

# University of Maryland Center for Environmental Science



Guiding our state, nation, and world toward a  
more sustainable future.



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

General Overview October, 2017

# From the banks of the Patuxent...



... Reginald V. Truitt established the Chesapeake Biological Laboratory in 1925.



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

General Overview October, 2017

# A venerable member of the USM

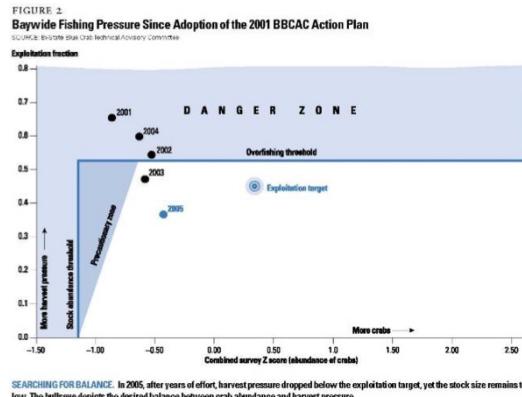
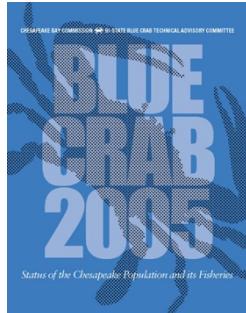
- 1807 – University of Maryland, Baltimore
- 1856 – University of Maryland, College Park
- 1865 – Bowie State University
- 1866 – Towson University
- 1886 – University of Maryland Eastern Shore
- 1898 – Frostburg State University
- 1900 – Coppin State University
- **1925 – University of Maryland Center for Environmental Science**
- 1925 – University of Baltimore
- 1925 – Salisbury University
- 1947 – University of Maryland University College
- 1966 – University of Maryland Baltimore County



# UMCES is strategically located



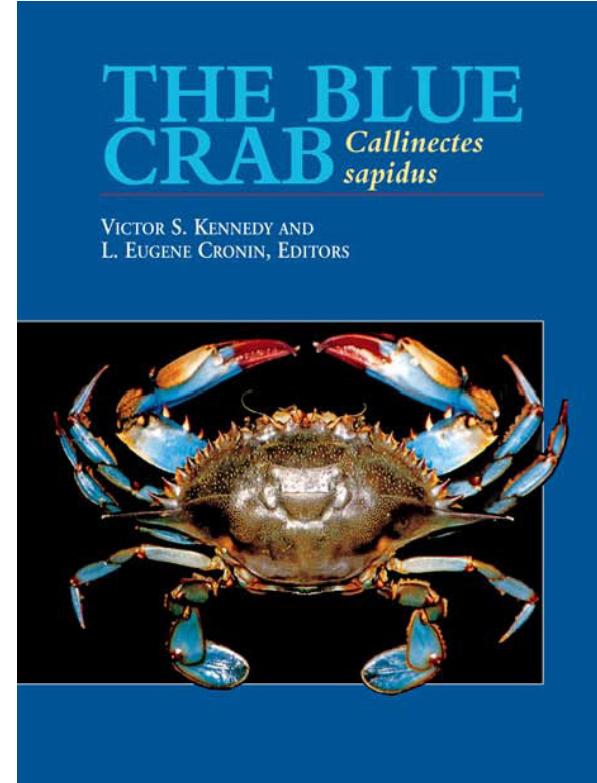
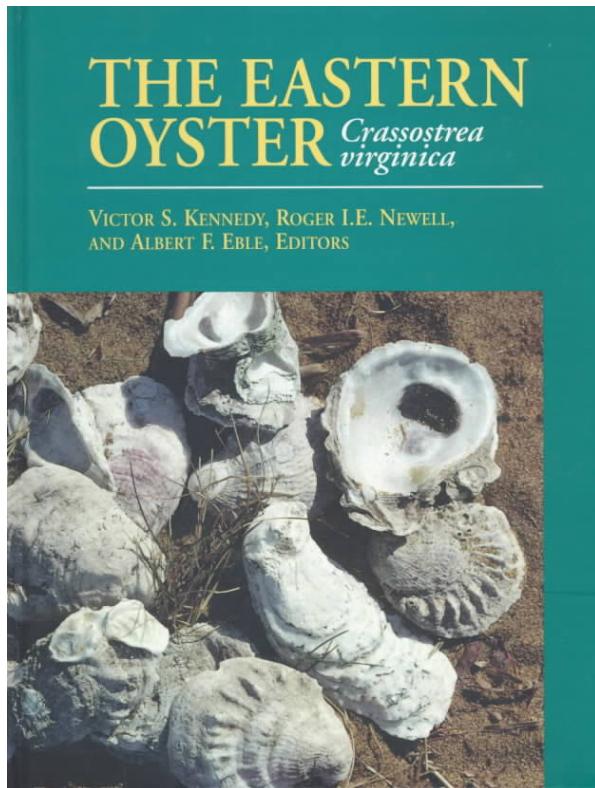
# Leading sustainable blue crab management



