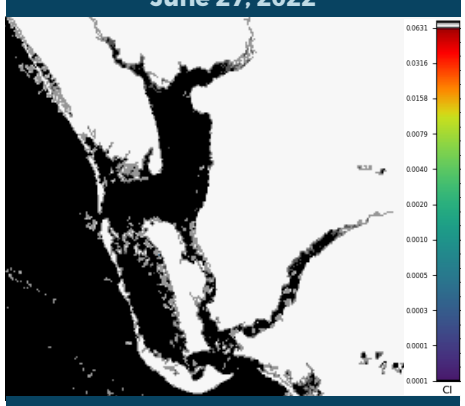
BLUE-GREEN ALGAL BLOOM WEEKLY UPDATE

REPORTING JUNE 24 - 30, 2022

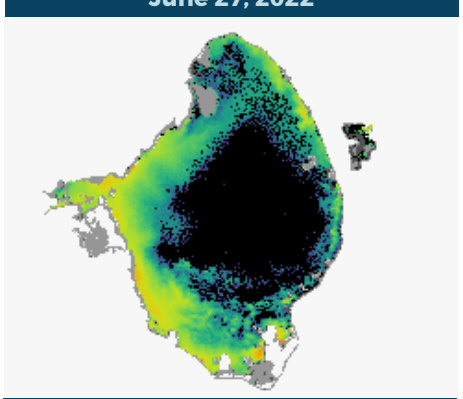
Satellite imagery provided by NOAA - Images are impacted by cloud cover.
A value of 0.004 is nominally equivalent to approximately 20-30 ug/L chlorophyll a of cyanobacteria, and 0.06 would be in the 300-500 ug/L chlorophyll a range.
Please keep in mind that bloom potential is subject to change due to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

Caloosahatchee Estuary
June 27, 2022



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

Lake Okeechobee
June 27, 2022

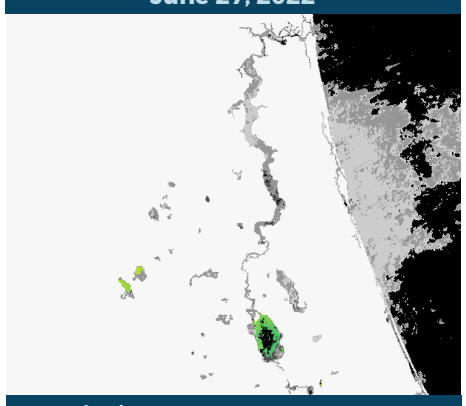


Satellite imagery for Lake Okeechobee shows approximately 50% to 60% coverage of moderate bloom potential, with the highest bloom potential predominantly along the western and southern shore of the lake.

St. Lucie Estuary
June 27, 2022

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

St. Johns River
June 27, 2022



Satellite imagery for the St. Johns River shows areas of moderate bloom potential on Lake George and on the mainstem of the river downstream of Lake George to Welaka and in Doctors Lake.

SUMMARY

There were 38 reported site visits in the past seven days, with 38 samples collected. Algal bloom conditions were observed by samplers at 24 sites.

On 6/27 – 6/29, South Florida Water Management District staff collected samples from the **C43 Canal - S77 (upstream)**; **C43 Canal - S79 (upstream)**; **Lake Okeechobee - S308C (lakeside)**; **C44 Canal - S308C (canal side)**; **Lake Okeechobee - S352 (lakeside)**; and **Lake Okeechobee - CULV10A**.

The **C43 Canal - S77 (upstream)** sample was dominated by *Cylindrospermopsis raciborskii* and had a trace level (0.11 parts per billion [ppb]) of cylindrospermopsin detected. The **C43 Canal - S79 (upstream)** sample had no dominant algal taxon and a trace level (0.51 ppb) of microcystins detected.

The **Lake Okeechobee - S308C (lakeside)** sample was dominated by *Microcystis aeruginosa* and had trace levels detected for microcystins (0.59 ppb) and cylindrospermopsin (0.13 ppb). The **C44 Canal – S308C (canal side)** had no dominant taxon and a trace level (0.13 ppb) of cylindrospermopsin detected.

The **Lake Okeechobee - S352 (lakeside)** sample was dominated by *Microcystis aeruginosa* and had 180 ppb microcystins detected. The **Lake Okeechobee – CULV10A** sample was dominated by *Microcystis aeruginosa* and had a trace level (0.67 ppb) of microcystins detected.

On, 6/27 - 6/30, St. Johns River Water Management District staff performed a combination of routine harmful algal bloom monitoring and bloom response sampling at 14 locations. On **Crescent Lake (three locations)**, the **Center** and **Crescent City Public Boat Ramp** samples were dominated by *Microcystis aeruginosa*, and the **mouth of Dunns Creek** sample was co-dominated by *Microcystis aeruginosa* and *Cylindrospermopsis raciborskii*. Trace levels of microcystins (range 0.73 to 1.2 ppb) and trace levels of cylindrospermopsin (range 0.14 to 0.23 ppb) were detected in all three samples.

