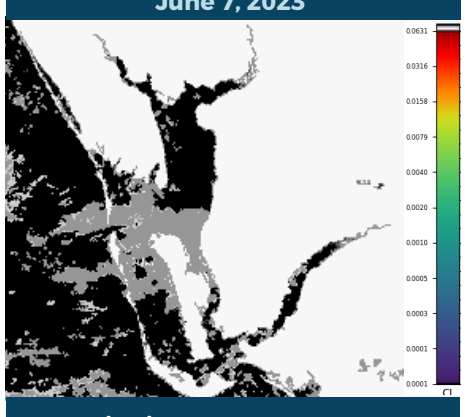
BLUE-GREEN ALGAL BLOOM WEEKLY UPDATE

REPORTING JUNE 2 - JUNE 8, 2023

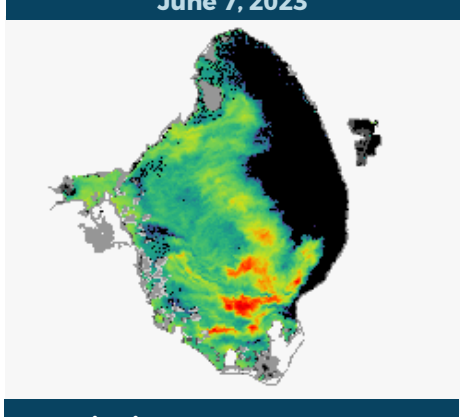
Satellite imagery provided by NOAA - Images are impacted by cloud cover.
A value of 0.004 is nominally equivalent to approximately 20-30 ug/L chlorophyll a of cyanobacteria, and 0.06 would be in the 300-500 ug/L chlorophyll a range.
Please keep in mind that bloom potential is subject to change due to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

Caloosahatchee Estuary
June 7, 2023



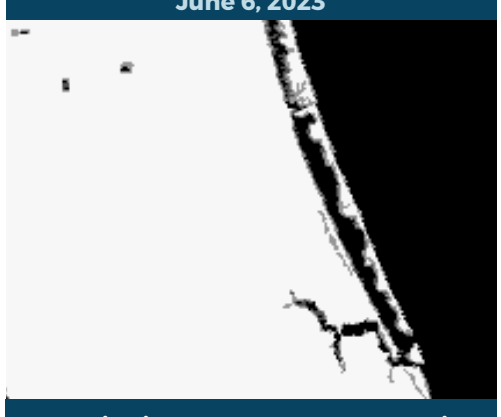
Satellite imagery for the Caloosahatchee Estuary shows no visible bloom potential.

Lake Okeechobee
June 7, 2023



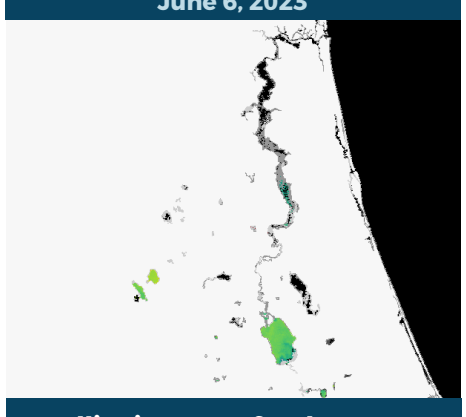
Satellite imagery for Lake Okeechobee shows moderate to high bloom potential on approximately 70% of the lake.

St. Lucie Estuary
June 6, 2023



Satellite imagery for the St. Lucie Estuary shows no visible bloom potential.

St. Johns River
June 6, 2023



Satellite imagery for the St. Johns River shows moderate bloom potential on Lake George extending down the mainstem of the river to Clarkes Creek.

DEP, in coordination with other state and local partners, extensively monitor and sample locations throughout Florida to evaluate water quality. Learn more about the roles and responsibilities of the agencies within this network when responding to blue-green algal blooms, as well as how local county health departments issue caution and health alert notices.

SUMMARY

There were 55 reported site visits in the past seven days with 55 samples collected. Algal bloom conditions were observed by samplers at 38 of the sites.