Dr. Thomas  
Miller



# “Writing the book” on key Bay species



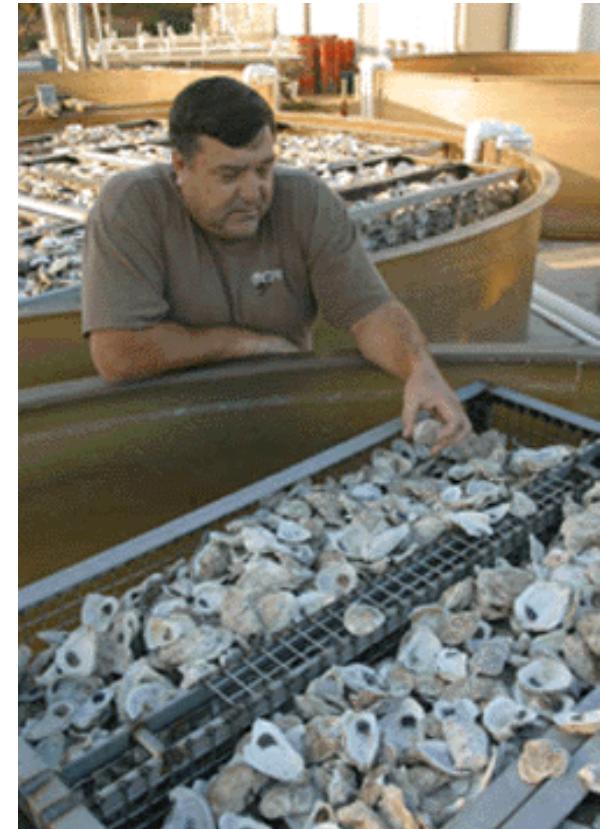
Published by Maryland Sea Grant



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

General Overview October, 2017

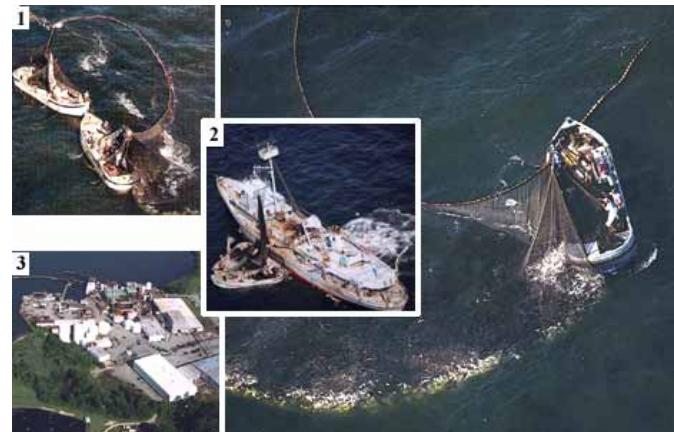
# Addressing the challenge of oyster restoration