On **Lake George (two locations)**, the **Center** and **North** samples were both co-dominated by *Microcystis aeruginosa* and *Cylindrospermopsis raciborskii* and had trace levels of cylindrospermopsin detected (0.31 ppb and 0.25 ppb, respectively).

For the following eight samples, the dominant taxon result and cyanotoxin result are included in parentheses following each station name: **Stickmarsh** (no dominant, trace level [0.11 ppb] cylindrospermopsin); **Doctors Lake** (*Microcystis aeruginosa*, 1.2 ppb microcystins); **Georges Lake** (*Microcystis aeruginosa*, 3.5 ppb microcystins); **Bull Creek - at Fish Camp** (*Aphanizomenon flos-aquae*, trace level [0.49 ppb] microcystins); **St. Johns River – Mandarin Point** (no dominant, trace level [0.28 ppb] microcystins); **St. Johns River – Shands Bridge** (*Microcystis sp.*, microcystins not detected); **St. Johns River – north of Buffalo Bluff Bridge** (*Cylindrospermopsis raciborskii*, trace level [0.29 ppb] cylindrospermopsin); and **Blue Cypress Lake** (no dominant, microcystins not detected).

Analytical results for **Lake Washington** are pending.

On 6/27, Lee County staff collected samples along the **Caloosahatchee River (three locations)**. The **Davis Boat Ramp** sample was co-dominated by *Microcystis aeruginosa* and *Glenodinium sp.*, whereas the **Alva Boat Ramp** and **North Shore Park** samples had no dominant taxon. All three samples had no cyanotoxins detected.

On 6/27 - 6/30, Florida Department of Environmental Protection (DEP) staff collected samples at 14 locations.

The **Caloosahatchee River - Moody Canal at Del Prado Blvd.** sample had no dominant taxon and no cyanotoxins detected.

The **Lake Marion, Lake Sue** and **Lake Ivanhoe** samples were dominated by *Microcystis aeruginosa*, and the **Lake Mann** sample was dominated by *Microcystis wesenbergii*. The **Lake Marion** sample had 5.6 ppb microcystins detected; the **Lake Sue** sample had trace levels of both microcystins (0.27 ppb) and cylindrospermopsin (0.35 ppb) detected; and the **Lake Ivanhoe** and **Lake Mann** samples had trace levels of cylindrospermopsin detected (0.13 ppb and 0.38 ppb, respectively).

Samples were collected from **Lochloosa Lake (three locations)**, two of which were co-dominated by *Microcystis aeruginosa* and *Microcystis wesenbergii* and the other dominated by *Microcystis aeruginosa*. All three locations had microcystins detected (range 1.9 to 2.1 ppb).

On **Lake Munson (two locations)**, the **North Lobe** sample was co-dominated by *Scytonema crispum* and *Nostoc sp.* and had a trace level (0.33 ppb) of microcystins detected. The **Slough Inlet** sample was dominated by *Oedogonium sp.* and had no cyanotoxins detected.

Analytical results are pending for **Tampa Bay - Maximo Park; Lake Griffin; Hillsborough River – at I-75;** and **Lake Harris.**

On 6/30, Highlands County sampled **Little Red Water Lake - Boat Ramp**. Analytical results are pending.

Last Week

Samples collected by DEP on 6/23 at the **Caloosahatchee River** and **Manatee River (two locations)** had no dominant taxon and no cyanotoxins detected.

DEP also collected samples on 6/23 from **Doctors Lake (three locations)** that were dominated by *Dolichospermum circinale*. A trace level (0.71 ppb), 1.3 ppb and 1.4 ppb of microcystins were detected in the samples at **Camp Echockotee, near Lucy Branch** and **end of Lawrence Rd.**, respectively).

