



# BLUE-GREEN ALGAL BLOOM WEEKLY UPDATE

REPORTING JULY 8 - 14, 2022

Satellite imagery provided by NOAA - Images are impacted by cloud cover.

A value of 0.004 is nominally equivalent to approximately 20-30 ug/L chlorophyll a of cyanobacteria, and 0.06 would be in the 300-500 ug/L chlorophyll a range.

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).

**Caloosahatchee Estuary**  
July 14, 2022

The satellite imagery of the Caloosahatchee estuary on 7/14 and 7/13, shows no significant bloom potential in visible portions of either estuary.

**Lake Okeechobee**  
July 14, 2022

The satellite imagery of Lake Okeechobee on 7/14 shows approximately 45% coverage of moderate to high bloom potential, with the highest bloom potential in the northern half of the lake.

**St. Lucie Estuary**  
July 13, 2022

The satellite imagery of the St. Lucie estuary on 7/14 and 7/13, shows no significant bloom potential in visible portions of either estuary.

**St. Johns River**  
July 13, 2022

The satellite imagery of the St. Johns River on 7/13 shows areas of moderate to high bloom potential on Lake George and on the mainstem of the St. Johns River downstream of Lake George to approximately Hastings, Florida and in Doctors Lake.

## SUMMARY

There were 39 reported site visits in the past seven days, with 39 samples collected. Algal bloom conditions were observed by samplers at 19 sites.

On 7/11-13, South Florida Water Management District (SFWMD) staff collected samples from the C43 Canal - S77 Structure (upstream), C43 Canal - S79 Structure (upstream), Lake Okeechobee - S308C Structure (lakeside), C44 Canal - S308C Structure (canal side) and Lake Okeechobee - S352 Structure (lakeside). None of the samples had a dominant algal taxon or cyanotoxins detected.

On 7/11 - 7/14, Florida Department of Environmental Protection (DEP) staff collected samples from Tiger Lake, 183rd Ave. Canal - off Cross Creek, Lochloosa Lake (three locations), Violet Lake, Lake Marian, Alligator Creek - Allapatchee Shore Park, Harbor Isle Lake (three locations), Lake Munson - Munson Slough Inlet, Lake Munson - north lobe, Fish Lake, Lake Hancock, Lake Ivanhoe, Lake Mann and Lake Sue. The Tiger Lake sample was dominated by *Microcystis aeruginosa* and had a trace level [0.11 parts per billion (ppb)] of microcystins detected. The 183rd Ave. Canal - off Cross Creek sample was dominated by *Microcystis aeruginosa* and had no cyanotoxins detected. The three Lochloosa Lake samples were each co-dominated by *Microcystis aeruginosa* and *Microcystis wesenbergii*, and had trace levels of microcystins ranging between 1.1 and 1.5 ppb. The Violet Lake sample was dominated by *Phormidium sp.* and had a trace level (0.25 ppb) of cylindrospermopsin detected. The Lake Marian sample was dominated by *Microcystis aeruginosa* and had a 2.2 ppb of microcystins detected. The Alligator Creek - Allapatchee Shore Park sample had no dominant algal taxon and no cyanotoxins detected. The three Harbor Isle Lake samples were each dominated by *Microcystis aeruginosa* and had microcystin concentrations ranging from 8.6 to 10 ppb. The Lake Munson - Munson Slough Inlet algal mat sample was dominated by *Oedogonium sp.* and the Lake Munson - north lobe algal mat sample was co-dominated by *Scytonema crispum* and *Spirogyra sp.* Neither sample had cyanotoxins detected. The Fish Lake, Lake Hancock, Lake Ivanhoe, Lake Mann and Lake Sue analytical results are still pending.

