

**Opportunity Title:** ERDC-CHL: Summer 2026 - Projected Land Cover Change Analysis and Flood Extent Sensitivity in the Lower Mississippi River Basin  
**Opportunity Reference Code:** ERDC-CHL-2026-0006

**Organization** U.S. Department of Defense (DOD)

**Reference Code** ERDC-CHL-2026-0006

**How to Apply** Click on *Apply* now to start your application.

**Application Deadline** 5/10/2026 11:00:00 PM Eastern Time Zone

**Description** The U.S. Army Engineer Research and Development Center's Coastal & Hydraulics Laboratory (CHL) performs research on ocean, estuarine, riverine, and watershed systems in support of the U.S. Army Corps of Engineers (USACE) and the Department of Defense (DOD) Task Force in support of the Ocean Commission. A multi-disciplinary team of scientists, engineers, and support personnel work in CHL's internationally known, unique facilities. This team has developed state-of-the-art experimental and computational models for solving water resource problems worldwide. CHL research and development addresses water resource and navigation challenges in a variety of hydrodynamic systems including aquifers, watersheds, rivers, reservoirs, lakes, estuaries, harbors, coastal inlets, and wetlands.

**What will I be doing?**

This research under the Mississippi River Geomorphology and Potamology (MRG&P) Program investigates how land cover change influences flood extent and flood risk in the Lower Mississippi River region.

Building on prior analysis (2001–2021), this project evaluates future relationships between land cover, hydrologic response, and flood inundation. The project involves preprocessing, analysis, and interpretation of land cover datasets and assess how land cover variability influences modeled flood extent outputs generated through the AutoRAPID modeling framework. Under the guidance of a mentor, you will:

- Understand how land cover influences:
  - infiltration
  - evapotranspiration
  - runoff generation
- Gain experience working with large-scale river basin datasets
- Learn how remote sensing integrates with hydrologic modeling workflows
- Develop reproducible geospatial analysis pipelines

**Where will I be located?** College Park, Maryland

**What is the anticipated start date?** June 2026

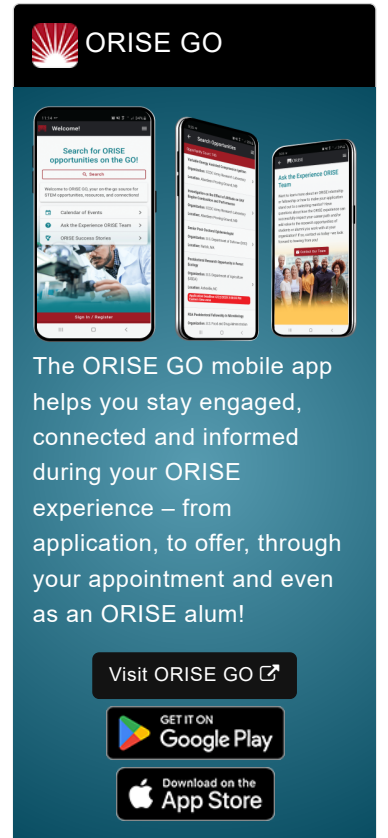
Exact start dates will be determined at the time of selection and in coordination with the selected candidate.

**What is the appointment length?**

This appointment is a full-time summer 10-week research appointment. Appointments may be extended depending on funding availability, project assignment, program rules, and availability of the participant.

**What are the appointment provisions?**

You will receive a stipend to be determined by ERDC-CHL. Stipends are typically based on a



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participant's academic standing, discipline, experience, and research facility location. Other provisions may include the following:

- Health Insurance Supplement (*Participants are eligible to purchase health insurance through ORISE*)
- Relocation Allowance
- Training and Travel Allowance

#### **About ORISE**

This program, administered by Oak Ridge Associated Universities (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 DoD. Participants do not enter into an employee/employer relationship with ORISE, ORAU, DoD or any other office or agency. Instead, you will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE. For more information, visit the [ORISE Research Participation Program at the U.S. Department of Defense](#).

**Qualifications** The ideal candidate will currently be pursuing a bachelor's degree in geography, environmental science, or earth and geosciences. A background in remote sensing and knowledge in GIS and spatial analysis methods preferred.

#### **Application Requirements**

A complete application consists of:

- Zintellect Profile
- Educational and Employment History
- Essay Questions (goals, experiences, and skills relevant to the opportunity)
- Resume (PDF)
- Transcripts/Academic Records - Please upload a copy of a transcript for your current or most recent degree program that meets the disciplinary qualifications of the opportunity. [Click here for detailed information about acceptable transcripts](#).
- One recommendation. We encourage you to contact your recommender(s) as soon as you start your application to ensure they are able to complete the recommendation form and to let them know to expect a message from Zintellect. Recommenders will be asked to rate your scientific capabilities, personal characteristics, and describe how they know you. You can always log back in to your Zintellect account and check the status of your application.

Submitted documents must have all social security numbers, student identification numbers, and/or dates of birth removed (blacked out, blackened out, made illegible, etc.) prior to uploading into the application system. All documents must be in English or include an official English translation. If you have questions, send an email to [USACE@orise.orau.gov](mailto:USACE@orise.orau.gov). Please list the reference code of this opportunity in the subject line of the email. Please understand that ORISE does not review applications or select applicants; selections are made by the sponsoring agency identified on this opportunity. All application materials should be submitted via the "Apply" button at the bottom of this opportunity listing. Please do not send application materials to the email address above.

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experience and beyond!

**Point of Contact** [Debbie](#)

**Eligibility** • **Citizenship:** U.S. Citizen Only

**Requirements** • **Degree:** Currently pursuing an Associate's Degree or Bachelor's  
Degree.

• **Minimum Overall GPA:** 3.00

• **Discipline(s):**

◦ **Earth and Geosciences** ([2](#))

◦ **Environmental and Marine Sciences** ([1](#))

◦ **Social and Behavioral Sciences** ([1](#))

• **Age:** Must be 18 years of age