

BUILDING CONSENSUS FOR FLORIDA'S HARMFUL ALGAL BLOOM

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Algae blooms are becoming a pervasive problem for Florida, impacting nearly every type of water body within the state. In 2018, the coastal red tide and blue-green algal blooms brought international attention to the state's water quality issues. Concern about the probable human, economic, and environmental health impacts of these harmful algal blooms (HABs) motivated action and water quality has become a statewide priority. Municipal, county and state officials are grappling with effective policies to address the numerous sources of natural and anthropogenic nutrients which are feeding these HABs. Management challenges are confounded due to the differences in species composition and geographic range, and the confusing and often misguided messages that are pervasive.

Success of management decisions is contingent upon their being based on the best available science. In August 2019, Florida Sea Grant convened a forum of 75 harmful algal bloom scientists to assess the current state of the research for Florida's HABs, with a focus on *Karenia brevis* red tide and *Microcystis aeruginosa* cyanobacteria blooms. The Florida Harmful Algal Bloom State of the Science Symposium was developed with guidance from a steering committee comprised of leading research scientists from state and federal agencies (FDEP, FDOH, FWC-FWRI, NOAA, USGS, and UF/IFAS).

The goals of the two-day forum were to develop consensus statements identifying the current state of the science regarding what we know and what we think we know, data gaps and areas of uncertainty, and research priorities. Specific topics addressed include: 1) Bloom initiation, development, and termination; 2) Detection and monitoring, 3) Prediction and modeling; 4) Prevention and mitigation; and 5) Public health. The consensus statements will be used to inform Florida's Harmful Algal Bloom and Blue-Green Algae Task Forces and facilitate cohesive public outreach by aligning and prioritizing the agencies and respective scientific institutions.

PRESENTER BIO: Dr. Lisa Krinsky is a Water Resources Regional Specialized Agent with the University of Florida IFAS and the Florida Sea Grant College Program. Lisa's extension work focuses on coastal water quality and harmful algal blooms in Florida.