

# ENVIRONMENTAL INSIGHTS

NEWS FROM THE UNIVERSITY OF MARYLAND CENTER FOR ENVIRONMENTAL SCIENCE

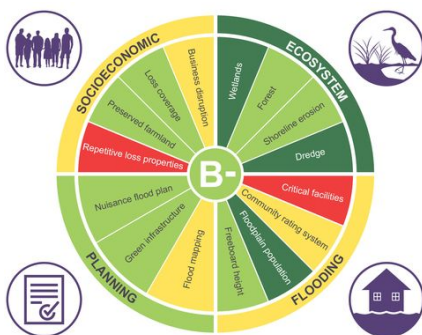
As we welcome in the new year, we look back to some of UMCES' most notable achievements from 2022.

## We celebrated 10 billion oysters, born and raised by UMCES, planted in the Chesapeake Bay



Last year we celebrated 10 billion oysters that have been born and raised at the Horn Point Oyster Hatchery and planted in the Bay. Research continues in full force at Horn Point Laboratory on improving oysters in aquaculture, finding replacement shell material, and using oyster reefs as a way to mitigate coastal erosion. [MORE](#)

## We helped Maryland with its first coastal adaptation report card



With more than 3,000 miles of shoreline and 72% of the state's population living and working along the coast, Maryland and its coastal communities face particular risk to the impacts of a changing climate. The state earned an overall score of B- and is fairly well-adapted to handle continuing threats of climate change. [MORE](#)

## An innovative incubator will jumpstart efforts to control harmful algal blooms



UMCES was awarded a \$7.5 million grant from NOAA to lead an innovative U.S. Harmful Algal Bloom Control Technology Incubator at the Institute of Marine and Environmental Technology. Its goal is to advance ways to control harmful algal blooms that are impacting the health of people and marine ecosystems, as well as regional economies.

[MORE](#)

---

## Our Appalachian Laboratory celebrated its 60th anniversary



During its 60-year history, the Appalachian Laboratory has served as a leading scientific institution in western Maryland, conducting research, advising state leaders, and training the next generation of scientists. Its research has focused on terrestrial and aquatic ecosystems with an emphasis on the rich and diverse environments of

the broader Appalachian region. [MORE](#)

---

## Community members helped our scientists spot dolphins in the Chesapeake Bay



Thousands of Marylanders with their eyes on the water have helped scientists understand when bottlenose dolphins are visiting the Chesapeake Bay. Over the past five years, researchers have used these sightings—submitted by over 12,000 Chesapeake Bay community members—to help track the patterns of dolphin visits to the Bay.

[MORE](#)

---

## Horn Point scientists began to track how microplastics are moving through the watershed

The two-year project will track how microplastics move through the Choptank River watershed on the Eastern Shore of Maryland. Thanks to a grant, a short-wave infrared microscope was purchased that will allow researchers to tell not only how much



microplastic is in samples, but what kinds of plastic are in different parts of the river. [MORE](#)

---

## Our Integration and Application Network hosted the World Seagrass conference in Annapolis



This biennial conference brought together seagrass scientists, students, and enthusiasts from around the world right to the shores of the Chesapeake Bay, a uniquely suited estuary to such a conference because of its long history of seagrass growth and conservation. [MORE](#)

---

## A first-of-its-kind database tracking agricultural phosphorus use world-wide was released

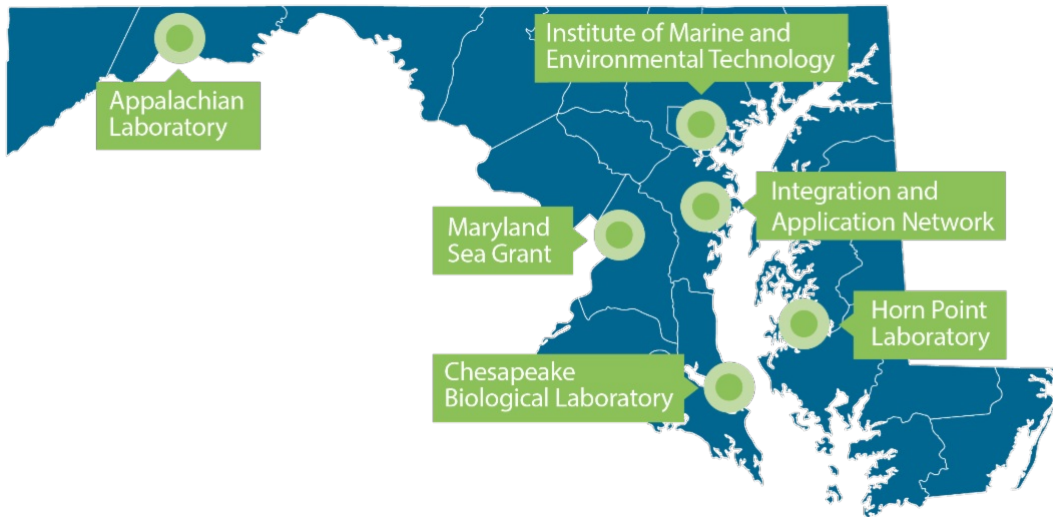


Graduate student Tan Zou led the development of a first-of-its-kind study quantifying cropland phosphorus budgets around the world that was published in the prestigious journal *Nature*. The new database will help countries and regions to evaluate their performances in addressing phosphorus pollution and scarcity challenges, and guide actions towards a more sustainable future. [MORE](#)

### WHAT'S NEXT? SHARE THE SCIENCE BEHIND THE NEWS

Sign up the Environmental Insights newsletter [HERE](#).





## SUPPORT SCIENCE

Your tax-deductible gift will help us continue unbiased scientific research and the education of the next generation of science leaders. **DONATE**



University of Maryland  
**CENTER FOR ENVIRONMENTAL SCIENCE**

**Appalachian Laboratory - Chesapeake Biological Laboratory**  
**Horn Point Laboratory - Institute of Marine and Environmental Technology**

**Integration and Application Network - Maryland Sea Grant**

**AN INSTITUTION OF THE UNIVERSITY SYSTEM OF MARYLAND**

University of Maryland Center for Environmental Science | [umces.edu](http://umces.edu)

