Algae Bloom Toxins in River Raise Serious Concerns

Recent test results indicate presence of harmful toxins

Jacksonville, FL – Test results from algae samples recently collected by St. Johns RIVERKEEPER found toxin levels up to 300 times the recreational safe limit for microcystins.

The Environmental Protection Agency’s Recommended Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories limit is currently 8 micrograms per liter (ug/L) total microcystins.

All five samples tested by Greenwater Labs contained toxins far in excess of what is considered safe for swimming and recreation. The samples were collected at the following locations on September 27 and 28:

- St. Johns River at St. Vincent’s Hospital (9/27/21) 1,060 ug/L
- St. Johns at the end of Seminole Road in Avondale (9/27/21) 2,415 ug/L
- Trout River near Highway 17/Main Street Bridge (9/27/21) 54.8 ug/L
- St. Johns River at River Road in San Marco (9/28/21) 615 ug/L
- Mouth of Craig Creek in San Marco (9/28/21) 491 ug/L

The St. Johns Riverkeeper test results differ dramatically from samples recently taken by Florida Department of Environmental Protection (FDEP) at similar locations.

- St. Johns River at St. Vincent’s Hospital (9/21/21) 3.9 ug/L
- St. Johns – Canal to Marco Lake in San Marco (9/23/21) 24 ug/L
- Mouth of Craig Creek (9/23/21) 1.5 ug/L

“Our sample results demonstrate how toxic some of these algae blooms can be,” explains Lisa Rinaman. “Unfortunately, there is no way to determine if a bloom is toxic without testing, so it is best to avoid contact and exposure with all algae outbreaks you may encounter.”
Toxins produced by the blooms can cause rashes, stomach cramps, nausea, diarrhea, and respiratory irritation. High exposure to toxins can affect the liver and nervous system.

If skin contact occurs, wash off immediately and thoroughly with clean water and soap. Long-term exposure can potentially result in nerve or liver damage. These toxins can be very dangerous depending on concentration levels and pathways of exposure.

Pet owners should prevent their pets from drinking or swimming in bodies of water where algal blooms are present. Ingestion of algal toxins can cause an animal to become extremely ill. If contact occurs, rinse off immediately and keep them from licking their fur.

While blue-green algae, also known as cyanobacteria, is naturally present in our waterways, excessive nutrients from fertilizers, manure, industrial wastewater, and failing septic tanks can stimulate the growth of toxic algae blooms.

Algae blooms block sunlight from reaching submerged aquatic plants and clog fish gills. As blooms die and decompose, oxygen levels are depleted causing fish kills. They can also produce harmful toxins.

Citizens can help prevent algae blooms and nutrient pollution by limiting the use of fertilizers, picking up dog waste, maintaining septic tanks, and reaching out to their elected officials to demand protective policies to reduce nutrient loading in our waterways.

If citizens spot what looks like bright green, paint-like scum on the surface of the water, they should steer clear. Do not recreate, boat, swim, or fish near an algae bloom.

If you encounter an algae bloom, report it to the FDEP by calling 855-305-3903 or completing an online form. You can also report to St. Johns RIVERKEEPER at report@sjrk.org.

Lisa Rinaman explains, "We encourage citizens to continue to report blooms to FDEP. It is critical that these blooms are documented, so state agencies can better understand the extent of the problem and the urgent need to reduce the amount of nutrient pollution that is entering our waterways."

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**About St. Johns RIVERKEEPER**

St. Johns RIVERKEEPER, Inc. is a member-supported, nonprofit advocacy organization for the St. Johns River and its watershed. Our mission is to defend the St. Johns River and advocate for its protection. Visit www.stjohnsriverkeeper.org for more information.