On 7/11 - 7/12, St. Johns River Water Management District (SJRWMD) staff collected routine harmful algal bloom (HAB) monitoring samples at Lake George, Crescent Lake - mouth of Dunns Creek, Crescent Lake - Crescent City Boat Ramp, Blue Cypress Lake, Stick Marsh North, St. Johns River - Shands Bridge, St. Johns River - Mandarin Point and Doctors Lake. They also collected HAB response samples at Georges Lake, St. Johns River - Buzzard Island, St. Johns River - Racy Point, St. Johns River - Palatka Riverfront Park Boat Ramp and Dunns Creek - canal between Waterside and Shoreline Ave. The Lake George sample was co-dominated by *Microcystis aeruginosa* and *Cylindrospermopsis raciborskii* and had a trace level (0.27 ppb) of cylindrospermopsin detected. The Crescent Lake - mouth of Dunns Creek and Crescent Lake - Crescent City Boat Ramp samples were both dominated by *Microcystis aeruginosa* and neither had cyanotoxins detected. The Blue Cypress Lake and Stick Marsh North samples had no dominant algal taxon and no cyanotoxins detected. The St. Johns River - Shands Bridge, St. Johns River - Mandarin Point samples were both dominated by *Microcystis aeruginosa* and neither had cyanotoxins detected. The Doctors Lake sample was dominated by *Microcystis aeruginosa* and had 3.9 ppb of microcystins detected. The Georges Lake sample was co-dominated by *Microcystis aeruginosa* and *Aphanizomenon flos-aquae* and had a trace level (2.3 ppb) of microcystins detected. The St. Johns River - Buzzard Island sample co-dominated by *Microcystis aeruginosa* and *Cylindrospermopsis raciborskii* and had a trace level (0.24 ppb) of cylindrospermopsin detected. The St. Johns River - Racy Point sample had no dominant algal taxon and had a trace level (0.15 ppb) of cylindrospermopsin detected. The St. Johns River - Palatka Riverfront Park Boat Ramp analysis results are still pending.

On 7/11, Lee County staff collected a sample from Caloosahatchee River - Davis Boat Ramp. The sample had no dominant algal taxon and no cyanotoxins detected.

On 7/12, Orange County staff collected a sample from Cypress Lake. The sample had no dominant algal taxon and no cyanotoxins detected.

On 7/13, Highlands County staff collected a sample from Little Red Water Lake. The sample was dominated by *Microcystis aeruginosa* and had a trace level (0.88 ppb) of microcystins detected.

### LAST WEEK

On 7/6 - 7/7, SFWMD staff collected samples from the Lake Okeechobee - S352 Structure (lakeside) and Lake Okeechobee - CULV10A (canal side). Both samples were dominated by *Microcystis aeruginosa* and neither had cyanotoxins detected. Staff also performed their bi-monthly routine HAB monitoring on Lake Okeechobee at the following stations: KISSRO.0 (non-detect), LZ2 (non-detect), NES191 (non-detect), L001 (non-detect), NES135 (non-detect), NCENTER (non-detect), EASTSHORE (non-detect), L004 (non-detect), L008 (1.6 ppb), L005 (trace, 0.26 ppb), POLESOUT (non-detect), POLESOUT1 (non-detect), POLESOUT2 (non-detect), POLESOUT3 (trace, 0.63 ppb), KBARSE (non-detect), CLV10A (non-detect), LZ40 (2.4 ppb), PALMOUT (trace, 0.77 ppb), PALMOUT1 (trace, 1.2 ppb), PALMOUT2 (non-detect), PALMOUT3 (non-detect), LZ30 (trace, 0.31 ppb), POLE3S (trace, 0.83 ppb), RITAE2 (3.5 ppb), LZ25A (non-detect), L007 (non-detect), L006 (non-detect) and PELBAY3 (non-detect).

