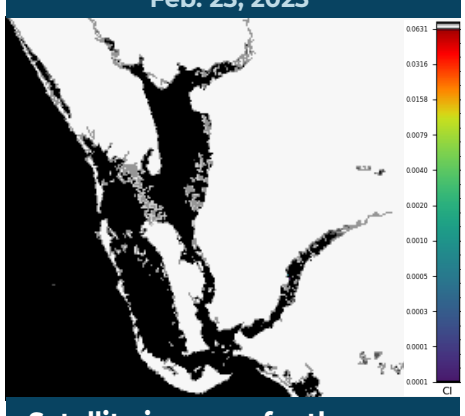
BLUE-GREEN ALGAL BLOOM WEEKLY UPDATE

REPORTING FEB. 17 - FEB. 23, 2023

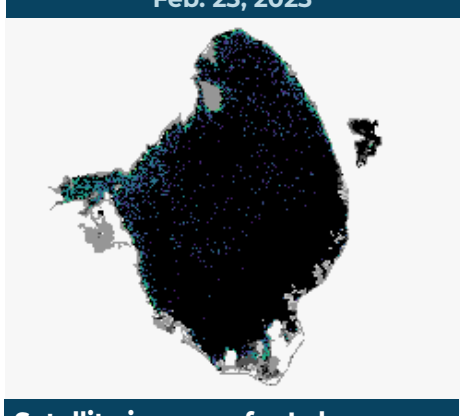
Satellite imagery provided by NOAA - Images are impacted by cloud cover.
A value of 0.004 is nominally equivalent to approximately 20-30 ug/L chlorophyll a of cyanobacteria, and 0.06 would be in the 300-500 ug/L chlorophyll a range.
Please keep in mind that bloom potential is subject to change due to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

Caloosahatchee Estuary
Feb. 23, 2023



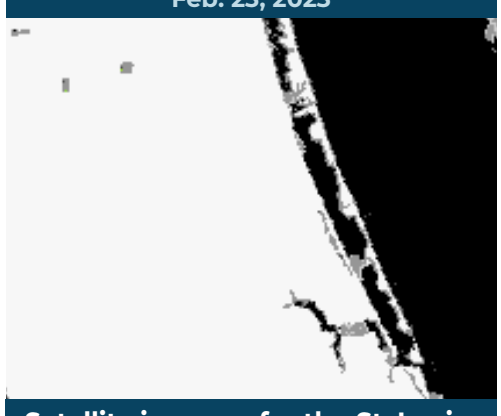
Satellite imagery for the Caloosahatchee Estuary shows no significant bloom potential in visible portions of the estuary.

Lake Okeechobee
Feb. 23, 2023



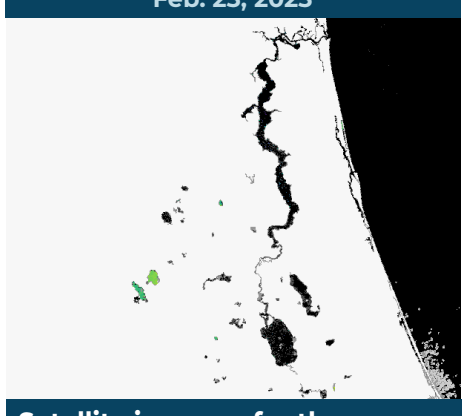
Satellite imagery for Lake Okeechobee shows scattered low bloom potential on visible portions of the lake.

St. Lucie Estuary
Feb. 23, 2023



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

St. Johns River
Feb. 23, 2023



Satellite imagery for the St. Johns River shows no significant bloom potential on visible portions of Lake George and the mainstem of the river downstream of Lake George.

SUMMARY

There were 20 reported site visits in the past seven days with 20 samples collected. Algal bloom conditions were observed by samplers at 13 of the sites.

On 2/20-2/23, Florida Department of Environmental Protection (DEP) staff collected harmful algal bloom (HAB) response samples at 15 locations. Dominant algal taxa and cyanotoxin results follow each waterbody name.

Note: Samples with results reported as "estimated" will be rerun due to analytical interference for several of the less commonly detected microcystin compounds. Updated results will be posted at FloridaDEP.gov/AlgalBloom once they are available; however, results are not anticipated to significant change.

