

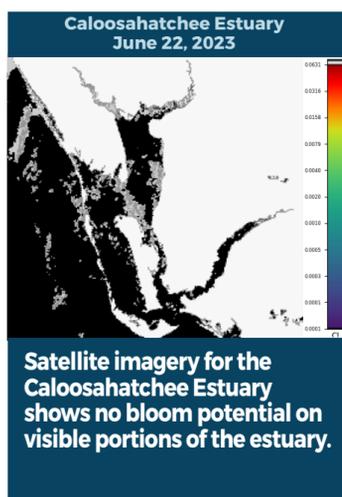


# BLUE-GREEN ALGAL BLOOM WEEKLY UPDATE

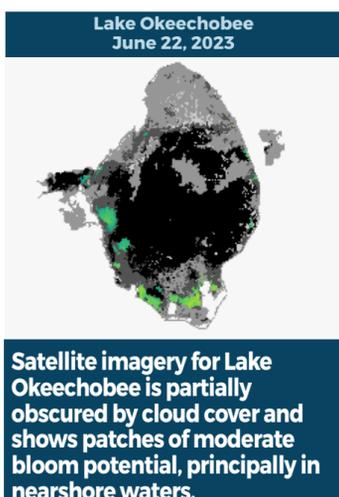
## REPORTING JUNE 16 - JUNE 22, 2023

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

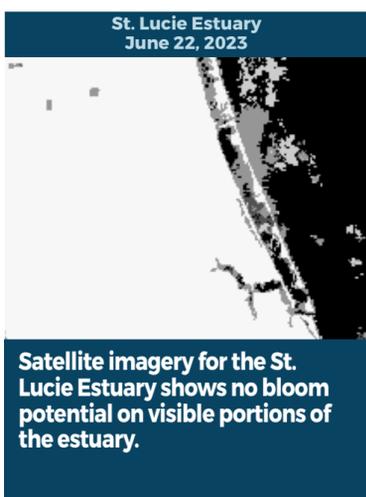
A value of 0.004 is nominally equivalent to approximately 20-30 ug/L chlorophyll a of cyanobacteria, and 0.06 would be in the 300-500 ug/L chlorophyll a range. Please keep in mind that bloom potential is subject to change due to rapidly changing environmental conditions or satellite inconsistencies (i.e., wind, rain, temperature or stage).



Satellite imagery for the Caloosahatchee Estuary shows no bloom potential on visible portions of the estuary.



Satellite imagery for Lake Okeechobee is partially obscured by cloud cover and shows patches of moderate bloom potential, principally in nearshore waters.



Satellite imagery for the St. Lucie Estuary shows no bloom potential on visible portions of the estuary.



Satellite imagery for the St. Johns River shows scattered low to moderate bloom potential on Lake George and down the mainstem of the river to Green Cove Springs.

Response efforts are currently underway to treat blue-green algal blooms at water control structures and public access points on Lake Okeechobee and within the C-43 and C-44 canals. The Florida Department of Environmental Protection (DEP) in partnership with the South Florida Water Management District (SFWMD) and the U.S. Army Corps of Engineers have deployed an innovative technology to target blue-green algal cells and the toxins they produce. In large systems like Lake Okeechobee, treatments may need to be repeated over the course of the bloom season as untreated bloom waters may migrate into treated areas due to winds and currents.

Stringent water quality monitoring is ongoing by the contractor and SFWMD while this technology is deployed. All sampling locations and results are posted to DEP's [Algal Bloom Monitoring and Response dashboard](#).

## SUMMARY

There were 64 reported site visits in the past seven days with 64 samples collected. Algal bloom conditions were observed by samplers at 45 of the sites.

On 6/19-6/22, Florida Department of Environmental Protection (DEP) staff collected harmful algal bloom (HAB) response samples from 22 sites. Dominant algal taxa and cyanotoxin results follow each waterbody name.