On 6/3-6/8, 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 - Fountain Bridge Preserve Ct:** No dominant algal taxon; no cyanotoxins detected.
- **Lake Smart - Hibiscus Dr:** *Microcystis aeruginosa*; trace level (0.41 ppb [parts per billion]) microcystins detected.
- **Alligator Lake – South:** *Microcystis aeruginosa*; cyanotoxin results pending.
- **Lake Rochelle - at Dock:** No dominant algal taxon; trace level (0.61 ppb) microcystins detected.
- **Fox Lake - S Shore:** No dominant algal taxon; no cyanotoxins detected.
- **Fox Lake - Park Boat Ramp:** *Microcystis aeruginosa* and *Dolichospermum circinale* co-dominant; no cyanotoxins detected.
- **Lake Apthorpe - Boat Ramp:** No dominant algal taxon; no cyanotoxins detected.
- **Peace River - at Bartow SR60:** No dominant algal taxon; no cyanotoxins detected.
- **Lake Hancock - South Central:** *Microcystis aeruginosa;* microcystins estimated to be 1.1 ppb.
- **Peace River - at Fort Meade:** No dominant algal taxon; no cyanotoxins detected.
- **Peace River - Crews Park Boat Ramp:** No dominant algal taxon; no cyanotoxins detected (anatoxin-a and saxitoxins results still pending).
- **Peace River - Brownville Park Boat Ramp:** No dominant algal taxon; no cyanotoxins detected (anatoxin-a and saxitoxins results still pending).
- **Peace River - Veterans Park Ramp:** No dominant algal taxon; no cyanotoxins detected (anatoxin-a and saxitoxins results still pending).
- **Lake Seminole - Boat Ramp:** No dominant algal taxon; trace level (0.17 ppb) cylindrospermopsin detected (anatoxin-a and saxitoxins results still pending).
- **Caloosahatchee River - Fort Myers Shores:** *Microcystis aeruginosa;* no cyanotoxins detected (anatoxin-a and saxitoxins results still pending).
- **Blue Lake - Western Shore:** *Microcystis aeruginosa*; no cyanotoxins detected (anatoxin-a and saxitoxins results still pending).

Results are pending for **Lake Okeechobee - S308C (lakeside); Sunset Lake - W Shore; Park Lake - W Shore; Lake Rowena - near NE corner; Lake Minnehaha - E Dock**; and **C44 canal - S308C (canal side)**.

On 6/5-6/7, South Florida Water Management District (SFWMD) staff collected 28 routine HAB samples on **Lake Okeechobee** and at three structures on the **C43 Canal at S77 (upstream), C43 Canal at S78 (upstream)** and **C43 Canal at S79 (upstream)**. All stations were dominated by *Microcystis aeruginosa* except **CLV10A, EASTSHORE, LZ2, NES191** and **PALMOUT,** which had no dominant algal taxon and no cyanotoxins detected. Anatoxin-a and saxitoxins results still pending for **LZ30, PALMOUT**, and **PALMOUT1**. No cyanotoxins were detected at **KISSRO.0, L001, NES135, L004, C43 Canal at S77 (upstream), C43 Canal at S78 (upstream)** and **C43 Canal at S79 (upstream)**.

Lake Okeechobee stations with trace or estimated levels microcystins detects include **NCENTER** (0.43 ppb); **L005** (0.51 ppb); **POLESOUT** (0.29 ppb); **POLESOUT3** (0.44 ppb); **POLESOUT2** (11 ppb); **L006** (0.85 ppb); and **RITTAE2** (0.55 ppb).

Lake Okeechobee stations with quantifiable levels of microcystins include **L008** (1.1 ppb); **POLESOUT1** (5.4 ppb); **KBARSE** (1.6 ppb); **LZ40** (1.5 ppb); **PALMOUT1** (3.6 ppb); **PALMOUT2** (16 ppb); **PALMOUT3** (2.7 ppb); **LZ30** (13 ppb); **POLE3S** (5.0 ppb); **LZ25A** (2.3 ppb); **L007** (5.7 ppb); and **PELBAY3** (11 ppb).

On 6/8, SFWMD staff collected HAB response samples at **Lake Okeechobee – S352 (lakeside)** and **Lake Okeechobee – S354 (lakeside)**. Results are pending.

