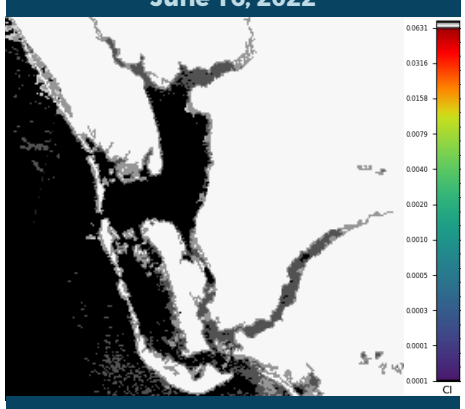
BLUE-GREEN ALGAL BLOOM WEEKLY UPDATE

REPORTING JUNE 10 - 16, 2022

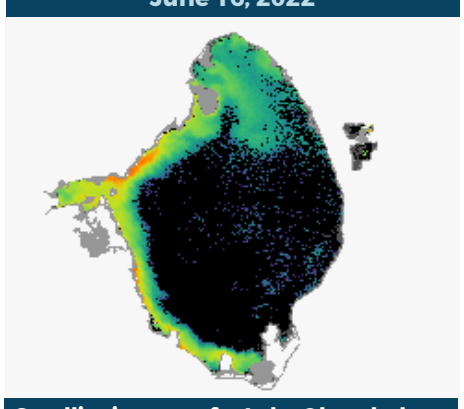
Satellite imagery provided by NOAA - Images are impacted by cloud cover.
A value of 0.004 is nominally equivalent to approximately 20-30 ug/L chlorophyll a of cyanobacteria, and 0.06 would be in the 300-500 ug/L chlorophyll a range.
Please keep in mind that bloom potential is subject to change due to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

Caloosahatchee Estuary
June 16, 2022



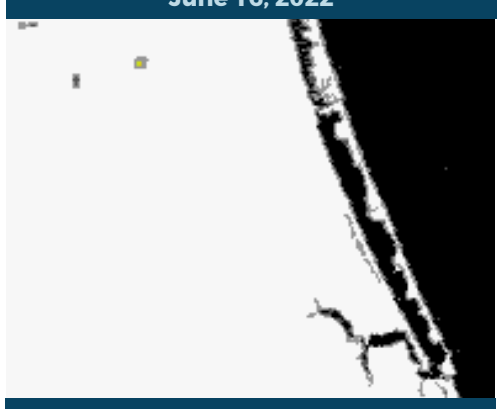
Satellite imagery for the Caloosahatchee Estuary shows no significant bloom potential in visible portions of the estuary.

Lake Okeechobee
June 16, 2022



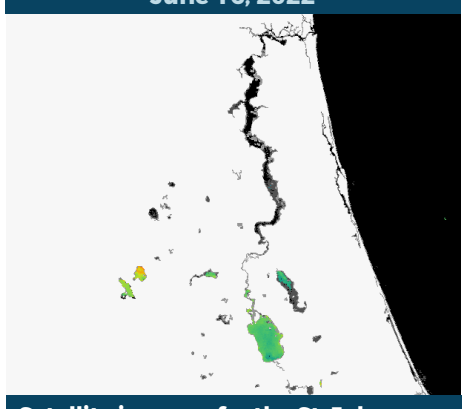
Satellite imagery for Lake Okeechobee shows approximately 30% coverage of moderate to high bloom potential, predominantly along western and southern shore and in the northern quarter of the lake.

St. Lucie Estuary
June 16, 2022



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

St. Johns River
June 16, 2022



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

SUMMARY

There were 48 reported site visits in the past seven days, with 47 samples collected. Algal bloom conditions were observed by samplers at 24 sites.

