



Chesapeake StREAM Internship GIS Analysis of Chesapeake Seabed Data for Habitat Mapping Products

Project Description

The NOAA Chesapeake Bay Office (NCBO) and Chesapeake Research Consortium (CRC) seek a summer intern for late May through mid-August 2021 (12 weeks) to assist with translating hydrographic and seabed habitat data into habitat mapping products. The C-StREAM GIS intern will work with the NCBO Observations Program and coordinate with the Fish, Oyster and Ecosystem Science teams. The project goal for the intern is to update an existing substrate component database with new data streams in the mainstem Virginia portion of the bay; and create new biotic and geoform component databases for the entire Chesapeake Bay using the Coastal Marine Ecological Classification Standard (CMECS). The intern will compile data, generate benthic terrain products, interpret data, create habitat segments and develop sampling plans for future field work.

Opportunities

This internship will assist efforts by the [Chesapeake Bay Program's Sustainable Fisheries Goal Implementation](#) Team (Fish GIT), a team composed of state fisheries managers from around the Bay and chaired by the director of the NOAA Chesapeake Bay Office. The Sustainable Fisheries GIT draws together a diverse group of managers and scientists to coordinate and facilitate improved management of blue crab and recovery of oysters, while promoting considerations of fish habitat and forage for key managed species like menhaden, striped bass and alosines. The GIT focuses on advancing ecosystem-based fisheries management by using science to make informed fishery management decisions that cross state boundaries. These internships provide a unique opportunity to contribute to large-scale, long-term ecological research critical to understanding Chesapeake Bay living resources. Each opportunity provides insights into careers in marine science and policy beyond those applied for. These experiences will additionally provide a background in hydrography, oceanography, ecology and restoration science. The position will also provide an opportunity to expand the C-StREAM interns knowledge of Chesapeake flora and fauna and the technologies related to field research and ecosystem monitoring. The internship will provide networking opportunities and assist in meeting science objectives to synthesize and make information on Chesapeake Bay habitats more useful and available to managers and the public.

Deliverables

- Compilation and organization of benthic habitat data and existing products.
- Complete spatial analysis that synthesizes geological, biological, and geomorphic data for Chesapeake Bay.
- Population of the [Chesapeake Bay Open Data Portal](#) with final products.
- Presentation to NCBO staff at the conclusion of the internship summarizing the experiences gained and work conducted.
- Presentation at the C-StREAM end of summer student symposium.

Requirements

- Intermediate-advanced knowledge and experience organizing and analyzing GIS data; using ESRI ArcGIS products preferable.
- Knowledge of and/or comfort in using reference sources on flora and fauna of the Chesapeake Bay.
- Motivated self-starter with ability to work and reason independently.
- Must be a college-level student entering sophomore, junior, or senior year of undergraduate study. Students are also eligible to participate during the immediate summer following their graduation if they are pursuing graduate studies in the fall. Students enrolled in a geography program are most relevant for this position; students from other programs welcome to apply with GIS experience.
- Must be a U.S. Citizen and willing to undergo a security background check.

Work Location and Duration

Due to health concerns, as well as CRC and NOAA policies guiding us during COVID-19 we have not yet determined if this position will be virtual or in person. Currently, we are planning for both possibilities. If we are able to offer this position as an in-person opportunity it will be based out of the NOAA Chesapeake Bay Office in Annapolis, Maryland.

The internship is scheduled to begin Monday, May 24, 2021 and end Friday, August 13, 2021. These are our preferred dates, but the dates can be adjusted to accommodate a student's school schedule if required. We plan on providing interns with access to a NOAA computer, email and phone services if this internship is offered in person. If the internship is virtual, interns will need to have access to a suitable internet, computer and communication resources.

Compensation

The intern will be reimbursed at the end of each month (June, July, and August), for a total of up to \$6,000 (\$500/week) for the equivalent of 12 weeks (480 hours) of full-time activities.

Candidates should expect to follow a normal weekday work schedule (roughly 9-5, M-F) with occasional variations for possible field work or other activities. No benefits are provided. We

offer assistance in arranging local housing if the position is an in-person opportunity if desired. A one-time housing and transportation allowance of \$1,000 is available to each intern to assist with living and transportation expenses. Funds are also available to compensate interns for occasional work-related travel and professional development activities.

Diversity and Inclusion

The Chesapeake Research Consortium and NOAA Chesapeake Bay Office are committed to supporting a diverse and inclusive science-oriented workforce. Our internship program endeavors to recruit from a diverse, qualified group of potential applicants to secure a high-performing workforce drawn from all segments of American society. CRC and NOAA are strongly supportive of broadening the participation of historically Black colleges and universities, Hispanic serving institutions, Tribal colleges and universities, and institutions that work in underserved areas. We highly encourage applications from students at any of the above institutions as well as students that identify as Black, Indigenous, person of color or 1st generation college student.

Application Instructions

Application instructions, required materials, and the C-StREAM application portal can be found on the C-StREAM website (<http://chesapeake.org/c-stream/>).

The deadline for applications is February 20, 2021.