

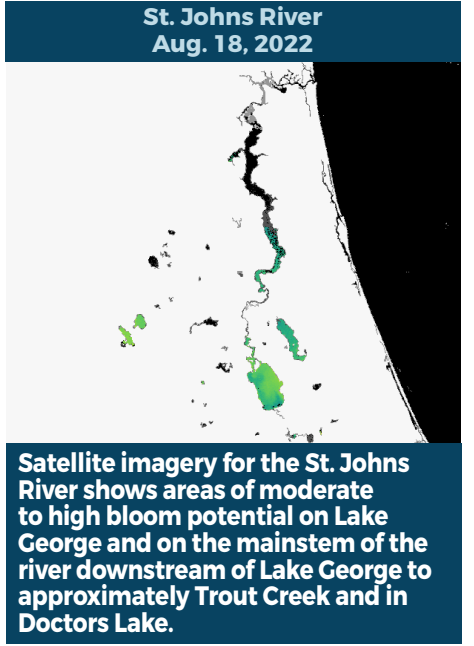
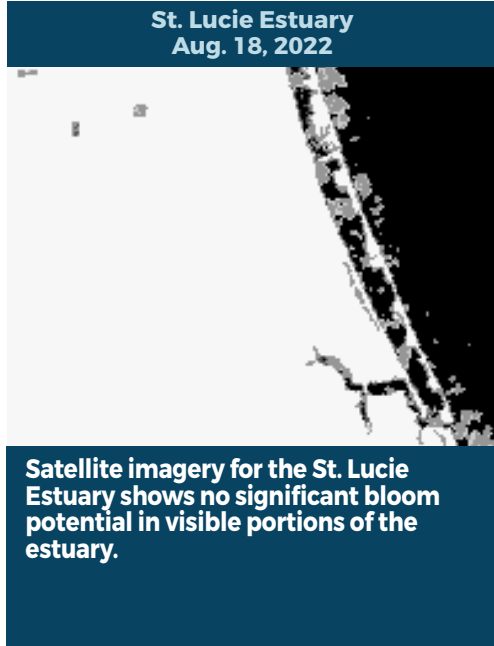
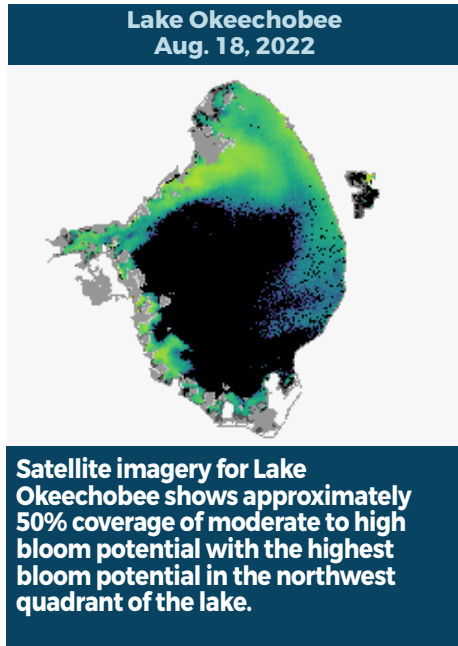
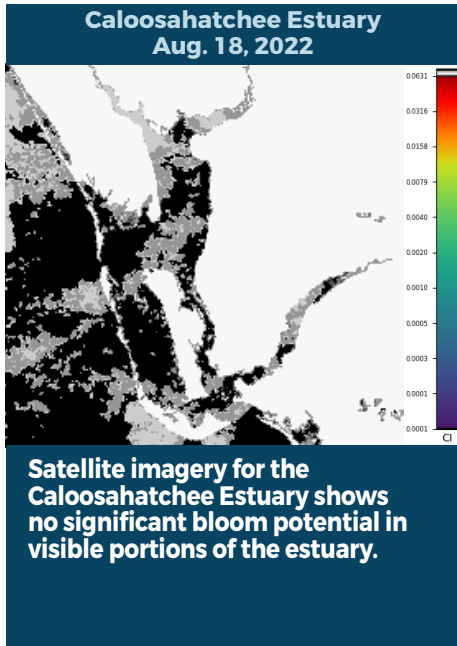


BLUE-GREEN ALGAL BLOOM WEEKLY UPDATE

REPORTING AUG. 12 - 18, 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).



SUMMARY

There were 62 reported site visits in the past seven days with 61 samples collected. Algal bloom conditions were observed by samplers at 19 sites.

On 8/15 - 8/17, South Florida Water Management District (SFWMD) staff collected samples from the **C43 Canal - S77 Structure (upstream); C43 Canal - S79 Structure (upstream); C44 Canal - S80 Structure (upstream);** and **Lake Okeechobee - CULV10A (canal side).** The **S77** and **S80** had no dominant taxon; the **S79** sample was co-dominated by *Microcystis aeruginosa* and *Glenodinium sp.* and the **Lake Okeechobee - CULV10A** was dominated by *Microcystis aeruginosa*. None of the four samples had cyanotoxins detected.

