

# Chesapeake Bay Research Reserve

## Education is Change on the Ground



2022

### Connect



Over 10,000 Virginia Scientists and Educators Alliance downloads

2,242 public program attendees



### Prepare

449 students engaged

4,764 student contact hours

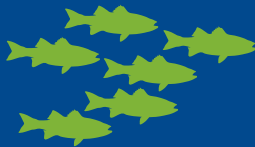
### Educators



1,440 hours training TOTE teachers

241 educators trained outside of TOTE

*"Thanks to the environmental education programs provided through CBNERR, my students were able to investigate and further their understanding of marine species and habitats. Additionally, the students were able to experience techniques used by marine scientists in the field."*



*"Since going to the summer camps at VIMS as a child, I have had an interest in the Bay. Looking back, these camps fostered a love for marine science that I still have today."*

Joice Small  
College student & previous summer camp participant

Chenoa Payne Teacher

## Virginia Scientists and Educators Alliance Program Hits 10,000 Downloads

Since 2015, fifty-nine graduate students across Virginia have participated in the Virginia Scientists and Educators Alliance (VA SEA) program. The program, a collaborative project of Chesapeake Bay National Estuarine Research Reserve (NERR) and VIMS Marine Advisory Program, allows students to enhance their science communication skills by developing middle and high school lesson plans based on their research. The lesson plans developed by our first five cohorts have been downloaded more than 10,000 times by educators in 138 countries. Now, we look to expand VA SEA through NERRS Science Collaborative funding into the Jacques Cousteau NERR and Florida Sea Grant.

### Camp Launch

Camp Launch provides gifted students from low socioeconomic levels with unique academic and enrichment opportunities. In partnership with William & Mary's School of Education, over 50 students participated in week or two week-long summer programs focused on marine science. Students participate in lab and field experiences and conduct research projects, as well as participate in career and personal development seminars.



## In-person Teachers on the Estuary Returns

In 2022, our Teachers on the Estuary (TOTE) workshop returned to in-person programming after several years of the pandemic. Teachers from high needs school districts across Virginia attended a four-day workshop on the Eastern Shore of Virginia, learning about field sampling and corresponding classroom lessons to share with their students. This workshop for 12 teachers was held in conjunction with colleagues at the Virginia Institute of Marine Science, and 100% of attendees intend to integrate resources from the workshop into their classroom.

Virginia's Chesapeake Bay Reserve is one of 30 sites in the National Estuarine Research Reserve System. Each site is a state federal partnership that combines research, monitoring, and education to advance the understanding and management of estuarine environments.



# National Estuarine Research Reserve Education Change on the Ground in 2022

## Connects

People to Estuaries

**1 million+  
ACRES**

of natural classrooms & living laboratories with



**26 INTERPRETIVE  
CENTERS**



*Hello to the  
Connecticut  
Reserve,  
designated  
in 2022!*



**296,131  
VISITORS**

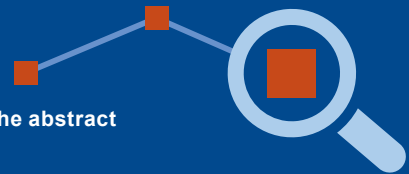
learn about estuaries through Research Reserve outreach & education

## Prepares

the Next Generation

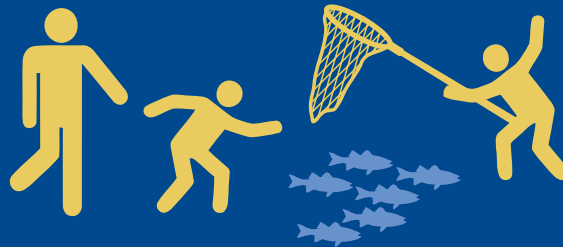
**54,773  
STUDENTS**

take learning out of the abstract & into the outdoors



**4,347  
TEACHERS**

are trained in the estuary & supported in the classroom



### SKILLS BUILT

- ✓ Observation
- ✓ Asking research questions
- ✓ Problem solving
- ✓ Data driven decision making

ESTUARY SCIENCE

LOCAL DATA

LAB WORK

FIELD INVESTIGATION

## Improves

the Environment

**10,570  
CITIZENS**

are trained & inspired to protect their coasts & estuaries



### VOLUNTEER ACTIONS

- ✓ Protect wildlife
- ✓ Monitor water quality
- ✓ Plant native species
- ✓ Clean up the coasts

**30 RESEARCH RESERVE  
EDUCATORS**

lead programs that foster coastal stewardship in communities in 25 states



Creating value through education  
37,371 volunteer hours = \$1,119,261\*