



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

**JUL - 1 2016**

The Honorable Patrick Murphy  
House of Representatives  
Washington, D.C. 20515

Dear Congressman Murphy:

Thank you for your June 27, 2016, letter to U.S. Environmental Protection Agency Administrator Gina McCarthy regarding the Indian River Lagoon and the ongoing effects of algal blooms on the estuary. The Administrator asked me to respond on her behalf.

The agency shares your concern regarding the impacts the algal blooms are having on the area as well as the concerns we have heard from the impacted communities in South Florida. Harmful algal blooms are an environmental problem that can have severe impacts on human health, aquatic ecosystems and the economy. Algal blooms can result in waters with very low oxygen levels, which are harmful to aquatic life. Some blooms can produce extremely dangerous toxins, raise treatment costs for drinking water and hurt communities and industries that depend on clean water. Toxins in blue-green algae, also known as cyanobacteria, can cause nausea and vomiting if ingested, and rash or hay fever symptoms if touched or inhaled. Drinking water containing certain levels of specific toxins can cause long-term liver disease.

Effective water management efforts in Lake Okeechobee, which are necessary for dike and levee protection and flood prevention, are a significant factor in mitigating algal blooms in South Florida. As part of its water management effort, the U.S. Army Corps of Engineers must keep the water level in the lake at a level protective of flooding. This has required water releases from the lake, which currently has a large blue-green algal bloom, and discharges into the Caloosahatchee and St. Lucie River and Estuary. In the last week, toxic algae have been found at some sampling locations in these receiving waterbodies. The Corps has decided to reduce releases from the lake beginning this weekend.

Most of Florida's public drinking water supplies are groundwater systems and are not at risk of contamination from toxins associated with the algal blooms. However, there are a small number of drinking water systems in that area that use surface water as a source. The EPA is coordinating with Florida Department of Environmental Protection (FL DEP) to make sure these systems are not at risk. In addition, Fort Myers source water can be affected by discharges from Lake Okeechobee. The agency is investigating whether Fort Myers water system is implementing a harmful algal bloom monitoring plan to protect citizens against the risk of a cyanobacteria outbreak. The EPA has also issued Health Advisories for cyanotoxins and "Recommendations for Public Water Systems to Manage Cyanotoxins in Drinking Water." You can find this document at: <https://www.epa.gov/sites/production/files/2015-06/documents/cyanotoxin-management-drinking-water.pdf>

The FL DEP takes the lead in collecting and testing algae and water samples in response to blooms reported by citizens, other agencies or other sources. The Water Management Districts assist FDEP, as requested, with collecting algal bloom samples. The Florida Department of Health (DOH) has the lead role when an algal bloom presents a risk to human health or there are reported health incidents

associated with a bloom. DOH issues health advisories as it determines to be appropriate when toxicity levels are of concern. It may also post warning signs when blooms affect public beaches or other areas where there is the risk of human exposure. Currently, health warnings have been posted in the estuary and several beaches have been closed near Stuart, Florida.

The EPA Region 4 Science and Ecosystem Support Division has engaged with FL DEP to offer technical assistance. Additionally, I have offered assistance from Region 4 SEDS staff who have field expertise and can provide support in collecting water samples from algal-bloom affected areas.

Unfortunately, as you noted in your letter, problems like this are not new to the area--they require long term solutions. To that end, the EPA is currently serving as co-chair of the Harmful Algal Bloom and Hypoxia Research and Control Act Interagency Working Group; collaborating with NASA, NOAA, and the USGS on the Cyanobacteria Assessment Network to detect and quantify cyanobacterial blooms in U.S. freshwater lakes and reservoirs using satellites; and collaborating with the Center for Disease Control and Prevention in developing the One Health Harmful Algal Bloom (HAB) System to collect data on HABs and associated human and animal illness. The agency also supports the work of our federal partners such as the Army Corps as they study options to develop long-term solutions on the ground in Florida, and we stand ready to provide our assistance and technical expertise to that end.

Sincerely,

  
Heather McTeer Toney  
Regional Administrator