UMCES

100 YEARS OF SCIENCE

FOR IMMEDIATE RELEASE
January, 2025

Bay Beginning, Global Impact

ABOUT UMCES

University of Maryland Center for Environmental Science (UMCES) is Maryland's preeminent research and educational institution dedicated to advancing scientific knowledge, informing public policy, and training the next generation of environmental leaders. Established a century ago, UMCES is recognized as an unbiased and innovative leader in environmental science, with a compelling reputation for credibility and integrity.

MISSION

"UMCES's 100-year journey is a testament to the power of science to drive solutions for a better future," said President Fernando Miralles-Wilhelm, who recently joined UMCES after a distinguished 30-year career in academia, the private sector and international development organizations. "As we celebrate this milestone, we look forward to continuing our mission to advance environmental science and finding pathways for sustainability on a global scale."

KEY HIGHLIGHTS

For its Centennial UMCES aims to build on its legacy with a bold vision for the next century:

- **Collaborative Network:** UMCES operates six regional campuses/laboratories, spanning from the Appalachian Mountains to the Chesapeake Bay—along with the Maryland Sea Grant College, the Integration and Application Network (IAN), Horn Point Laboratory, and Institute of Marine and Environmental Technology. Together, these entities address critical environmental issues locally and globally.
- **Research Leadership:** UMCES conducts innovative research on topics such as climate change, sustainable fisheries, and nutrient pollution. The institution is a cornerstone of the Chesapeake Bay restoration effort, serving as its "scientific conscience."
- **Graduate Education:** UMCES educates future environmental leaders through a unique graduate program offered in partnership with the University of Maryland, College Park, emphasizing mentorship and interdisciplinary collaboration.

NOTABLE ACCOMPLISHMENTS

- **UMCES played a pivotal role in scientific breakthroughs related to Chesapeake Bay**, such as submerged aquatic vegetation recovery and sustainable oyster restoration.
- **Contributions to global understanding of climate dynamics and resource management** in ecosystems ranging from the Arctic to the tropics.
- **Establishment of the Maryland Greenhouse Gas Reduction Act science support.** UMCES has provided critical

research and modeling to guide Maryland's efforts to reduce greenhouse gas emissions and combat climate change.

- **Leadership in harmful algal bloom (HAB) research.** UMCES scientists have advanced understanding of the causes and impacts of HABs, contributing to better management and mitigation strategies for water quality.
- F**ounding of the Integration and Application Network (IAN).** UMCES created IAN to translate complex scientific data into actionable resources for policymakers, educators, and communities.
- **Innovative research on microplastics and marine pollution:** UMCES has been at the forefront of studies assessing the effects of microplastics on aquatic ecosystems and public health.
- **Advancing renewable energy through offshore wind research:** UMCES has been integral in assessing the environmental impacts of offshore wind development along the U.S. East Coast.
- P**artnerships with state and federal agencies:** UMCES has long been a trusted partner in providing science-based solutions for agencies such as the EPA, NOAA, and Maryland's Department of Natural Resources.
- **Development of the Chesapeake Bay Report Card:** This widely recognized tool, developed in collaboration with partners, tracks the health of the Chesapeake Bay and provides critical data for environmental advocacy and action.

UNIQUE STRENGTHS

- **Trusted Advisor:** Renowned for its independent, science-based resource management recommendations, UMCES provides practical solutions for policymakers and the public.
- **Interdisciplinary Approach**: By integrating science, public policy, and education, UMCES ensures its research has tangible benefits for society and the environment.
- **Responsive and Nimble:** UMCES addresses emerging environmental challenges with agility and innovative approaches.

CENTENNIAL CELEBRATION

As UMCES celebrates 100 years of leadership in environmental science, the institution reflects on its legacy of innovation and its role in shaping a sustainable future. The centennial is an opportunity to highlight UMCES's achievements and reaffirm its commitment to addressing the pressing environmental challenges of our time.

CORE MESSAGES

- **UMCES is integral to Maryland's environmental sustainability and a vital resource for global ecological research.**
- **Its work bridges science and policy to create actionable solutions for complex environmental problems.**
- **UMCES's dedication to education equips new generations to lead in environmental stewardship**.