

ENVIRONMENTAL INSIGHTS

NEWS FROM THE UNIVERSITY OF MARYLAND CENTER FOR ENVIRONMENTAL SCIENCE



First-of-its-kind database tracks agricultural phosphorus use worldwide

University of Maryland Center for Environmental Science researchers have created a database that will help countries and regions to evaluate their performances in addressing phosphorus pollution and scarcity challenges, and guide actions towards a more sustainable future. This first-of-its-kind study quantifying cropland phosphorus budgets around the world will help in identifying nutrient management gaps in different regions in food production and consumption systems.

“To address these management challenges, it is critical to use phosphorus more efficiently in agriculture,” said lead study author **Tan Zou**. “Knowing these gaps and potential drivers can help to guide the development and implementation of best management practices, such as soil testing and specialized fertilizers that are better absorbed by crops.” **MORE**



Innovative incubator to jumpstart efforts to control harmful algal blooms

UMCES has been awarded a \$7.5 million grant from NOAA to lead an innovative US Harmful Algal Bloom Control Technology Incubator to advance innovative ways to control harmful algal blooms that are impacting the health of people and marine ecosystems, as well as regional economies. The Institute of Marine and Environmental Technology in Baltimore, Maryland, will partner with the Mote Marine Laboratory & Aquarium in Sarasota, Florida, to offer the first-of-its-kind center to solicit, fund, and assist the development of innovative harmful algal bloom control technology projects with commercial potential.

“Overall harmful algal blooms frequency has been increasing a tremendous amount over past five years due to climate change, increasing temperatures, and legacy nutrients,” said Al Place, who will be directing the project from the Institute of Marine and Environmental Technology. [MORE](#)



Mike Sieracki joins UMCES as Horn Point Laboratory Director

Dr. Michael (Mike) Sieracki has been selected as the new director of UMCES' Horn Point Laboratory in Cambridge, Maryland. A leading oceanographer, Sieracki takes the helm from longtime director Mike Roman, who is stepping down after 20 years to continue his ocean research as a faculty member. Sieracki will be officially joining UMCES on November 14.

“I am impressed by his technical expertise, mentoring experience, and deep commitment to issues of diversity, equity, and inclusion when he served in his leadership role at the National Science Foundation,” said UMCES President Peter Goodwin. “He will be a wonderful director that will truly advance both Horn Point Laboratory and UMCES.” [MORE](#)

Science for Communities Seminar Series returns

Discover how our scientists are developing new approaches to solving environmental challenges facing our world. All seminars are free, online or in-person at the Chesapeake Biological Laboratory in Solomons. [MORE](#)



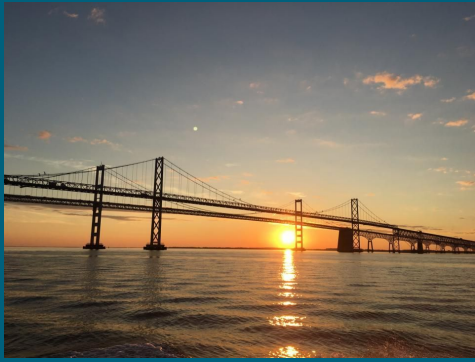
Long Time, No Sea: Bottlenose Dolphins in the Chesapeake Bay

Tuesday, November 8, 7–8 p.m.

Presented by Jamie Testa

The Chesapeake DolphinWatch app launched in 2017, and since then the DolphinWatch team has gathered incredible information on dolphin presence, distribution, and behavior in the estuary. Project Coordinator Jamie Testa will discuss the research findings from the first five years

of DolphinWatch, how graduate students at UMCES Chesapeake Biological Laboratory are advancing dolphin research in Chesapeake Bay, and future plans for the research.



Chesapeake Reflections: What We've Learned During the Past 50 Years and Where We Need to Go in the Future

Tuesday, November 15, 7–8 p.m.