On 8/15 - 8/17, SFWMD staff performed bimonthly routine harmful algal bloom monitoring on **Lake Okeechobee** at 30 stations: **FEBIN; FEBOUT; KISSRO.0; LZ2; NES191; L001; NES135; NCENTER; EASTSHORE; L004; L008; L005; POLESOUT; POLESOUT1; POLESOUT2; POLESOUT3; KBARSE; CLV10A; LZ40; PALMOUT; PALMOUT1; PALMOUT2; PALMOUT3; LZ30; POLE3S; RITTAE2; LZ25A; L007; L006** and **PELBAY3.**

Seven **Lake Okeechobee** station samples (**L008, L005, PELBAY3, LZ30, PALMOUT3, PALMOUT** and **LZ40**) were dominated by *Microcystis aeruginosa*; two station samples (**NES191** and **NES131**) were dominated by *Cylindrospermopsis raciborskii*; the **POLESOUT** station sample was co-dominated by *Cylindrospermopsis raciborskii* and *Dolichospermum circinale* and the remaining 21 station samples had no dominant algal taxon.

Algal bloom conditions were visible to the samplers only at stations **PALMOUT1** and **PALMOUT2.** Only four station samples (**NES191, NES135, EASTSHORE** and **POLESOUT1**) had trace levels, ranging from 0.11 parts per billion (ppb) to 0.33 ppb of cylindrospermopsis.

On 8/16, St. Johns River Water Management District staff collected a sample at **Lake Washington.** The sample was dominated by *Dolichospermum helicoideum* and had no cyanotoxins detected.

On 8/15 - 8/17, Florida Department of Environmental Protection (DEP) staff collected 21 samples: **Alafia River - Ashman Rd; Intercoastal Waterway - Loggerhead Marina; Sampson River - SW CR 225; Lochloosa Lake (three locations); Lake Mariam - Boat Ramp; Lake Dot; Violet Lake; Lake Marian - Pavilion; Peregrine Falcon Lake - Amelia Earhart Park; Lake Mann; Lake Ivanhoe; Lake Sue; Caloosahatchee River - SE 32nd St; Swimming Pen Creek - Whitey's Fish Camp; Doctors Lake (four locations)** and **Lake Henry.**

The **Lake Marian - Pavilion, Lake Ivanhoe, Lake Sue, Lochloosa Lake - entrance to cross creek, Lochloosa Lake - Lochloosa Park and Boat Ramp, Lake Henry** and all four **Doctors Lake** samples were dominated by *Microcystis aeruginosa*, and the **Lake Mann** sample was dominated by *Microcystis wesenbergii*. The **Lake Mariam - Boat Ramp** sample was dominated by *Aphanizomenon flos-aquae*, and the **Lake Dot** sample was co-dominated by *Microcystis aeruginosa* and *Cylindrospermopsis raciborskii*. The **Caloosahatchee River** sample was dominated by *Anabaenopsis circularis*.

Of the 21 samples collected, 13 had cyanotoxins detected. Cyanotoxin results are included in parentheses in parts per billion following each station name: **Doctors Lake - Lawrence Rd, Doctors Lake - Mill Cove** and **Swimming Pen Creek** (detects ranging 1.1 to 2.0 microcystins); **Lake Mann** (0.77 cylindrospermopsin); **Sampson River, Violet Lake** and **Lake Ivanhoe** (trace ranging 0.11 to 0.39 cylindrospermopsin); **Lochloosa Lake - entrance to cross creek** and **Lochloosa Lake - NE in veg** (trace 0.41 and trace 0.34 anatoxin-a, respectively); and **Lake Marian - Pavilion, Lochloosa Lake - Lochloosa Park, Doctors Lake - Lucy Branch** and **Doctors Lake - Camp Echokotee** (trace ranging 0.12 to 2.7 microcystins).

On 8/18 DEP staff collected samples from **Tampa Bay - Maximo Park, Ortego River - Morven Canal, Lake Kinsale, St. Johns River - St. Vincent's Riverside** and **Boca Ciega Bay - Madeira Beach** at **Island Dr.** The **Lake Kinsale** sample was dominated by *Scytonema crispum*. All other algal identifications and cyanotoxin results are pending.

