What has the Blue-Green Algae Task Force Delivered?

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In January, Governor DeSantis issued executive order 19-12. Part of that executive order called for the establishment of a Blue-Green Algae Task Force to focus on expediting progress towards reducing the adverse impacts of blue-green algae blooms now and over the next five years. Given the devastating impact that blue-green algae had on the Refuge last year, the work of this task force is critically important to us.

After holding a series of six meetings across the state of Florida, the task force recently released a report with their recommendations. Below is a summary of some of its key recommendations.

Basin Management Action Plans (BMAPs)

A <u>BMAP</u> is a restoration road map with an identified suite of projects and/or actions intended to restore impaired waterbodies. When discussing how BMAPs have historically been managed, the task force stated: "The effectiveness of specific projects has not been regularly and rigorously assessed due to a lack of available monitoring data calling into question returns on investment."

The task force recommended:

- Funding the storage and treatment infrastructure necessary to reduce freshwater discharges to the Caloosahatchee and St. Lucie River Estuaries
- Making it a goal to reduce not just the amount of phosphorous entering Lake Okeechobee, but also the amount of nitrogen
- That priority be given to projects that have a demonstrated potential to expedite the removal of the legacy nutrients that reside in our water bodies

Agricultural Best Management Practices (BMPs)

"Agricultural Best Management Practices (BMPs) are practical, cost-effective action plans that agricultural producers can take to conserve water and reduce the amount of pesticides, fertilizers, animal waste and other pollutants entering our water resources," according to the Florida Department of Agriculture. Although the law requires agricultural producers in a BMAP area to adopt and implement BMPs, not all do.

The task force recommended:

- Funding and action to increase BMP enrollment in BMAP areas
- The effectiveness of BMPs be supported by adequate data
- Advanced technologies should be incorporated into revised BMP manuals
- BMP manuals should be subject to regular review and revision to achieve a greater environmental benefit

Onsite Sewage Treatment and Disposal Systems; a.k.a., septic systems

"Conventional septic systems are a well-known and substantial source of nutrients to ground water and surface waters across the state," reports the task force. "There are, in fact, more than 2.5 million septic systems in Florida that treat approximately one third of the wastewater generated in the state. The nutrients in the effluent from these systems contributes to the development and maintenance of harmful blue-green algae blooms."

Currently there is no requirement that conventional septic systems be inspected post-installation. Realizing that, the task force recommended the development and implementation of a septic system

inspection and monitoring program with the goal of identifying improperly functioning and/or failing systems so that corrective action can be taken.

Innovative Technologies and Applications

"A broad suite of innovative technologies is potentially available to aid in the prevention, clean-up and mitigation of harmful algae blooms," states the task force report. "Technologies, however, vary widely in approach (biological, chemical, and/or mechanical in nature), scalability and cost."

The task force recommended that investments be made in:

- Technologies with the potential to detect, monitor, and forecast harmful algal blooms to enable more proactive response.
- A program to aid in the development and/or implementation of technologies to reduce nutrients and/or harmful algae.

Blue-Green Algae Blooms and Public Health

"Public health issues as they relate to blue-green algae blooms are an increasing concern in Florida, though the science bearing on those concerns is quite limited and not well developed," notes the task force's report.

To respond to growing health concern, the task force recommended that the Florida Department of Health (FDOH) work collaboratively with the Florida Department of Environmental Protection (FDEP) to implement a transparent and consistent communication plan to inform the public about the potential health impacts associated with exposure to algae and/or algal toxins. To respond to the lack of relevant science, the task force recommended that regular and proactive sampling for algal toxins be incorporated strategically into existing and future water quality sampling/monitoring programs.

Science-based Decision Making, Data Needs and Monitoring Programs

Because of the lack of effective monitoring data, the task force recommended that:

- Monitor programs incorporate additional environmental parameters, where appropriate
- An expanded water quality monitoring program be implemented in each of the relevant BMAP areas; e.g., the Caloosahatchee estuary.

Conclusions

The work of the task force, undoubtedly, has made a significant contribution in improving the quality of the water in South Florida. However, the size of that contribution is an open question. For example, how well will the FDOH and the FDEP work to implement the various recommendations, such as implementing a transparent and consistent communications plan to inform the public about health risks?

In similar fashion, how aggressively will the Florida legislature adopt the recommendations? For example, given that the Florida legislature passed a law in 2010 to require septic system inspections and then repealed it two years later, will the legislature be motivated to pass such a law again this year?