



CENTER for MARINE SCIENCE

"The Coastal University"



Center for Marine Science

- 50 years
- Myrtle Grove, shellfish and finfish hatcheries

Ensuring safe and healthy coasts



CENTER for MARINE SCIENCE

• Affiliated with 108 UNCW faculty & 15 academic programs & MarineQuest

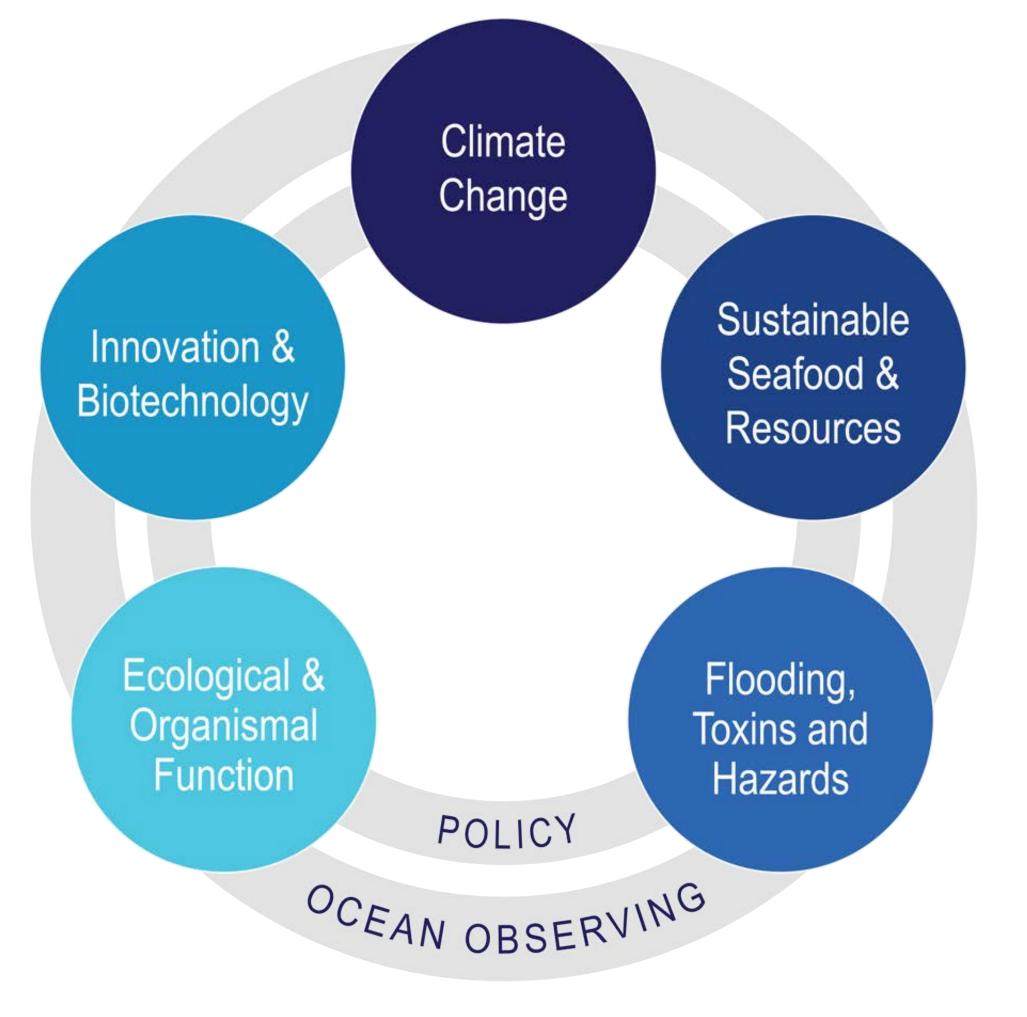








Center for Marine Science



Ensuring safe and healthy coasts



Flooding and Inundation

Complex flooding