On 6/13 – 6/15, Florida Department of Environmental Protection (DEP) staff visited **Lake Sue** (two locations), **Lake Ivanhoe, Lake Mann, Harbor Isle Lake** (three locations), **Pasadena Lake, Lake Hancock, Lake Munson** (two locations), **Lake Marian, Caloosahatchee River – Moody Canal, Lake Disston, Lake Blanche, Lochloosa Lake** (three locations), **Lake Monroe, Lake Hamilton, Biscayne Canal – NE 107th St., Lake Crago, Lake Dot, C100 Canal – Coral Reef Park, Lake Griffin** (Seminole County), **Lake Kathryn** and **Lake Buffum**. The **Lake Sue** samples were dominated by *Microcystis aeruginosa* and *Cylindrospermopsis raciborskii* and had trace levels (0.26 parts per billion [ppb] and 0.42 ppb) of microcystins detected. The **Lake Ivanhoe, Lake Mann** and **Lake Hancock** samples had no dominant algal taxon and had trace levels (0.52 ppb, 0.28 ppb and 0.91 ppb, respectively) of microcystins detected. The **Lake Munson** phytoplankton samples were dominated by *Scytonema crispum* and *Oedogonium sp.* and had trace levels (0.42 to 0.49 ppb) of microcystins detected. The **Lake Marian** sample had no dominant algal taxon and had 3.6 ppb of microcystins detected. All three **Harbor Isle Lake** samples had no dominant algal taxon and had trace levels (0.32 to 0.70 ppb) of microcystins detected. The **Pasadena Lake** sample was dominated by *Microcystis wesenbergii* and had a trace level (0.38 ppb) of microcystin detected. The **Caloosahatchee River – Moody Canal** sample was dominated by the filamentous green alga, *Spirogyra sp.* and had no cyanotoxins detected. The **Lake Disston** sample was dominated by *Microcystis aeruginosa* and had a trace level (0.41 ppb) of microcystins detected. No sample was collected at **Lake Blanche** where no algal bloom was observed. Two of the **Lochloosa Lake** sample were co-dominated by *Microcystis aeruginosa* and *Dolichospermum circinale* and the third was dominated by *Microcystis aeruginosa* and *Microcystis wesenbergii*. The three **Lochloosa Lake** samples had microcystin concentrations ranging between 1.3 ppb to 2.8 ppb. The **Lake Monroe** sample was dominated by *Microcystis aeruginosa* and *Dolichospermum circinale* and had no cyanotoxins detected. The **Lake Hamilton, Biscayne Canal – NE 107th St., Lake Crago, Lake Dot, C100 Canal – Coral Reef Park, Lake Griffin** (Seminole County), **Lake Kathryn** and **Lake Buffum** analysis results are still pending.

On 6/13, St. Johns River Water Management District (SJRWMD) staff collected samples at **Crescent Lake** (three locations), **Stickmarsh-North, Lake George** (two locations), **Blue Cypress Lake, St. Johns River – Racy Point, St. Johns River – Shands Bridge, Doctors Lake, St. Johns River – Mandarin Point** and **Doctors Lake**. Two of the **Crescent Lake** samples were dominated by *Microcystis aeruginosa* and only one had a trace level (0.26 ppb) of microcystins detected. The **Stickmarsh-North** sample had no dominant algal taxon and no cyanotoxins detected. The **Lake George** samples were dominated by *Cylindrospermopsis raciborskii* and *Pseudanabaena limnetica* and had non-detect to trace levels microcystins (0.31 ppb) and trace levels (0.21 to 0.22 ppb) of cylindrospermopsin detected. The **Blue Cypress Lake** sample had no dominant algal taxon and a trace level (0.27 ppb) of microcystins detected. The **St. Johns River – Racy Point** sample was dominated by *Aphanizomenon flos-aquae* and had no cyanotoxins detected. The **St. Johns River – Shands Bridge** sample was dominated by *Cylindrospermopsis raciborskii* and had a trace level (0.26 ppb) of microcystins detected. The **St. Johns River – Mandarin Point** and **Doctors Lake** samples had no dominant algal taxon and had trace levels (0.25 ppb and 0.53 ppb, respectively) of microcystins detected.

On 6/13, Lee County staff collected a sample at **Caloosahatchee River – Alva Boat Ramp** and **Caloosahatchee River – North Shore Park**. The **Caloosahatchee River – Alva Boat Ramp** sample had no dominant algal taxon and no cyanotoxins detected. The **Caloosahatchee River – North Shore Park** sample was dominated by *Microcystis aeruginosa* and had a trace level (0.77 ppb) of microcystins detected.

