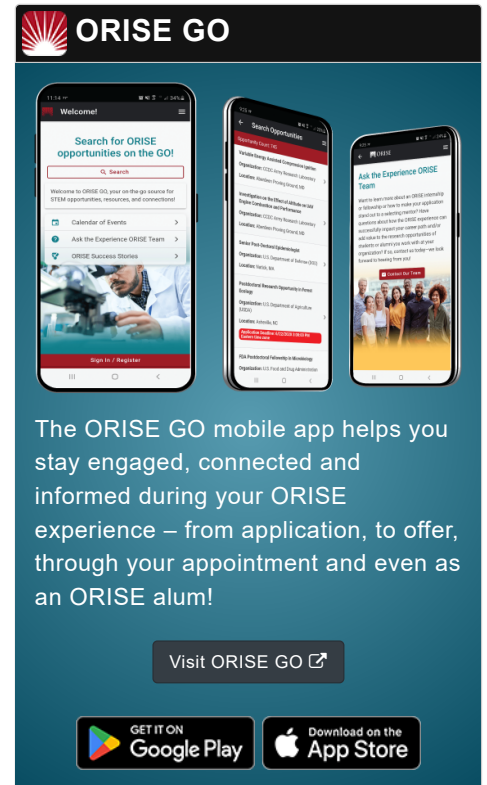
2. Compensatory Mitigation Projects Under Multiple Authorities: Compensatory mitigation projects can be developed to offset impacts under the Clean Water Act Section 404 in addition to other federal, state and local requirements. The participant will research the practices of existing joint compensation projects including how compensatory mitigation performance is tracked and compensation credits are accounted for across authorities.

3. Wetland and Stream Compensatory Mitigation Monitoring and Performance Standards: Wetland and stream mitigation sites success is usually measured in terms of accessing compliance with specific performance standards. Many different measures, protocols, and indexes exist to monitor sites across the country. The goal of this research is to create a compendium of approved standard approaches to monitor and evaluate mitigation sites so that the results are nationally comparable to each other and other reference datasets.

4. Long Term Approach to Compensatory Mitigation Evaluation: This research will aim to help 404 Program partners understand and experiment with approaches for addressing common questions and issues posed to compensatory mitigation programs and understand opportunities for collaboration across programs and agencies at the state and federal level.

Learning Objectives: This research training opportunity will provide an exceptional professional development opportunity in a highly collaborative, multidisciplinary environment. The research participant will have access to a team of experts collaborating in and across disciplines on emerging and high-profile projects and topics including:

- Clean Water Act section 404 regulatory authority and practices
- Review and analysis approaches for complex development projects impacting all types of aquatic ecosystems
- Wetland and stream restoration policy and practice
- Alternative approaches to design, build, operate and evaluate different types of projects that may result in a discharge to aquatic resources (e.g. mining, transportation, pipelines, water supply reservoirs, or retail developments)

Through this program, the participant will gain a better understanding of how EPA implements a variety of regulatory and non-regulatory programs to increase understanding and positive perception of the functions and values of aquatic resources.

The participant will have an opportunity to obtain a broad view of CWA issues and how its programs interrelate, and will gain an understanding of aquatic resource protection programs. S/he may also have the chance to generate reports, analyze data,

create maps, conduct geospatial analyses, write memoranda and create outreach documents. S/he will also have opportunities to submit research project results for publication in trade and peer reviewed journals.

This project will also provide training for support to ongoing branch priorities through GIS analysis, our national tracking system for coordination on Clean Water Act section 404 projects, and collecting and evaluating program information to identify priorities for further research, technical resource and training development.

Mentor(s): The mentor for this opportunity is Brian Topping (topping.brian@epa.gov). If you have questions about the nature of the research please contact the mentor(s).

Anticipated Appointment Start Date: Fall 2021. 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 based on the level of education and experience completed on the start date: **$60,129 (Masters), $72,750 (PhD), $87,198 (PhD +2 years' experience)**. Funding will also be made available to reimburse the participant's travel expenses to conduct research as needed and present the results of his/her research at scientific conferences and stakeholder venues. No funding will be made available to cover travel costs for pre-appointment visits, relocation costs, tuition and fees, or participant's health insurance.

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

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(NPA).

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@orau.org and include the reference code for this opportunity.

Qualifications

The qualified candidate should have received a master's or doctoral degree in one of the relevant fields, or be currently pursuing the degree with completion by the end of December 2021. Degree must have been received within the past five years.

Familiarity with the Clean Water Act Section 404 program, assessment of stream and wetland ecology, and experience with complex data sets and or policies is desirable.

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 12/31/2021 11:59:00 PM.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (1 👁)
  - **Communications and Graphics Design** (1 👁)
  - **Earth and Geosciences** (5 👁)
  - **Engineering** (5 👁)
  - **Environmental and Marine Sciences** (14 👁)
  - **Life Health and Medical Sciences** (7 👁)
  - **Social and Behavioral Sciences** (3 👁)
- **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).