Need to be able to model and predict

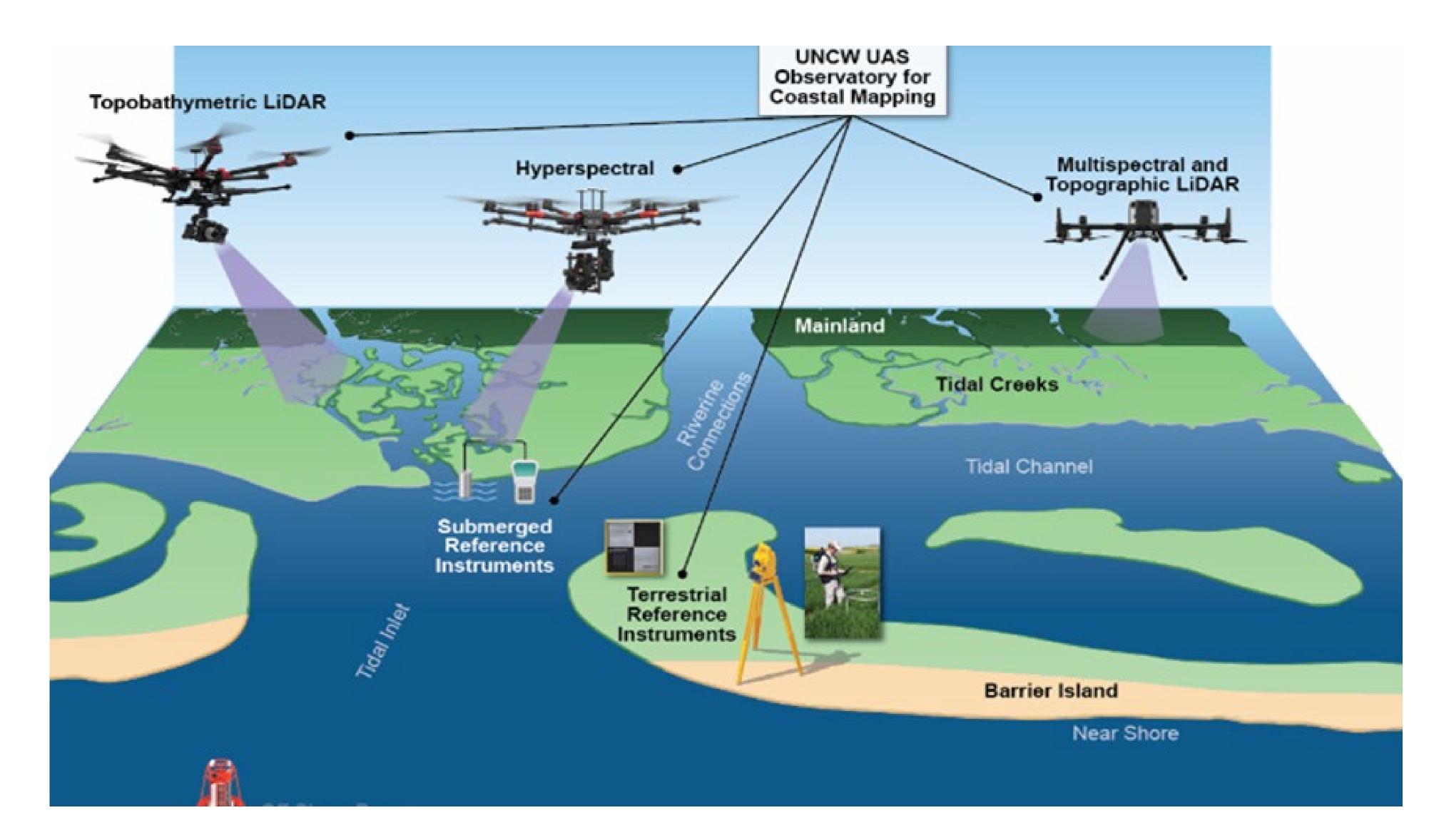
Hazard Nexus





STAR NEWS – CAROLINA BEACH

UNCW Coastal UAS Observatory



Marine Al





Oceanographic Instrumentation

The new buoys CHR60 and CHR60WAVE are already providing valuable weather and sea state data for ships transiting into and out of Charleston Harbor. This is important meteorological and oceanographic information to help aid in safe and efficient marine transportation.

