CBNERR-VA By the Numbers

174,313,900

water quality samples (since 2003)

(since 2004)





grants newly funded

active

grants

committees & workgroups with Reserve representation

Aquatroll units deployed along Goodwin Islands & Catlett Islands

transects

Marsh Surface Elevation Table (SET) sites for monitoring

projects conducted within Reserve boundaries by state & federal agencies and universities





720

students served through virtual classroom visits/field trips total Discovery Lab

participants

students hosted through VASEA & teachers the Institute's participating larine Advisory in VASEA Marine Advisory

Program lesson plan

Stay in touch with us!



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@CBNERR









CBNERR-VA Highlights

July 1, 2020 – June 30, 2021

Cultivating science-based and community-supported resource management through innovative stewardship and promotion of socioecological resilience.





Who is CBNERR-VA?

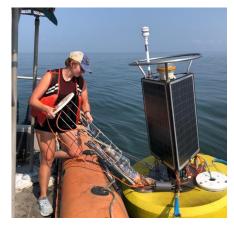
Designated in 1991, the Chesapeake Bay National Estuarine Research Reserve in Virginia (CBNERR-VA) is one of 29 protected areas that make up the National Estuarine Research Reserve System (NERRS) established to promote informed management of the nation's estuaries and coastal habitats.



What We Do









R

Reserve Science

- Water Quality, atmospheric and biological monitoring
 - Water Quality monitoring at all Reserve components and additional stations
 - NERRS System-Wide Monitoring Program Weather Station at Taskinas Creek
 - Submerged Aquatic Vegetation (SAV) biomonitoring and SeagrassNet at Chincoteague Bay (NPS)
 - Harmful Algal Blooms (HABs) monitoring
 - Chesapeake Bay Interpretive Buoy System (CBIBS) https://buoybay.noaa.gov/
- Virginia Estuarine and Coastal Observing System (VECOS)
 http://web2.vims.edu/vecos
- Chesapeake Data Explorer ▶ https://cmc.vims.edu/#/home



Education and Outreach

- Teachers on the Estuary (TOTE) training for K-12 teachers to bolster environmental literacy in local classrooms
- Virginia Teachers Innovating and Designing Experiential Science (VATIDES) training for pre-service teachers on how to conduct field investigations
- Virginia Scientists and Educators Alliance (VA SEA) training for graduate students in marine science
- Discovery Labs: family-friendly workshops on estuarine science
- Critter Collection: a collection opportunity to understand and prepare an estuarine aquarium for classroom use



Coastal Decision-Maker Outreach

- Thematic trainings, workshops and summits on issues relevant to coastal decision-makers
- Technical assistance on coordination, facilitation, communications, planning process, grant writing, DEIJ in coastal zone and social science
- Community engagement through partner coordination and liaising



Environmental Stewardship

- Research permit submissions for various on-site research/monitoring projects conducted by non-Reserve staff, including state and federal agencies and universities
- Marsh sediment core processing to characterize sediment conditions at SET stations
- Marsh base-line habitat maps and emergent wetland biomonitoring at all Reserve components

What's New This Year





- Chronolog station at York River State Park
 - https://www.chronolog.io/site/CBV101
- Camp Launch: serving underrepresented students from the Hampton Roads Region through marine science education
- Support of climate-adaptive nearshore natural and nature-based restoration projects
- Sarah Nuss awarded <u>Conservation Educator of the Year</u> title by the Garden Club of Virginia
- Research reference database that leverages BibTex formats and associated code-based reformatting tools to track and publish research products associated with the reserve
- Lynnhaven River Submerged Aquatic Vegetation (SAV) restoration
- Partnership with MarineGeo and Chesapeake Bay Program to include Goodwin Islands as an SAV Sentinel Site, contributing SAV monitoring data to their databases
- <u>COVID on the Coast</u>: series highlighting the challenges, solutions and silver linings surrounding the COVID-19 pandemic and its impact in coastal VA
- Engagement of the oyster aquaculture industry and establishment of real-time water quality monitoring for facility intake waters at Bevan Oyster Company and Oyster Seed Holdings Company
- Participation in a Marsh Mat Study, a limited U.S. Fish & Wildlife Service pilot study to determine if micro-habitat creation through use of "marsh mats" can be used as a management strategy
- Middle Peninsula Tidal Creek Bathymetry Project
- Equitable Negotiation on the Coast: a workshop for practitioners engaging in strategic relocation (in concert with UVA's Institute for Engagement & Negotiation)
- Margaret A. Davidson Graduate Fellowship

What's Coming Up Next

- State of the York: A holistic synthesis of place-based data for informed decisionmaking and outreach
- Inclusion of the three Reserve-based stations of Taskinas Creek, Catlett Islands and Sweet Hall Marsh in the VIMS Tide Watch network
- NWI Project: Enhancing 3D Coastal Capabilities: "From Basin to Creek"

