# MANAGEMENT & MITIGATION HABSOS 2019 Review

## WHAT WE THINK WE KNOW

- Site-specific benthic characteristics will affect the efficacy and safety of mitigation and management practice.
- Algal bloom mitigation must take potential ecological harm and human health risks into consideration.
- The scale of some blooms makes the application of some algal bloom mitigation techniques unfeasible.

### WHAT WE DON'T KNOW

• The fate of algicides.



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#### RESEARCH PRIORITIES - CYANOHABS

- 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 control methods
- 2c. Evaluate and weigh engineering approaches versus ecological approaches
- 3. Evaluate what hydrological conditions can impact management and future management options
- 4. Determine a strategy for effective messaging to public regarding expectations, timelines, and costs
- 5. Create a central database for alternative technologies
- 6. Assess food web ramifications and develop better ecological models

#### RESEARCH PRIORITIES - HABS IN GENERAL

- 1. Conduct pilot studies (lab, mesocosm, small areas) to mitigate blooms using new technologies
- 2. Conduct coastal watershed investments/restoration activities that would reduce the occurrence, duration, and severity of future blooms
- 3. Plan for comprehensive statewide monitoring and mitigation response
- 4. Create a business or political model that funds or implements a mitigation or control solution
  - Conduct a cost-benefit analysis to promote the business model