Last Week

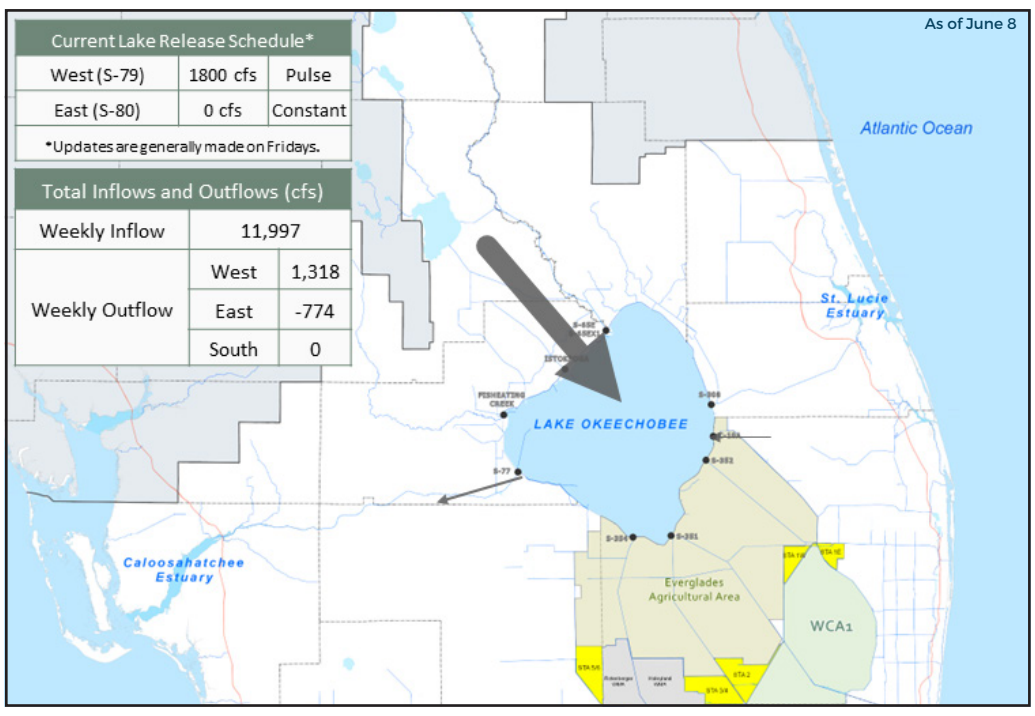
On 6/1, DEP staff collected HAB response samples from four sites.

- **Hunter Springs:** No dominant algal taxon; no cyanotoxins detected.
- **Georges Lake at Boat Ramp:** *Microcystis aeruginosa* and *Microcystis wesenbergii* co-dominant; trace level (0.32 ppb) microcystins detected.
- **Old Lake Davenport – SW Dock:** *Microcystis aeruginosa*; 0.54 ppb microcystins detected.
- **Tiger Lake:** *Microcystis aeruginosa* and *Microcystis wesenbergii* co-dominant; microcystins estimated to be 3.0 ppb.

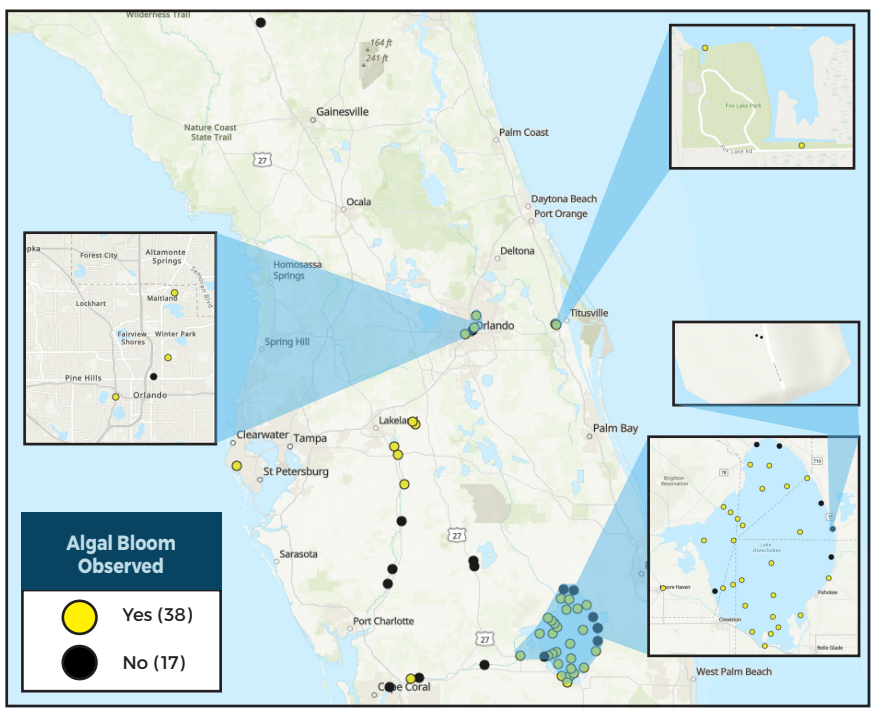
Results for completed analyses are available at FloridaDEP.gov/AlgalBloom.

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

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