On 7/7, DEP staff collected samples from Lake Marian, Swimming Pen Creek - Whitey's Fish Camp, Doctors Lake (four locations), Lake Dot, Lake Buffum, Lake Griffin (Seminole County), Hillsborough River - USF Park, Lake Kathryn and St. Johns River - 2930 SR 13. The Lake Marian sample was dominated by *Microcystis aeruginosa* and had 4.5 ppb of microcystins detected. The Swimming Pen Creek - Whitey's Fish Camp was dominated by *Microcystis aeruginosa* and had 18 ppb microcystins detected. The four Doctors Lake samples were all dominated by *Microcystis aeruginosa* and had microcystin concentrations ranging from 1.8 to 7.6 ppb. The Lake Dot sample was co-dominated by *Microcystis wesenbergii* and *Cylindrospermopsis raciborskii* and had no cyanotoxins detected. The Lake Buffum and Lake Griffin (Seminole County) samples had no dominant algal taxon and no cyanotoxins detected. The Hillsborough River - USF Park, Lake Kathryn, and St. Johns River - 2930 SR 13 samples were dominated by *Microcystis aeruginosa* and neither had cyanotoxins detected.

On 7/7, SJRWMD staff collected monthly routine HAB monitoring samples at Lake Monroe and Lake Jesup, and HAB response samples at Trout Creek - Trout Creek Park Boat Ramp. The Lake Monroe and Lake Jesup samples had no dominant algal taxon and no cyanotoxins detected. The Trout Creek - Trout Creek Park Boat Ramp sample was dominated by *Microcystis aeruginosa* and had no cyanotoxins detected.

On 7/7 Alachua County collected samples from Lake Wauberg and Bivens Lake. The Lake Wauberg sample was co-dominated by *Microcystis aeruginosa* and *Microcystis wesenbergii* and had a trace level (0.29 ppb) of anatoxin-a detected. The Bivens Lake sample had no dominant algal taxon and no cyanotoxins detected.

Results for completed analyses are available and posted at [FloridaDEP.gov/AlgalBloom](https://FloridaDEP.gov/AlgalBloom).

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 Dashboard. Different types of blue-green algal bloom species can look different and have different impacts. However, regardless of species, many types of blue-green algae can produce toxins that can make you or your pets sick if swallowed or possibly cause skin and/or eye irritation due to contact. We advise staying out of water where algae is visibly present as specks or mats or where water is discolored pea-green, blue-green or brownish-red. Additionally, pets or livestock should not come into contact with algal bloom-impacted water or with algal bloom material or fish on the shoreline.

### LAKE OKEECHOBEE OUTFLOWS

Current Lake Release Schedule*		
West (S-79)	750 cfs	Pulse
East (S-80)	0 cfs	Constant
*Updates are generally made on Fridays.		
Total Inflows and Outflows (cfs)		
Weekly Inflow	4,034	
Weekly Outflow	West	0
	East	-430
	South	0

### SITE VISITS FOR BLUE-GREEN ALGAE

Algal Bloom Observed

- Yes (19)
- No (20)

### SIGN-UP FOR UPDATES

To receive personalized email notifications about blue-green algae and red tide, visit

PROTECTING TOGETHER

[ProtectingFloridaTogether.gov](https://ProtectingFloridaTogether.gov)

### REPORT PUBLIC HEALTH ISSUES

#### HUMAN ILLNESS

Florida Poison Control Centers can be reached 24/7 at 800-222-1222

(DOH provides grant funding to the Florida Poison Control Centers)

#### OTHER PUBLIC HEALTH CONCERNS

#### CONTACT DOH

(DOH county office)

[FloridaHealth.gov/all-county-locations.html](https://FloridaHealth.gov/all-county-locations.html)



#### SALTWATER BLOOM

- Observe stranded wildlife or a fish kill.
- Information about red tide and other saltwater algal blooms.



#### CONTACT FWC

800-636-0511 (fish kills)  
888-404-3922 (wildlife Alert)

[MyFWC.com/RedTide](https://MyFWC.com/RedTide)



### REPORT ALGAL BLOOMS

#### FRESHWATER BLOOM

- Observe an algal bloom in a lake or freshwater river.
- Information about blue-green algal blooms.



#### CONTACT DEP

855-305-3903 (to report freshwater blooms)

[FloridaDEP.gov/AlgalBloom](https://FloridaDEP.gov/AlgalBloom)