

FLORIDA DEPARTMENT OF Environmental Protection

Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, FL 32399 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Interim Secretary

Blue-Green Algae Task Force Staff Minutes

June 23, 2020 10 a.m. SFWMD Headquarters and via Zoom Webinar

General subject matter considered: The Blue-Green Algae Task Force met to discuss innovative technology, public outreach and communication.

Attendee Name	Title	Status
Dr. Mark Rains	Facilitator	Present
Dr. Evelyn Gaiser	Member	Present
Dr. Wendy Graham	Member	Present (Virtual)
Dr. Michael Parsons	Member	Present
Dr. Valerie Paul	Member	Present (Virtual)
Dr. James Sullivan	Member	Present

- 1. Interim Secretary Hamilton, Florida Department of Environmental Protection (DEP), introduced new Chief Science Officer Dr. Mark Rains and provided agency updates.
- 2. Dr. Rains facilitated the meeting.
- 3. Dr. Rains provided an update on Protecting Florida Together and educational signage.
- 4. Edward Smith, Director of Office of Water Policy and Ecosystems Restoration, gave an overview on the Innovative Technologies Grant Program. Innovative projects are those that employ new technologies, or existing technologies applied in a new way. Projects may be categorized as nutrient reduction and removal, algae reduction and removal, and algae detection and prediction.
- 5. Task force members discussed the selection and evaluation process. They proposed that the department consider employing independent scientific peer review to evaluate both project proposals and final project evaluations. The current process for evaluating projects involves coordinating with scientists internal to DEP.

Meeting minutes are not intended to act as a transcript of the meeting. To watch a recording of the meeting or to see the recommendations of the Blue-Green Algae Task Force, please visit ProtectingFloridaTogether.gov/state-action/blue-green-algae-task-force.

- 6. Members discussed monitoring regimes taking place as projects are being implemented. Currently, vendors conduct their own monitoring, and concurrent monitoring is conducted by the local project sponsor to verify the results. All monitoring plans must be approved by DEP.
- 7. Seán Sculley, P.E., Applied Sciences Bureau Chief for South Florida Water Management District (SFWMD), discussed Lake Okeechobee harmful algal bloom (HAB) monitoring and management strategies, including monitoring, data assessment, forecasting, mitigation and prevention. The monitoring network for Lake Okeechobee has been significantly expanded throughout the basin and within the lake, both regarding parameters being monitored and frequency of sampling events. In addition, six real-time monitoring sites have been added to collect data on chlorophyll *a* and blue-green algae. Satellite data from NOAA are also being used to assess bloom potential.
- 8. Rory Feeney, Land Resources Bureau Chief at SFWMD, discussed implementation of innovative technologies throughout the district in partnership with DEP to control bluegreen algal blooms, including hydrogen peroxide, ultrasonic transducers, vacuum services, nano-bubbles, aerators and circulation pumps.
- 9. Task force members discussed comparison of NOAA data with data collected from field sampling as well as the current monitoring regimes that the SFWMD is employing to monitor the progress of innovative technology projects.
- 10. The potential for unintended consequences resulting from various innovative technology projects was discussed, such as changes to pH due to chemical additions, release of microcystin due to mechanical disruption of cells, or destruction of good algae due to indiscriminate algaecide.
- 11. Limitations of some technologies to treat suspended algae throughout the water column was discussed.
- 12. A deeper discussion on data collection and evaluation was proposed for a future meeting.
- 13. Task force discussed site-specific variables that would affect the desirability of a given technology, such as depth, algal species, and mixing.
- 14. A prevention-first approach treating the source of excess nutrients was discussed.
- 15. Existing algal bloom cleanup response procedures were discussed.
- 16. There was a public comment period summarized here. Topics included:
 - a. Reducing phosphorus in Lake Okeechobee.
 - b. Public advisories and health effects.
 - c. Evaluating fish population as a source of phosphorus.
 - d. Ensuring safe drinking water where the source water is impacted by a HAB.
 - e. Actionable regulation.

- f. Innovative technologies.
- g. More frequent meetings.
- h. Following up on consensus recommendations.
- i. Focusing on nutrient reduction and pollution prevention.
- j. Green infrastructure.
- k. Unintended consequences with regards to innovative technologies.
- 1. Implementing site-specific solutions.
- 17. Dr. Rains provided closing remarks.