On 8/16, Lee County staff performed a site visit but no sample collection at **Caloosahatchee River - Balboa Canal.**

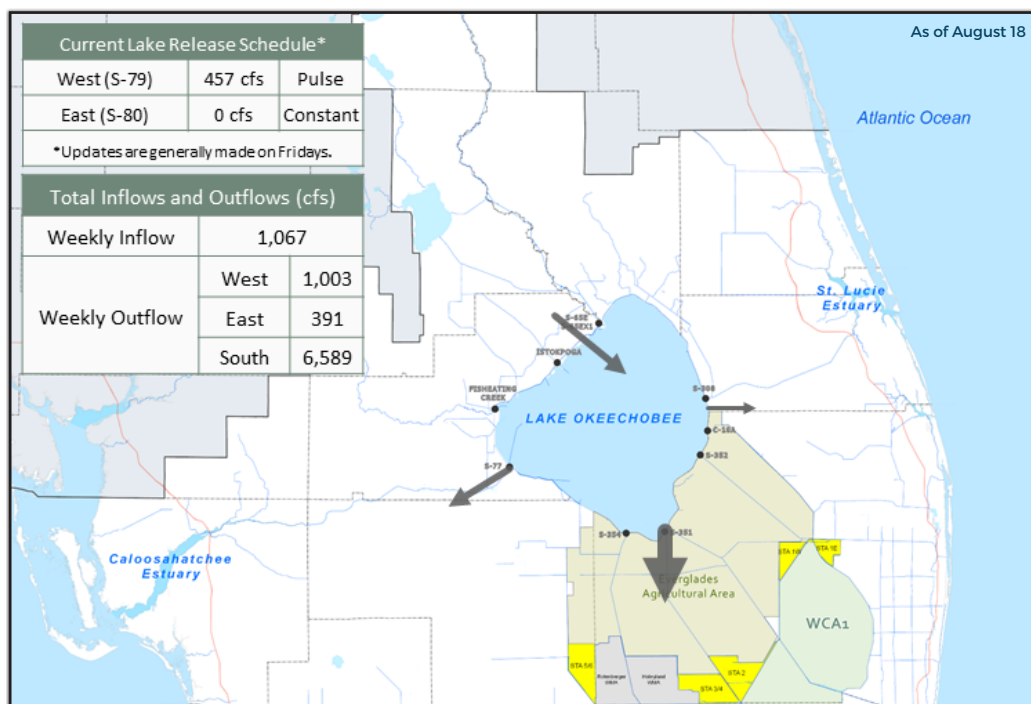
Last Week

On 8/11, DEP staff collected three samples at **Harbor Isle (South Lobe, Northwest Lobe and SE Lobe)** and one sample at **Caloosahatchee River - Elliot-Morley Canal.** All three **Harbor Isle** samples were dominated by *Microcystis aeruginosa* and had 12 ppb, 5.2 ppb and 16 ppb of microcystins detected, respectively. The **Caloosahatchee River - Elliot-Morley Canal** sample was dominated by *Dolichospermum helicoideum* and had no cyanotoxins detected.

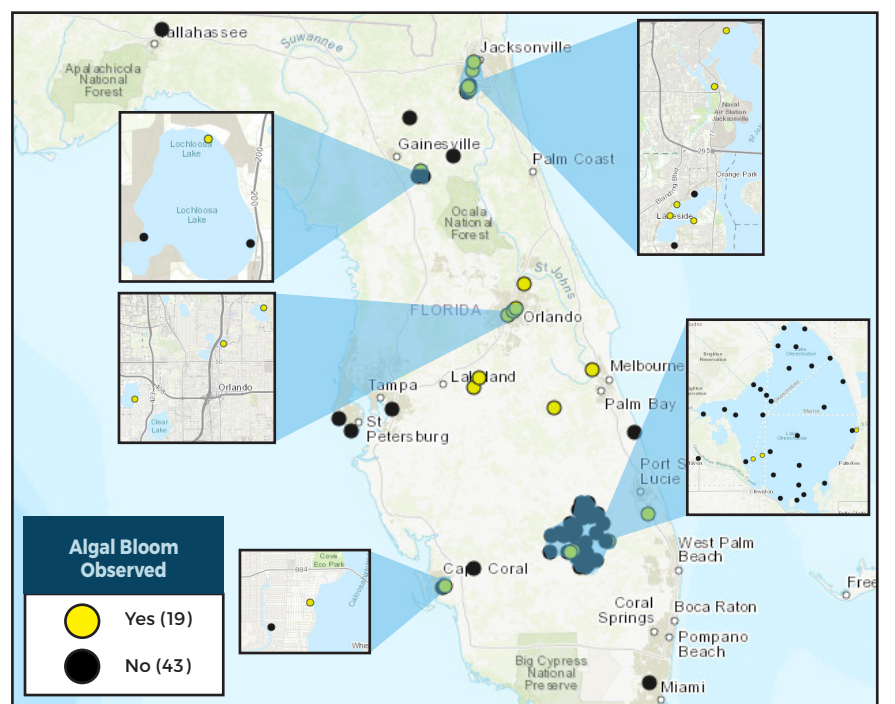
Results for completed analyses are available and posted at FloridaDEP.gov/AlgalBloom.

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



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



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



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

