



Chesapeake Bay Virginia National Estuarine Research Reserve Impact Statement to the Administration's 2018 National Oceanic and Atmospheric Administration's (NOAA) budget – *reduction and elimination of grants and programs supporting coastal and marine management, research and education.*

The National Estuarine Research Reserve System (NERRS), a network of 29 reserves established by partnerships between NOAA and coastal states, was founded on the principle that healthy estuaries are at the foundation of national and local coastal community economic and social well-being. Using a national approach grounded in integrated programs of research, education and stewardship, the NERRS is advancing the ability of coastal communities dependent on estuaries to address ever increasing and complex challenges. The proposed funding cuts to NOAA reflected in the Administration's fiscal year 2018 budget eliminated federal funding support for the NERRS. NOAA provides the majority of base operational support for the NERRS, including the Chesapeake Bay NERR in Virginia (CBNERR). If enacted, this budget would impact the Commonwealth of Virginia in a number of ways. Below are some highlighted areas of interest and identified areas that are at risk of elimination if we lose the CBNERR.

- **Platforms for Actionable Science.** Protecting more than 1.3 million acres of coastal and estuarine habitats, the NERRS serve as living laboratories for on-site staff, visiting scientists and graduate students. Their efforts are vital to improved understanding of coastal ecosystems, management of our estuaries, and making the information available to a large variety of stakeholders. On an annual basis, over 600 research and monitoring projects are conducted within the NERRS and typically 35 projects are permitted within the CBNERR York River focus area. The CBNERR continues to develop and manage the most robust and comprehensive sentinel site network on Virginia's western shore to address complex management questions with respect to critical bay habitats such as underwater grass beds, tidal marshes and transition zones between marshes and uplands.
- **Water Quality Monitoring.** The CBNERR is a recognized regional leader in developing and administering state of the art water quality monitoring programs. It administers the York River System-wide Monitoring Program, the southern Chesapeake Bay Shallow Water Monitoring Program and provides field maintenance for NOAA's Chesapeake Bay Interpretive Buoy System. In Virginia, these data contribute to yearly state and regional water quality assessments, assist emergency response to storm surge and flooding, track the formation and extent of harmful algal blooms, support fisheries management decisions, and aid shellfish industry operations in addition to many other uses. Through the Virginia Estuarine and Coastal Observing System (VECOS) web portal (<http://web2.vims.edu/vecos>) and water quality monitoring programs, the CBNERR is an instrumental contributor and database manager to Bay observations.
- **Increasing Local Community Decision-Making Capacity.** The CBNERR's Coastal Training Program is known throughout the region as offering high-quality training opportunities in support of local government planning and resource management. Staff from member counties and towns representing over half of all the Virginia Planning District Commissions and regional Department of Defense staff from all military branches take advantage of trainings. The course catalog (http://www.vims.edu/cbnerr/coastal_training/course_catalog/index.php) provides a listing of workshops focusing on coastal hazards and resiliency, stormwater management, shoreline and watershed management, water quality, and resource management and planning. Over the past 5 years, the CBNERR has reached about 2,400 participants during 57 workshop offerings, with most being offered on a no-cost basis.
- **Reaching the Next Generation.** The NERRS educates approximately 85,000 students and 3,200 teachers nationwide each year. Through the combined approach of locally-based investigative classroom curricula and experiential field opportunities, the CBNERR has created highly recognized middle and high school education programs that meet school and state standards. Over the past five years, the CBNERR reached over 13,000 students in seven local neighboring school districts. Additionally, greater than 500 teachers have been engaged over this time period in CBNERR school and teacher training programs.
- **Public Outreach.** The CBNERR has developed signature family and community based programs to increase awareness, understanding and appreciation of natural resources – a fundamental principle for the wise use and long-term health of living resources and coastal communities dependent upon them. The popular monthly 'Discovery Lab' series, featuring expert speakers in concert with exhibits and hands-on activities, has reached over 2,500 life-long learners over a five year basis (http://www.vims.edu/cbnerr/education/public_programs/index.php). CBNERR educators also developed and offer the acclaimed VIMS Chesapeake Bay Summer Camps that are tailored to meet the learning stages of multiple age groups (rising 1st to 8th grade). When combined with other opportunities, the Reserve Public Outreach Program has engaged over 10,000 persons over this period.