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

General Overview October, 2017

# Toward ecosystem-based management



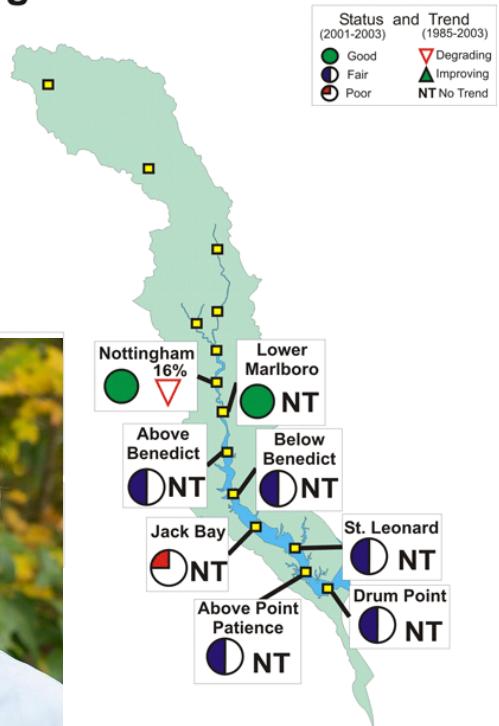
University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

General Overview October, 2017

# Restoring water quality from streams to the Bay



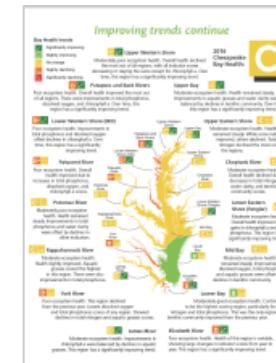
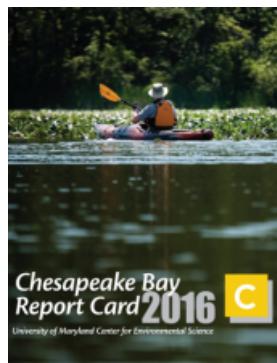
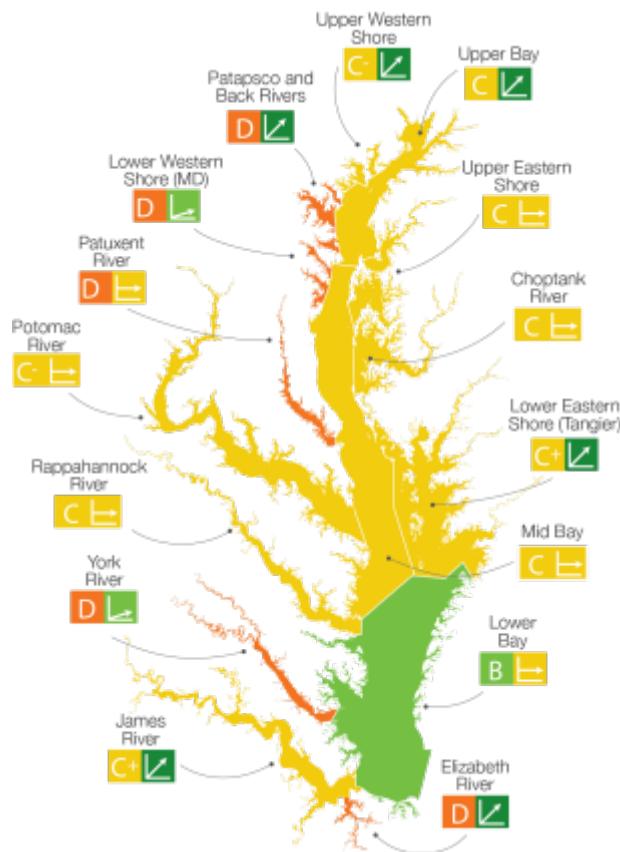
**Summer Bottom Dissolved Oxygen: Patuxent River**



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

General Overview October, 2017

# Assessing Chesapeake Bay health



# Ensuring safe harbors



Michael Fincham



Dr. Mario Tamburri



Maritime Environmental Resource Center



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

General Overview October, 2017

# Research spanning the globe



Dr. David Secor



Atlantic Bluefin Tuna populations



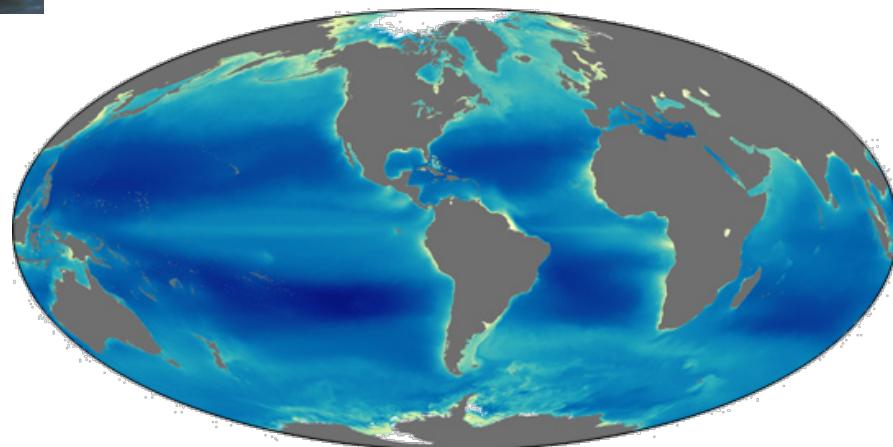
University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