Presented by Dr. Walter Boynton

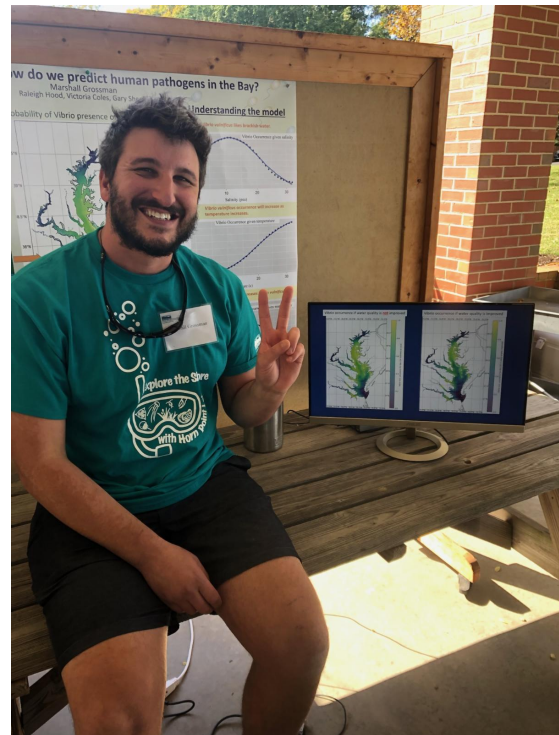
Dr. Walter Boynton, Professor Emeritus, explains how throughout his career he has experienced the pleasures and challenges of trying to better understand how estuaries work, what causes serious degradation to water quality and habitats, and what we might expect from past and continuing restoration efforts.

Next Generation: Marshall Grossman on ecological forecasting in the Chesapeake Bay

Graduate student Marshall Grossman is looking at water quality in the Chesapeake Bay to determine the abundance of *Vibrio*, organisms that are the leading causes of food-borne illness when consuming raw or undercooked seafood.

"It will hopefully lay the groundwork for a more sophisticated way to look at environmental change as not just as an environmental impact but a human response of cause and effect. This has the potential to begin bridging the gap between environmental science and local communities that usually tend to struggle to work with and understand one another," he said.

[MORE](#)





UMCES IN THE NEWS

Saving the sturgeon (Star Democrat)

New research looks to further reduce uncertainty and improve confidence in menhaden assessments (Yahoo Finance)

Maryland's juvenile rockfish count below average for fourth year, but state says there's no need to panic (Baltimore Sun)

New director to take over Horn Point Lab, home to one of East Coast's largest oyster hatcheries (Chesapeake Bay magazine)

Salmon farm developer withdraws discharge permit request amid sturgeon concerns (Bay Journal)

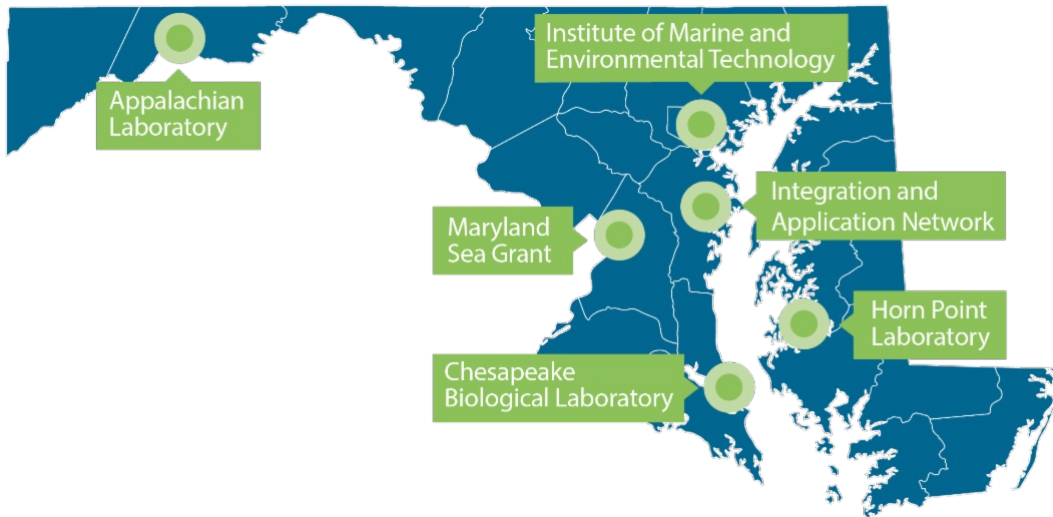
US Coast Guard Cutter Healy reaches the North Pole (Marine Link)

2025 deadline for Chesapeake Bay cleanup could be pushed back, EPA says (Baltimore Sun)

The modern battle for Maryland's oysters (Maryland Today)

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