TOM BOYLE

Director, Vessel Operations, South Carolina Ports Authority



- Operates and maintains a suite of specialized field instrumentation
 - Provides technical and electronics support
 - Capabilities include:
 - physical, biological and chemical in situ measurements
 - seafloor mapping
 - uncrewed shallow water and aerial surveys
- Support for "hands-on" learning in marine science laboratory courses.













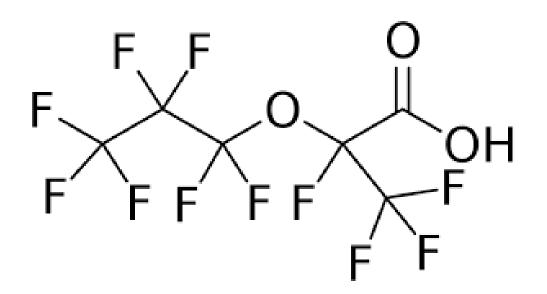
Toxicants & Hazards

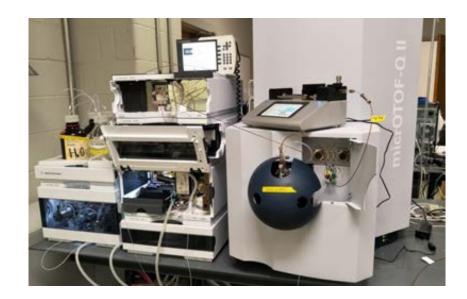
Harmful Algal Blooms





PFAS detection











The beauty of North Carolina's lakes and rivers is being threatened by a group of human-made chemicals, known as PFAS, including GenX.



To understand the extent of PFAS contamination across the state, the North Carolina General Assembly funded a statewide research study.

This study is a collaboration among universities to document the presence of PFAS and understand its impacts on the environment and our health.

Learn about the study

What are PFAS?



UNCW Research Shellfish Hatchery







• Includes a 2.75-acre aquaculture demonstration site adjacent to the CMS pier on the intracoastal waterway

- Strategies for increasing productivity:
 - Selective breeding of oysters
 - Crop diversification
 - Polyploidy
 - Growout challenges (including pathogens, parasites

















Finfish Hatchery







• Established in 1997

- Facility on Harbor Island at Wrightsville Beach consists of:
 - broodstock holding systems
 - larviculture lab
 - nutrition lab
 - experimental hatchery
 - feeds preparation lab
 - recirculating growout systems
 - access to high-quality seawater from Banks Channel
 - Serving 5 restaurants









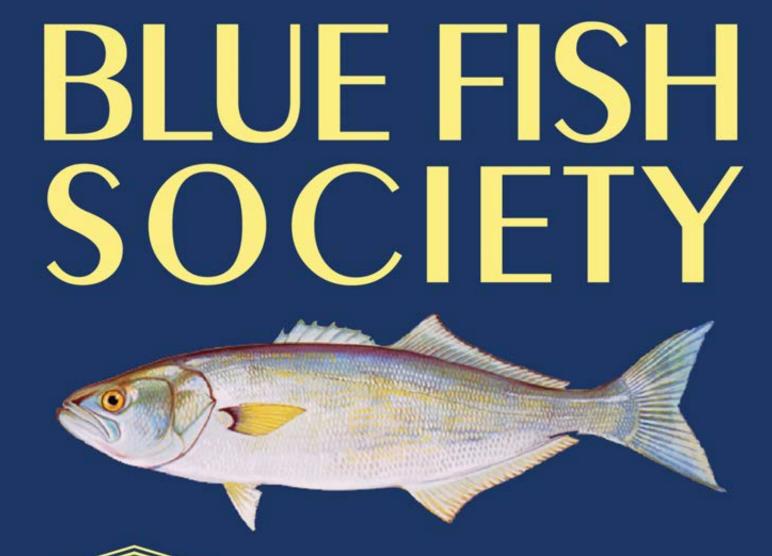












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Questions?

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