On, 6/13 – 6/14, South Florida Water Management District staff collected samples from **C43 Canal – S77 Structure (upstream), Lake Okeechobee – S308C Structure (lakeside), C44 Canal – S308C Structure (canal side), C43 Canal – S79 Structure (upstream)** and **C51 Canal – S155 Structure (upstream).** The **C43 Canal – S77 Structure (upstream), Canal – S308C Structure (canal side)** and **C43 Canal – S79 Structure (upstream)** samples had no dominant algal taxon and no cyanotoxins detected. The **Lake Okeechobee – S308C Structure (lakeside)** and **C51 Canal – S155 Structure (upstream)** samples were dominated by *Microcystis aeruginosa* and had trace levels (0.88 ppb and 0.33 ppb, respectively) of microcystins detected.

On 6/15, Alachua County staff collected samples at **Lake Wauberg** and **Bivens Lake**. Neither sample had a dominant algal taxon and had trace levels (0.60 ppb and 3.3 ppb) of microcystins detected, respectively.

Last Week

On 6/9, SJRWMD staff collected samples at **Lake Monroe - Volusia Boat Ramp, Lake Monroe - Center** and **Lake Jesup - Center**. The **Lake Monroe - Volusia Boat Ramp** sample was co-dominated by *Microcystis aeruginosa* and *Dolichospermum circinale* and the **Lake Monroe – Center** samples had no dominant algal taxon. Both samples had trace levels (0.32 ppb and 0.26 ppb, respectively) of microcystins detected. The **Lake Jesup – Center** sample had no dominant algal taxon and no cyanotoxins detected.

On 6/9, DEP staff collected samples at **St. Johns River - 2930 SR 13; Swimming Pen Creek - Whitey's Fish Camp; Doctors Lake - end of Lawrence Rd. ; Lake Griffin - South Lobe** and **Lake Harris - South of Monkey Island**. The **St. Johns River - 2930 SR 13** sample was dominated by *Cylindrospermopsis raciborskii* and had a trace level (0.26 ppb) of microcystins detected. The **Swimming Pen Creek - Whitey's Fish Camp** sample had no dominant algal taxon and had a trace level (0.39 ppb) of microcystins detected. The **Doctors Lake - end of Lawrence Rd.** sample was dominated by *Microcystis aeruginosa* and had no cyanotoxins detected. The **Lake Griffin - South Lobe** sample had no dominant algal taxon and a trace level (0.29 ppb) of microcystins detected. The **Lake Harris - South of Monkey Island** sample was dominated by *Microcystis aeruginosa* and had a trace level (0.32 ppb) of microcystins detected.

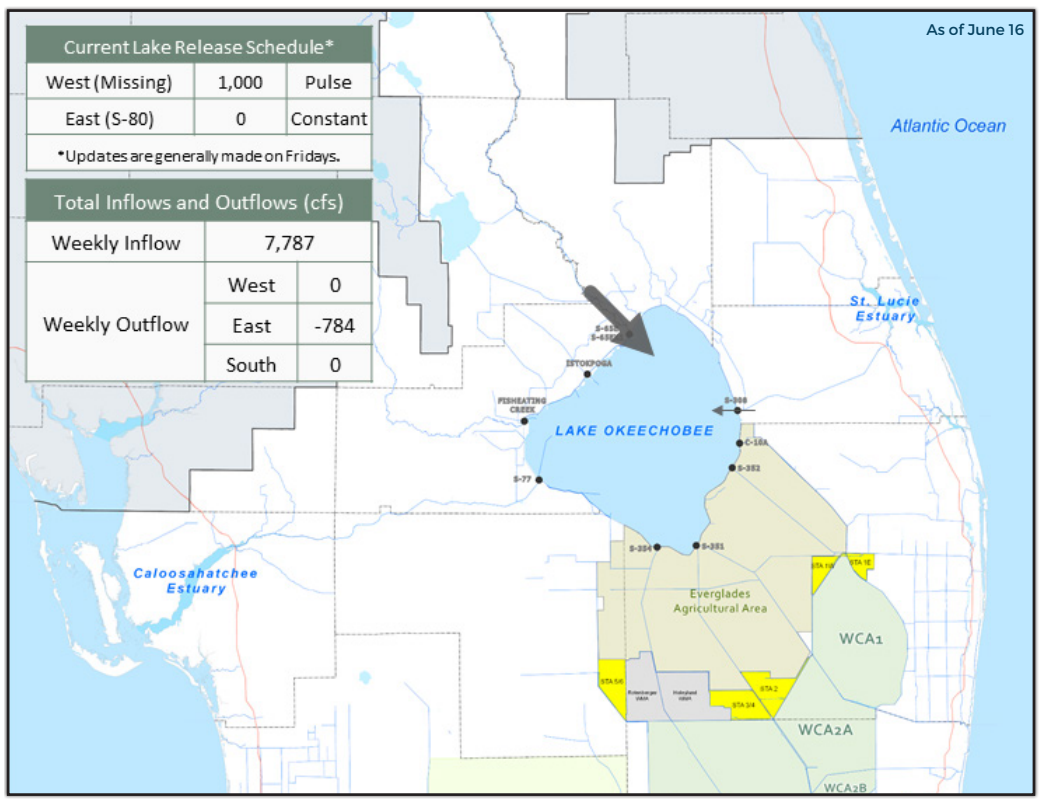
Results for completed analyses are available and posted at FloridaDEP.gov/AlgalBloom.

