



## Chesapeake Research Consortium C-StREAM Internship Interest Form

**Student Name:**

**Date:**

This C-StREAM internship interest form will be asking you a series of questions so that C-StREAM Staff and Mentors can gain an understanding of your general interests, what experience you are hoping to gain, and which of our identified internship opportunities you are most interested in. You should complete this form and upload it as part of your application materials by 11:59 PM, February 20, 2021 via the C-StREAM website (<https://chesapeake.org/c-stream/>).

### Section 1: Internship type

Are you interested in management or research internships? *Rank your preference (1 through 2, 1 being most preferred). If you are not interested in an internship type, please write "NO" on the line next to the internship type.*

#### \_\_\_\_\_ **Management and Policy Internships**

These internships are typically hosted by our management partners such as the Chesapeake Bay Program Office and NOAA's Chesapeake Bay Office. The focus of these internships is environmental management, policy development and implementation. Projects may include things like literature reviews, data analysis, GIS projects, website/tool design, etc.

#### \_\_\_\_\_ **Research Internships**

The internships are typically hosted by CRC member institutions and take place in a research lab and/or in the field. These internships may also include data collection, data analysis, etc.

### Section 2: Rank the Available Opportunities

The list below displays our available management/policy and research opportunities for the summer 2021 internship season. Full descriptions of the identified internships can be viewed on the C-StREAM website (<https://chesapeake.org/c-stream/>).

*For all opportunities below, both management/policy AND research internships, please rank your preference (1 through 12, 1 being most preferred). Additional, specific research positions will be identified so we will use this ranking to assess your interest in working with each member institution. If you are not interested in an internship, please write "NO" on the line next to the internship.*

## **Management and Policy Internships**

### **Chesapeake Bay Program Office (<https://www.chesapeakebay.net/>)**

Since 1983, the Chesapeake Bay Program has led and directed the restoration of the Chesapeake Bay. Bay Program (CBP) partners include federal and state agencies, local governments, non-profit organizations and academic institutions.

#### **\_\_\_\_\_ Diversity, Equity, Inclusion and Justice Analysis**

This intern will be tasked with conducting a jurisdiction by jurisdiction inventory of the current job market to establish opportunities for careers in the environmental field and their potential growth and salaries. Additionally, the intern will conduct a literature review and collect qualitative and quantitative data to examine the economical and societal benefits of incorporating DEIJ considerations in restoration and conservation activities.

#### **\_\_\_\_\_ Equity and Outreach**

This intern will support CBP's efforts to develop and strengthen new and existing partnerships. The intern will identify underrepresented stakeholders that are not currently engaged with CBP's restoration and conservation efforts and foster meaningful relationships. The intern will also examine existing relationships with partners and evaluate the equitable exchange of knowledge and identify areas of improvement.

#### **\_\_\_\_\_ Immersive Geovisualization of Landscape Change**

This internship would provide an undergraduate student pursuing a game or simulation program an opportunity to develop one or more gamification applications communicating place-based landscape change scenarios (e.g. sea level rise, flooding, population growth and development). The intern would work with the CBP GIS Team to research the context of a given scenario and extend corresponding GIS outputs provided by the GIS Team into interactive and dynamic experiences for the end user.

### **NOAA Chesapeake Bay Office (<https://www.fisheries.noaa.gov/topic/chesapeake-bay>)**

The NOAA Chesapeake Bay Office uses science, service, and stewardship to improve the health of the Chesapeake Bay and ensure its sustainable use for generations to come. As part of NOAA Fisheries' Office of Habitat Conservation, we apply science and engage communities to tackle problems and challenges facing the Bay. Our work includes habitat science, oyster restoration, sustainable fisheries, climate resiliency; and environmental literacy. We are a partner in the Chesapeake Bay Program, leading the Program's fisheries, environmental literacy, and climate resiliency efforts, and supporting the habitat work. The NOAA Chesapeake Bay Office was formally established by Congress in 1992.

#### **\_\_\_\_\_ Sustainable Fisheries**

The project goal for the Sustainable Fisheries intern is to develop a data portal for invasive blue catfish that will summarize biological, ecological, and commercial and recreational fishery data for use by managers, scientists, NGOs and the public. The intern will compile data, develop the data and GIS portal organization framework, conduct spatial analysis, and populate the portal. Other species and habitat data may be included in the portal development.

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## **GIS Analysis of Seabed Data for Habitat Mapping Products**

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.

## **Research Internships**

CRC is currently working to identify the specific research projects and host institutions for our summer 2021 research internship positions. One of the three opportunities has been identified and is presented below. Two additional opportunities will be confirmed and will be hosted by two of CRC's [seven academic member institutions](#).

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### **Blue Carbon Data Detective and Crediting Protocol Review**

Virginia Institute of Marine Science

This position involves a literature review and data exploration (data detective!) that would look at: the types of information and data that are needed to apply existing blue carbon crediting protocols for wetlands and SAV restoration projects; the spatial extent and characteristics of blue carbon data in the Chesapeake Bay; the strengths and limitations of each crediting approach related to available data and information; the impact of blue carbon stock variability in applying existing protocols to the Chesapeake Bay; and potential approaches to verify blue carbon value with existing monitoring programs.

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**Johns Hopkins University**

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**Old Dominion University**

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**Penn State University**

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**Smithsonian Environmental Research Center**

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**University System of Maryland**

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**Virginia Tech**