- **Caloosahatchee River - N of Loftons Island:** *Microcystis aeruginosa*; 1.1 parts per billion (ppb) microcystins detected.
- **Able Canal - Connie Ave N:** No dominant algal taxon; trace level (0.10 ppb) cylindrospermopsin detected.
- **Silver Lake:** No dominant algal taxon; no cyanotoxins detected.
- **Lake Hollingsworth - at Lakeland Water Ski Club:** *Microcystis aeruginosa*; no cyanotoxins detected.
- **Scott Lake - at Fitzgerald Rd Boat Ramp:** *Microcystis aeruginosa*; trace levels (0.28 ppb) microcystins and (0.12 ppb) cylindrospermopsin detected.
- **Lake Hancock - South Central:** *Microcystis aeruginosa*; estimated 1.1 ppb microcystins detected.
- **Peace River - at Bartow:** No dominant algal taxon; no cyanotoxins detected.
- **C44 canal - S308C (canal side):** *Microcystis aeruginosa*; 5.5 ppb microcystins detected.
- **Lake Okeechobee - S308C (lakeside):** *Microcystis aeruginosa*; 233 ppb microcystins detected.
- **Peace River - at Ft Meade:** No dominant algal taxon; no cyanotoxins detected.
- **Biscayne Canal - at NW 67th Ave:** Algal mat dominated by *Plectonema wollei*, water sample had no dominant algal taxon; no cyanotoxins detected.
- **Lake Istakpoga - near c410:** No dominant algal taxon; trace level (0.13 ppb) microcystins detected.
- **Georges Lake - Boat Ramp:** *Microcystis aeruginosa*; trace level (0.92 ppb) microcystins detected.
- **Blue Lake - Western Shore:** No dominant algal taxon; no cyanotoxins detected.
- **Lake Apthorpe - Boat Ramp:** No dominant algal taxon; no cyanotoxins detected.
- **Caloosahatchee River - West First St and Altamont Ave:** *Microcystis aeruginosa*; 2.4 ppb microcystins detected.
- **Lake Marian - Boat Ramp:** No dominant algal taxon; 2.7 ppb microcystins detected.
- **Caloosahatchee River - Fort Myers Shores:** *Microcystis aeruginosa*; trace level (0.73 ppb) microcystins detected.

Results are pending for samples collected at **Peace River - Brownville Park**; **Peace River - Veterans Park Ramp**; **Palm Coast Pond - at 44 Flamingo Drive**; and **Peace River - Crews Park Boat Ramp**.

On 6/19-6/21, South Florida Water Management District (SFWMD) staff collected 30 routine HAB monitoring samples on **Lake Okeechobee**. All samples were dominated by *Microcystis aeruginosa* except **Station LZZ**, which was co-dominated by *Microcystis aeruginosa* and *Dolichospermum circinale*, and **NES135**, which was missing an algal identification sample.

Cyanotoxins were non-detect at **KISSRO.0**, **LZZ** and **POLESOUT**. Trace levels microcystins were detected at **FEBIN** (0.46 ppb); **FEBOUT** (0.32 ppb); **NES191** (0.37 ppb); **L001** (0.76 ppb); **NCENTER** (0.41 ppb); and **KBARSE** (0.46 ppb).

Unqualified microcystins levels were detected at **PALMOUT** (1.6 ppb); **PALMOUT1** (1.6 ppb); **PALMOUT2** (2.1 ppb); **PALMOUT3** (5.4 ppb); **LZ30** (12 ppb); **POLES3** (3.2 ppb); **RITTAE2** (3.9 ppb); **LZ25A** (5.2 ppb); **L007** (18 ppb); **PELBAY3** (7.4 ppb); **CLV10A** (13 ppb); **LZ40** (3 ppb); **L006** (13 ppb); **POLESOUT1** (1.6 ppb); **POLESOUT2** (10.5 ppb); **POLESOUT3** (28 ppb); **EASTSHORE** (50 ppb); **L004** (77 ppb); **L008** (1.2 ppb); **L005** (1.4 ppb); and **NES135** (38.6 ppb).

On 6/19-6/22, SFWMD staff collected HAB response samples at seven locations.

- **C43 Canal at S77 (upstream):** *Microcystis aeruginosa*; trace level (0.66 ppb) microcystins detected.
- **C43 Canal at S78 (upstream):** No dominant algal taxon; no cyanotoxins detected.
- **C43 Canal at S79 (upstream):** No dominant algal taxon; no cyanotoxins detected.
- **Lake Okeechobee - Pahokee Marina:** *Microcystis aeruginosa*; 68 ppb microcystins detected.

Results are pending for samples collected at **Lake Okeechobee - S271 (lakeside)**; **Lake Okeechobee - S352 (lakeside)**; and **Lake Okeechobee - S354 (lakeside)**.

On 6/19, St. Johns River Water Management District (SJRWMD) staff collected one routine HAB monitoring sample and four HAB response samples.

