- Cyanobacteria infestation (>60%) in the Lake Okeechobee
- Marine life (Dolphins, Manatees, Fish etc.) is in danger
- Causing several water quality issues (hypoxic conditions)
- Human health problems if consumed infested water



## Lake Okeechobee

- FIU Agroecology will conduct workshops, training, and field days
- Role of cyanobacteria biofertilizer will be demonstrated to farmers, stakeholders, and general public
- FIU graduate students will be involved



- "Float it up and skim it off" FIU researchers' teams up with AECOM and US Army Crops of Engineers for cyanobacteria collection Deployable AECOM system for intercepting algae upstream of a spillway **Cyanobacteria Collection unit** - Collected cyanobacteria will be transported to FIU shade house - Samples will be dried in the facility for biofertilizer preparation

## **Extension & Outreach**

- Cyanobacteria biofertilizer will be applied in our cooperative farmer's field
- Tomato and Okra production



**Farmer's Field** 

## Tomato and Okra

- Organic tomato (Lycopersicum sp) and okra (Abelmoschus esculentus) production
- Premium price and higher revenue for farmers



**Cyanobacteria processing unit FIU Shade House** 



- Processed cyanobacteria will be stored in plastic bags as biofertilizer
- Stored in cool, dark, and dry place
- Plastic bags will be loaded in cardboard storage boxes and ready to be transported in farmers' field

Figure 3. Schematic diagram of overall project (cyanobacteria collection, processing, application in the greenhouse and field, and outreach activities for this project



**Storage of cyanobacteria** biofertilizers