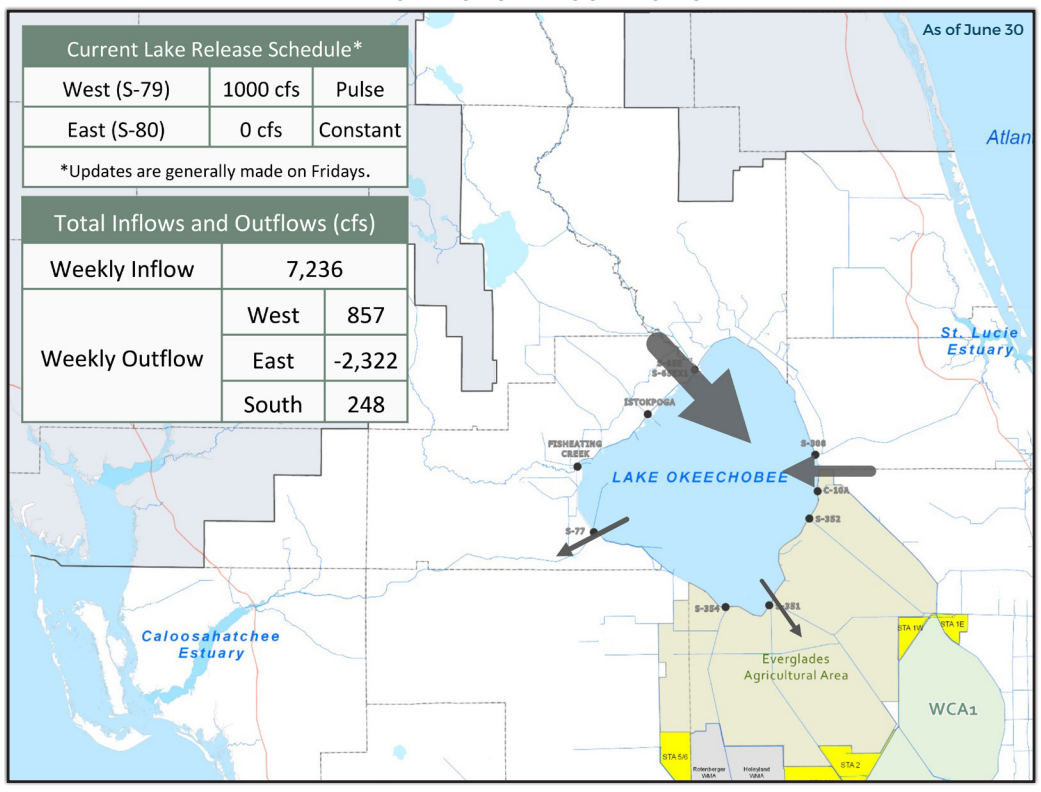
Results for completed analyses are available and posted at FloridaDEP.gov/AlgalBloom.

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.

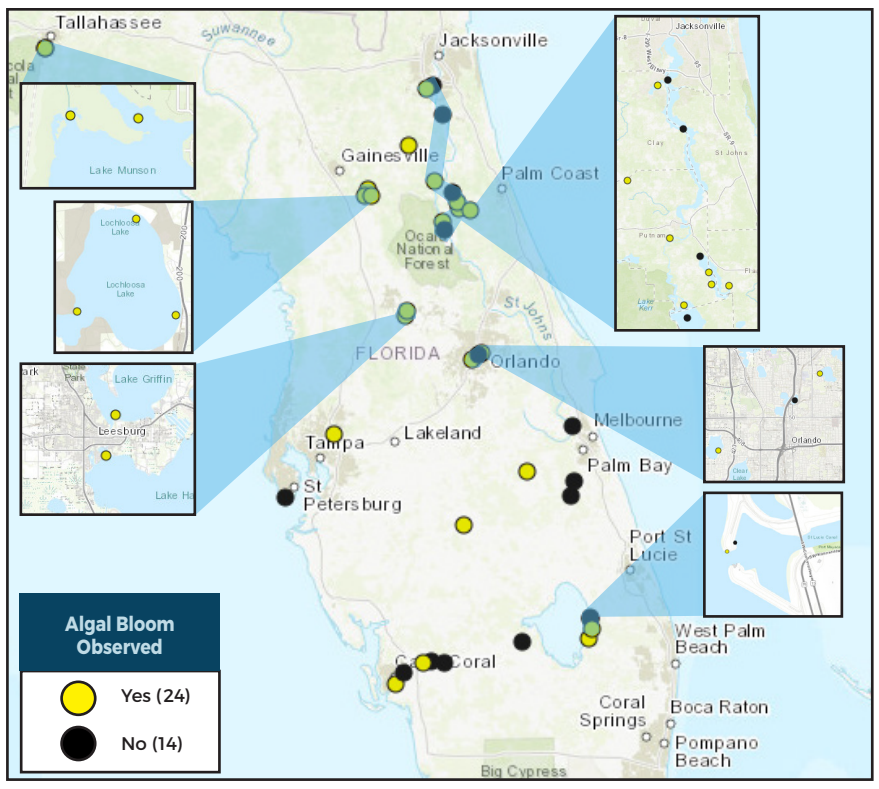
LAKE OKEECHOBEE OUTFLOWS

Current Lake Release Schedule*		
West (S-79)	1000 cfs	Pulse
East (S-80)	0 cfs	Constant
*Updates are generally made on Fridays.		

Total Inflows and Outflows (cfs)		
Weekly Inflow	7,236	
Weekly Outflow	West	857
	East	-2,322
	South	248



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/all-county-locations.html

REPORT ALGAL BLOOMS

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

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