- **Lake Washington - Center:** *Dolichospermum circinale*; no cyanotoxins detected.
- **Sawgrass Lake - Outlet:** No dominant algal taxon; no cyanotoxins detected.
- **Georges Lake - Center:** *Microcystis aeruginosa*; 0.57 ppb microcystins detected.

Results are pending for samples collected at **Lochloosa Lake - Center** and **Newnans Lake - Center**.

## Last Week

Results were pending last week for five samples collected by DEP staff on 6/15/23.

- **Lake George - North:** *Coelosphaerium kuetzingianum*; trace level (0.36 ppb) microcystins detected.
- **Little Half Moon Lake - South:** No dominant algal taxon; trace level (0.12 ppb) cylindrospermopsin detected.
- **Georges Lake - Boat Ramp:** *Microcystis aeruginosa*; trace level (0.10 ppb) cylindrospermopsin detected.
- **Lake St Claire - North:** *Microcystis aeruginosa*; no cyanotoxins detected.
- **Tiger Lake - Center:** *Microcystis aeruginosa*; 2.0 ppb microcystins detected.

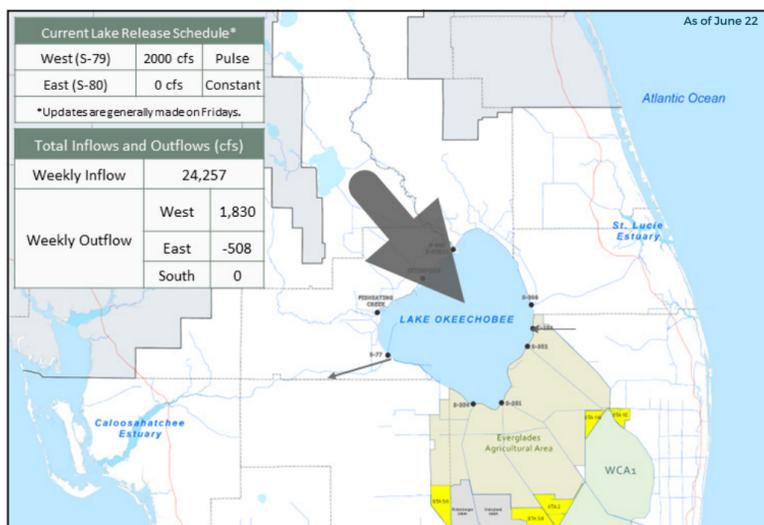
Also on 6/15, SJRWMD staff collected three routine monitoring HAB samples.

- **Crescent Lake - Mouth of Dunns Creek:** *Microcystis aeruginosa*; trace level (0.26 ppb) microcystins detected.
- **Lake Jesup - Center:** *Microcystis aeruginosa*; no cyanotoxins detected.
- **Lake Monroe - Center:** *Microcystis aeruginosa*; trace level (0.10 ppb) cylindrospermopsin detected.

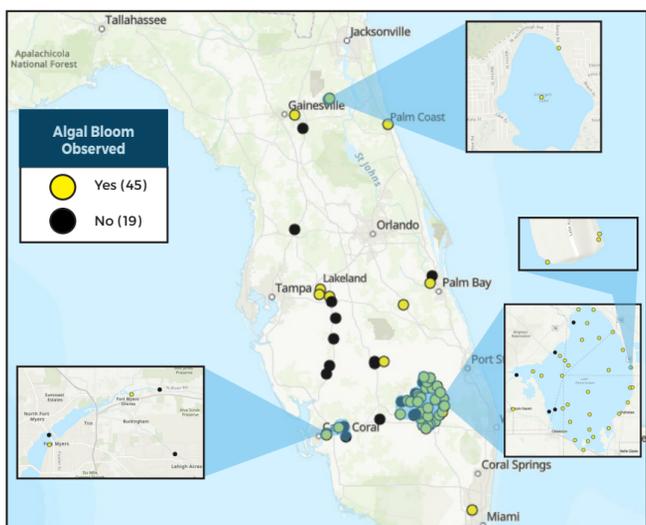
Results for completed analyses are available at [FloridaDEP.gov/AlgalBloom](https://FloridaDEP.gov/AlgalBloom).

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



## SITE VISITS FOR BLUE-GREEN ALGAE



## SIGN-UP FOR UPDATES

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

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

### 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)