General Overview October, 2017

# Research spanning the globe



Dr. Lee Cooper  
Arctic Ocean biogeochemistry



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

General Overview October, 2017

# UMCES Researchers as Presidents of Professional Associations



Dr. Peter Goodwin



Dr. Margaret Palmer



Dr. Eric Davidson



Dr. Fredrika Moser



Dr. Russell Hill



# Extending lessons from the Chesapeake



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

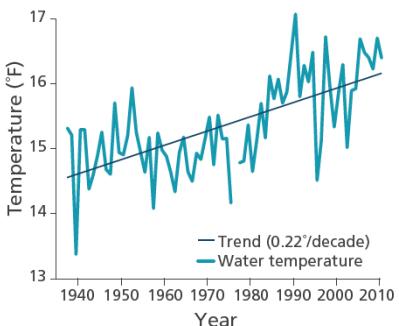
General Overview October, 2017

# Understanding consequences of climate change

Increasing temperature  
at CBL pier



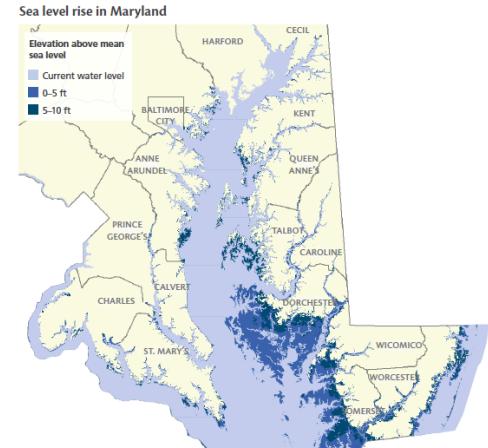
Water temperature - Solomons, MD



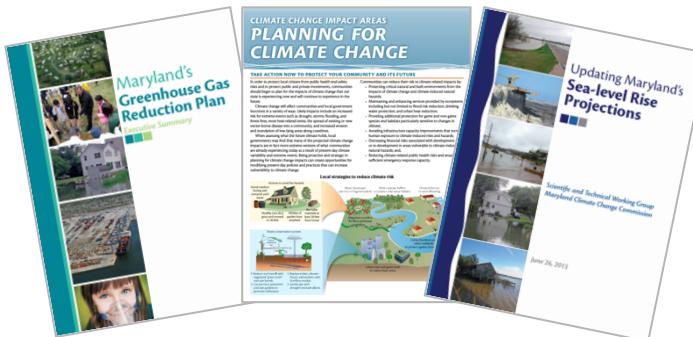
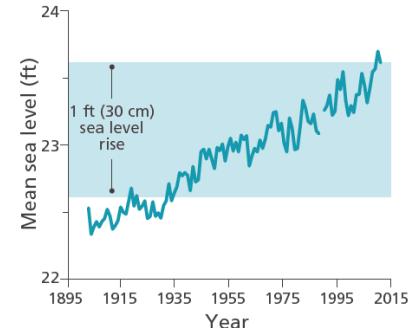
Annapolis flooding



Sea level rise



Mean sea level - Baltimore, MD



# Investing in future scientists



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

General Overview October, 2017

# Supporting education of future environmental leaders



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

General Overview October, 2017

# Investing in new research capabilities



A photograph of a sunset or sunrise over a calm body of water. The sky is filled with dramatic, swirling clouds in shades of orange, red, and purple. The horizon line is visible in the distance, and the water in the foreground reflects the warm colors of the sky.

At times of change, the learners will  
be the ones who will inherit the  
world, while the knowers will be  
beautifully prepared for a world that  
no longer exists.

Alastair Smith

*Thank you for your attention.*