SUPPLEMENTARY MATERIALS FOR

FLORIDA SEA GRANT SYMPOSIA PROMOTE COLLABORATION AMONG HARMFUL ALGAL BLOOM STAKEHOLDERS

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TABLE S1. 2019 HABSOS CyanoHAB research priorities and status in 2023. Research priorities listed are those that received the majority of votes during the ranking process. Research priorities were grouped by relatedness as indicated by letters or dependency as indicated by bullet points. *Represents progress has been made between 2019 and 2023 as identified by BGASOS II presenters. **Bold** indicates that the research priority remains on the BGASOS II priority list.

RESEARCH PRIORITIES BY SESSION THEME
DRIVERS OF BLOOM INITIATION AND TERMINATION
1. **Understand the factors that contribute to initiation, persistence, severity, and decline of cyanoHABs.***
BLOOM PREDICTION AND MODELING
1. **Collect regular internal and external nutrient load data into Lake Okeechobee.***
2a. Improve blue-green algae prediction.* 2b. **Develop good physical models of water column structure and circulation.***
BLOOM DETECTION AND MONITORING
1. Enhance blue-green algae monitoring, including time series (longitudinal) as another data point.* • Improve blue-green algae field identification.*
2. Determine if and what role environmental conditions have on cyanotoxin levels.*
BLOOM MITIGATION AND MANAGEMENT
1. Control all nutrient pollution (N & P) – including different forms of N (urea, ammonia, etc).* • Determine the relative importance (quantitative measures) of different nutrient inputs.* • Convert all septic tanks near water to municipal sewage.*
2a. **Determine if your management practice will actually achieve the goal of reducing blooms in Lake Okeechobee and what the ramifications are (chemical, biological, ecological, socioeconomic).*** 2b. **Develop blue-green algae control methods.*** 2c. **Evaluate and weigh engineering approaches versus ecological approaches.***
PUBLIC HEALTH
1. Identify all toxins, risks, and levels of toxicity, including microcystin, BMAA, stress.* • Determine longevity of diverse cyanotoxins in biota relevant for human health consumption. • Understand the persistence of microcystins in sediments and the water column, their ability to be remobilized, and how that affects drinking water. • Determine human exposure pathways through the food chain (e.g., beef, seafood, crops, and milk).* • Assess synergistic effects of toxins with other toxic chemicals.