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.

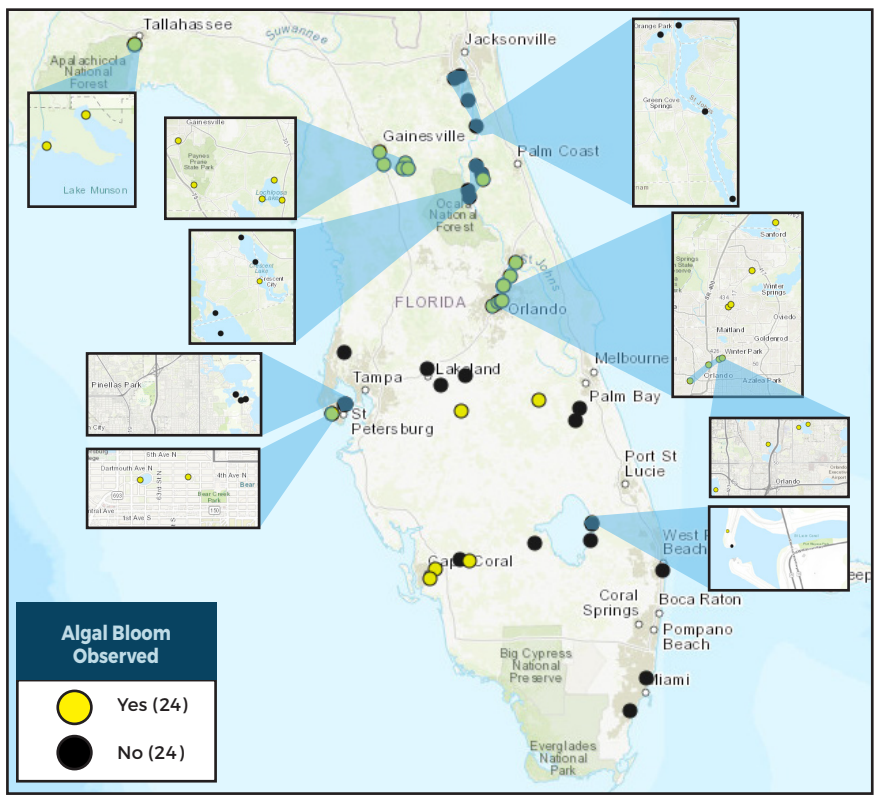
LAKE OKEECHOBEE OUTFLOWS

Current Lake Release Schedule*		
West (Missing)	1,000	Pulse
East (S-80)	0	Constant
*Updates are generally made on Fridays.		

Total Inflows and Outflows (cfs)		
Weekly Inflow	7,787	
Weekly Outflow	West	0
	East	-784
	South	0



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