



July 10, 2020

Dr. Thomas Frazer  
Chief Science Officer  
3900 Commonwealth Blvd.  
Tallahassee, FL 32399

Sent by email

Dear Dr. Frazer and members of the FDEP Blue-green Algae Task Force

The Waterkeeper Alliance Regional Entity, Waterkeepers Florida, is composed of 14 individual Waterkeeper organizations in Florida. Our collective project area in Florida encompasses 45,000 square miles of watershed, home to 15 million Floridians. The global mission of the Waterkeeper Alliance is to strive for “drinkable, fishable and swimmable” waters.

We are contacting you and members of the Blue-green Algae Task Force (BATF) regarding ongoing and unresolved issues of public health risk notification with respect to cyanotoxins in Florida. As part of the BATF initial consensus document the BATF recommended the following to the Florida Department of Environmental Protection (FDEP) and the Florida Department of Health (FDOH):

*“Defensible health advisories should be established by the Florida Department of Health and defensible water quality criteria should be established by the Florida Department of Environmental Protection. These actions should be supported by the best available science and monitoring, and updated as new information becomes available. The task force further recommends that the Department of Health work collaboratively with the Department of Environmental Protection to implement a transparent, consistent and comprehensive communication plan that recognizes the diverse population in Florida in order to inform the public about the potential health impacts associated with exposure to algae and/or algal toxins.”*

FDEP’s policy or position on cyanobacteria, as it pertains to recreational exposure, is for the public to report a bloom on the FDEP algal bloom web site. FDEP reports the results for the species of algae and associated toxins when present on their Departmental Algal Bloom Web Site from Departmental surveys or sampling to verify reports from the public. However, FDOH is the designated agency for notifying the public of harmful algal bloom (HAB) health risks. Observations by Florida Waterkeepers around the state indicate that the FDOH policy for notifying the public of health risk from HABs is not implemented consistently among FDOH County Health Units.

During the September 25, 2019 meeting of the BATF, FDOH stated that it had a consistent statewide policy with regard to cyanotoxins and would work collaboratively with FDEP to implement that policy. More specifically, FDOH indicated that a yellow FDOH HAB caution sign would be posted at least seasonally at public access areas of waterbodies that had or are experiencing cyanobacteria blooms as

reported to them by FDEP and a red FDOH HAB Alert sign would be posted when toxins were documented. Apparently the FDOH policy for signage stems from the following statements on their HAB web site about blue-green algae:

“CONTAMINATED WATER - Water from areas with blue-green algae can make animals and people sick— stay away from these areas. SWIMMING - Don’t swim in or around blue-green algae”. Furthermore, FDOH presented information to the BATF on September 25, 2019 that implementation of the previously described policy for risk notification would be voluntary for FDOH County Health Units. The voluntary stipulation for FDOH County Health Units was also verified through personal communication with FDOH staff.

To determine the consistency of FDOH’s HAB public health risk notification per FDOH County health units, four Waterkeeper organizations (St. Johns Riverkeeper, Lake Worth Waterkeeper, Kissimmee Waterkeeper and Calusa Waterkeeper) conducted a survey of public access areas with regard to FDOH signage between May 15, 2020 and June 30, 2020. We surveyed three major waterway systems including the Caloosahatchee River, Lake Okeechobee and St. Johns River. Each of the three systems had a history of cyanobacteria blooms. The survey was conducted within the jurisdictions of the Lee, Hendry, Glades, Palm Beach, Duval, Putnam, Clay, Seminole and St. Johns County Health Units. The highest priority public access points for our survey were publicly owned boat ramps, beaches or designated public fishing areas with a secondary priority for privately owned boat ramps that allowed public access. The survey included 31 public access points among the three waterway systems described above.

The results of the survey were that 22 (71%) of the 31 access points had no FDOH HAB signage of any kind, and 9 (29%) had an FDOH sign with some relevance to HABs, typically a FDOH HAB Caution or Alert sign.

Please refer to this interactive map for more information on survey locations and associated signage status. Red icons indicate no FDOH HAB signs at public access points, green icons indicate either a FDOH HAB Caution or Alert sign during the survey period.

<https://www.google.com/maps/d/edit?mid=129sNuhs-dubu-qK25NjklU54ZGmN7Tw5&usp=sharing>

From January 1, 2020 through June 30, 2020 cyanobacteria blooms were common in each of the three waterways surveyed and included the period during which the survey was conducted. In the Caloosahatchee River and estuary, FDEP reported 22 sampling dates for cyanobacteria of which 19 (86.4.0%) resulted in confirmed cyanobacteria blooms and microcystin was documented from threshold detection levels up to 4.3 ug/l for 10 samples (45.4%). For Lake Okeechobee, 109 samples were collected by FDEP or SFWMD during the same period of January 1, 2020 to June 30, 2020 of which 59 (54.1%) were positive for cyanobacteria blooms, and cyanotoxins from detectable levels up to 800 ug/l, were documented by FDEP for 55 samples (50.5%.) On four dates, toxins were detected from threshold detection levels up to 1.1ug/l when no bloom was observed.

At the Lake Okeechobee Canal Point access, there was an inappropriate FDOH sign cautioning residents of red tide, adding confusion about public health risk. Starting in mid-June, concurrent with a spatially massive *Microcystis* bloom on Lake Okeechobee, there was no HAB signage of any kind at the Lake’s Clewiston Public Access Boat Ramp, one of the busiest boat ramps in south Florida. Microcystin levels were frequently documented on Lake Okeechobee as reported above and during our survey.

The appalling lack of appropriate FDOH signage notifying the public of health risk from cyanobacteria, even during periods of frequent cyanobacteria blooms and the periodic documentation of microcystin or other cyanotoxins, is a reflection of FDOH County health units lack of consistency with FDOH HAB policy on public health risk notification.

Since FDEP has referred the BATF Public Health recommendation on “algae and/or algal toxins” back to the BATF for further comment, we would ask that the BATF develop and recommend specific criteria and requirements to FDEP and FDOH for notifying the public of risk from recreational exposure to cyanobacteria (blue-green algae). The criteria and requirements should involve numeric thresholds for recreational exposure to cyanotoxins as indicated in the Waterkeepers Florida Triennial Review comments to FDEP on May 31, 2019. The BATF should incorporate these numeric thresholds in order to provide transparent and consistent guidance enabling a required reporting process for FDOH County Health Units when cyanobacteria or other toxigenic algal species are occurring in public waters.

Furthermore, the BATF should recommend a sampling protocol to FDEP specifically for cyanobacteria in surface waters that enables a more comprehensive and consistent understanding of public health risk from cyanotoxins.

We thank you for your public service and await your recommendations.

Respectfully and with endorsement by Waterkeepers Florida,

Reinaldo Diaz, Lake Worth Waterkeeper

Lisa Rinaman, St. Johns Riverkeeper

John Capece, Kissimmee Waterkeeper

John Cassani, Calusa Waterkeeper

CC.

DR. EVELYN GAISER, FLORIDA INTERNATIONAL UNIVERSITY

DR. WENDY GRAHAM, UNIVERSITY OF FLORIDA

DR. MICHAEL PARSONS, FLORIDA GULF COAST UNIVERSITY

DR. VALERIE PAUL, SMITHSONIAN

DR. JAMES SULLIVAN, FLORIDA ATLANTIC UNIVERSITY HARBOR BRANCH