Toxic Algae Talking Points

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COMMUNITY SERVICES

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"For more information on EPA Health Advisories and other regulations, please visit: https://www3.epa.gov/

First: What you need to know

Following weeks of sustained rainfall exceeding local historical amounts, the U.S. Army Corps of Engineers (USACE) began discharging polluted freshwater from Lake Okeechobee into the Saint Lucie River. Historical rainfall since the middle of May had caused the lake to rise more than a foot, prompting the USACE to discharge water. As a result of these freshwater discharges, which brought with them pollutants and algae, Martin County Health Department has issued a bacteria advisory for areas including those under the Roosevelt Bridge downtown, near Sandsprit Park, Leighton Park, and Stuart Sandbar.

Why are the discharges necessary?

The United States Army Corps of Engineers (USACE) is responsible with managing Lake Okeechobee water levels to ensure the Hoover Dike is not structurally impacted in such a way that it fails or causes regional flooding to communities surrounding the Lake. Even when Lake Levels are below the 18 foot threshold established by the 2008 Lake Okeechobee Regulation Schedule (LORS), the USACE must achieve a level of 12.5 feet in preparation for "wet-season" months, in the fall. In recent months, the USACE has modified its release schedule to accommodate a "pulsed discharge" of freshwater in order to mitigate the effects, surge, and propensity of algal blooms.

Why is the water polluted?

The St. Lucie River and Estuarial System is historically a delicate "brackish" ecosystem; balancing both fresh and salt water levels naturally. The extreme rate and volume of freshwater discharges permeating the St. Lucie system as a result of Lake Okeechobee releases has destabilized this balance at a time where water temperatures are perfect for blue-green algae growth. The pollution in this freshwater however, is directly related to agricultural runoff (particularly phosphate) from farming industries south of Orlando and surrounding the Lake itself. There are also additional concerns of septage leeching into the system locally.

Why are these pollutants allowed into our water?

Although the U.S. Congress established a basic structure for regulating the discharge of pollutants into waters of the United States through the 1972 Clean Water Act, not all pollution is effectively captured with modern EPA policies. Typically any government, industry, or entity that pollutes water systems requires a National Pollutant Discharge Eliminations System (NPDES) permit. The EPA is tasked with monitoring this permit system and establishing technology and water quality limitations of pollution effluent.

However, in 2008, the EPA established a new "Water-Transfer Rule," which effectively deregulated the process of transferring polluted water from one system into another non-polluted system (thereby spreading pollution). EPA officials claimed at the time that all 'Waters of the United States' comprise a "unitary" system – completely altering what had been historical judicial interpretation and common law. The federal agency similarly concluded that this water transfer action by any industry or agency no longer required an EPA (NPDES) permit; and instead would be subject to water resource management agency oversight and other state authorities. Without strict EPA oversight, effluent pollution and its proliferation across water systems has gone unchecked since the rule change.

What are the adverse health effects of the toxins?

All residents and citizens are advised to not have direct contact with water determined to be toxic with toxic blue-green algae as this contact can lead to a host of allergen-like symptoms. Digestion of water containing microcystin is also linked with gastroenterological complications, liver disease, and possibly permanent neurological damage. Citizens should contact their health professional if they believe to have complications resulting from direct exposure. Local, state, and federal health officials are also monitoring the toxins and studying possible negative health implications for inhalation of hydrogen sulfates surrounding large algal blooms.

What action is the City of Stuart taking?

The City of Stuart is collaborating with Martin County, the local legislative delegation, federal representatives, and other state agencies in providing prompt and accurate information for our residents. The City is committed to finding both short and long term solutions to this highly complex problem and will continue to work at all levels until a permanent solution is found.

Where to go for more information

- For City of Stuart news and information please visit: http://cityofstuart.us/
- For more information on EPA and agency Health Advisories please visit: https://www3.epa.gov/