SUMMARY

There were 20 reported site visits in the past seven days (5/28 – 6/1), with 20 samples collected. Algal bloom conditions were observed by the samplers at 14 of the sites. Lake Okeechobee was partially obscured by cloud cover in the 6/3 satellite imagery and showed moderate to high bloom potential on approximately 15% of the lake, with the heaviest accumulation along the northern and northwestern shorelines. No significant bloom potential was observed in visible portions of the Caloosahatchee River or estuary, but algal bloom conditions were reported on the Caloosahatchee River at several locations between the S77 structure and the Davis Boat Ramp. No bloom potential was observed in visible portions of the St. Lucie River or estuary; however, algal bloom conditions were observed on the C44 canal downstream of the S308 structure and downstream on the C44 Canal at Time Powers Park. Satellite imagery from 6/2 showed moderate bloom potential over 50% or more of Lake George and on the St. Johns River immediately downstream from Lake George and in the vicinity of Willis Point. Please keep in mind that bloom potential is subject to change due to rapidly changing environmental conditions or satellite inconsistencies (i.e., wind, rain, temperature or stage).

On 6/7 and 6/3, Florida Department of Environmental Protection (DEP) staff collected water samples at 13 locations in the area near Port Manatee in Tampa Bay in response to the Piney Point emergency release. Cyanotoxins were not detected in the 6/1 samples, and the 6/3 sample results are pending. For daily updates and sampling data results, please visit ProtectingFloridaTogether.org/PineyPointUpdate.

On 6/1, Florida South Water Management District (SFWMED) staff collected samples at Lake Okeechobee S308C (lakeside) and C44 – S308C (canal side). Both samples were dominated by Microcystis aeruginosa and had a trace level (0.07 ppb) and 13 ppb microcystins detected, respectively.

On 6/1, SFWMED staff collected samples from C44 Canal – S77 (upstream) and C44 Canal – S79 (upstream). Both samples were dominated by Microcystis aeruginosa and had 12 ppb and a trace level (0.37 ppb) microcystins detected, respectively.

On 6/2, SFWMED staff collected samples from C51 Canal – S155A (upstream); C51 Canal – Bridge Southern with Military; C51 Canal – Bridge Forrest Hill with I-95; and C51 Canal – Bridge S155 (upstream). All the samples were dominated by Microcystis aeruginosa except the C51 Canal – S155A (upstream) sample, which had no dominant algal taxon and no cyanotoxins detected. The C51 Canal – Bridge Southern with Military, C51 Canal – Bridge Forrest Hill with I-95 and C51 Canal – Bridge S155 (upstream) samples had 2.0 ppb, a trace level (0.36 ppb) and 16 ppb microcystins detected, respectively.

On 6/2, DEP staff collected samples from Sawgrass Lake – from CWC Dock; Trout Lake Canal – 35 meters from FL-19; C44 Canal – Timer Powers Park; and Lake Rowena – NE Corner. The Sawgrass Lake – from CWC Dock sample was co-dominated by Microcystis aeruginosa and Aphanizomenon flos-aquae and had no cyanotoxins detected. The Trout Lake Canal – 35 meters from FL-19 sample had no dominant algal taxon and no cyanotoxins detected. The C44 Canal – Timer Powers Park and Lake Rowena – NE Corner samples were both dominated by Microcystis aeruginosa and had 5.3 ppb and a trace level (0.34 ppb) of microcystins detected, respectively.

On 6/3, DEP staff collected samples from Caloosahatchee River – Labelie; Caloosahatchee River – Sebastian Court Canal; Caloosahatchee River – South Olga Drive; and Orange River – Manatee Park. Analytical results are still pending. Also on 6/3, DEP staff collected samples at Lake Otis – Boat Ramp, Lake Haines – Four Lakes Dock and Lake Myra – 202 Baker Road. Analytical results are still pending.

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This is a high-level summary of the sampling events for the reported week. For all field visit and analytical result details, please refer to the complete algal bloom map with data table by clicking the “Field and Lab Details” Quick Link from the Algal Bloom disease module on the site.

This week’s activity may appear to be drastic, but it is not unusual for bloom conditions to change rapidly. This is a testament to the urgency of conducting field site visits and analytical tests to determine the presence and potential of cyanotoxins. Cyanotoxins are formed by the growth of cyanobacteria, which commonly occur in aquatic environments. They can be harmful to human and animal health, wildlife, and the environment. Therefore, it is important to monitor bloom conditions and act accordingly to prevent any negative impacts on public health and ecosystems.

Lakes are dynamic environments, and algal blooms can be influenced by various factors, such as nutrient inputs, water temperature, and sunlight. In some cases, blooms may be triggered by the release of nutrients from agricultural runoff or sewage. Additionally, water temperature and sunlight can affect the growth and bloom potential of cyanobacteria, which can be influenced by the presence of other nutrients or light levels.

In conclusion, it is crucial to continue monitoring and sampling algal blooms to better understand their causes, impacts, and potential risks to human and animal health. The Florida Department of Environmental Protection (DEP) and other agencies continue to work diligently to ensure the safety and well-being of the public and the environment. Please stay informed on the latest updates and take necessary precautions to protect yourself and others from the potential harms of algal blooms.