- **Black Creek - at SR-17:** No dominant algal taxon; no cyanotoxins detected.
- **Lake Baldwin - Fleet Peeples Park:** ***Microcystis aeruginosa***; estimated 0.52 parts per billion (ppb) microcystins detected.
- **Lake Osceola - Canton Ave:** ***Microcystis aeruginosa***; trace level (1.1 ppb) microcystins detected.
- **Lake Ola - NE Shore:** ***Microcystis aeruginosa***; trace level (0.22 ppb) microcystins detected.
- **Lake Virginia - Dinky Dock:** ***Microcystis aeruginosa***; trace level (0.78 ppb) microcystins detected.
- **Georges Lake - Boat Ramp Rd:** ***Microcystis aeruginosa*** and ***Woronichinia naegeliana*** co-dominant; 9,000 ppb microcystins detected, with anatoxin-a and saxitoxin results pending.
- **Georges Lake – Center:** ***Microcystis aeruginosa***; trace level (8.9 ppb) microcystins detected. The reported value is still considered trace due to high method detection limits caused by the amount of sample dilution needed to analyze the sample.
- **Lake Glenada - Boat Ramp:** No dominant algal taxon; trace level (estimated 1.6 ppb) microcystins detected.
- **Blue Lake - Western Shore:** ***Microcystis aeruginosa***; trace level (estimated 0.84 ppb) microcystins detected.
- **Lake Placid - Boat Ramp:** ***Microcystis aeruginosa***; trace level (estimated 0.33 ppb) microcystins detected.
- **Lake Pineloch - E Shore:** ***Microcystis aeruginosa***; trace level (estimated 0.35 ppb) microcystins detected.
- **Lake Sue - NW Shore:** Results pending.
- **Big Sand Lake from Dock:** Results pending.
- **Lake Mann - McQueen Park:** Results pending.
- **Sunset Lake - W Shore:** Results pending.

Regarding sample results for **Georges Lake**, DEP staff are working closely with the Florida Department of Health (DOH). Last week, the Putnam County Health Department issued a cyanobacteria health advisory notification for this waterbody, which remains in effect. The algal bloom is congregated at the base of the canal near the boat ramp. It is common for algal blooms to accumulate at the base of canals due to wind and not being able to disperse due limited circulation; and therefore, would cause higher results. Persistent blooms are routinely monitored and retested, and in the coming days, staff will resample this site. **Residents and visitors are advised to avoid coming into contact with algae and to stay out of the water where a visible bloom is present.**

On 2/22, South Florida Water Management District staff collected two HAB response samples. Updated results will be posted at FloridaDEP.gov/AlgalBloom once they are available.

- **Lake Okeechobee - S308C (lakeside):** ***Microcystis aeruginosa***; estimated no cyanotoxins detected.
- **C44 canal - S308C (canal side):** ***Microcystis aeruginosa***; trace level (estimated 0.62 ppb) microcystins detected.

On 2/20-2/23, St. Johns River Water Management District (SJRWMD) staff collected routine HAB monitoring samples at three locations.

- **Lake Washington – Center:** No dominant algal taxon; trace level (0.26 ppb) microcystins detected.
- **Lake Jesup – Center:** ***Microcystis aeruginosa***; trace level (0.61 ppb) microcystins detected.
- **Lake Monroe – Center:** Results pending.

Last Week

On 2/14-2/16, DEP staff collected HAB response samples at 15 locations.

- **Lake Whistler - at Dock:** ***Microcystis aeruginosa***; trace level (1.8 ppb) microcystins detected.
- **Georges Lake - Center:** ***Microcystis aeruginosa***; 49 ppb microcystins detected.
- **Georges Lake - Boat Ramp Rd:** ***Microcystis aeruginosa***; 100 ppb microcystins detected.
- **Lake Tennessee - SW Shore:** ***Microcystis aeruginosa***; no cyanotoxins detected.
- **Lake Baldwin - Fleet Peeples Park:** Dominant taxon in water sample was ***Microcystis aeruginosa***; dominant taxon in algal mat sample was ***Scytonema crispum***; trace level (1.1 ppb) microcystins detected.
- **Lake Virginia - Dinky Dock:** ***Microcystis aeruginosa***; 1.1 ppb microcystins detected.
- **Lake Osceola - Canton Ave:** ***Microcystis aeruginosa***; 1.5 ppb microcystins detected.
- **Lake Maitland - Kraft Azalea Garden:** ***Microcystis aeruginosa***; trace level (0.70 ppb) microcystins detected.
- **Lake Formosa - Pedestrian Bridge:** No dominant algal taxon in water sample; dominant taxon in algal mat sample was ***Spirogyra sp.***; no cyanotoxins detected.
- **Wood Lake - E Shore:** Co-dominant algal taxa were ***Microcystis aeruginosa*** and ***Woronichinia naegeliana***; trace level (0.88 ppb) microcystins detected.
- **Deep Lake - N Shore:** ***Microcystis aeruginosa***; no cyanotoxins detected.
- **Lake Pearl - Woodside Village Ramp:** ***Microcystis aeruginosa***; trace level (0.16 ppb) microcystins detected.
- **Lake Howell - NW Shore:** No dominant algal taxon; no cyanotoxins detected.
- **Lake Marian – Boat Ramp:** ***Microcystis aeruginosa***; 6.2 ppb microcystins detected.
- **L-14 Canal - NW 5th Street Bridge:** No dominant algal taxon; no cyanotoxins detected.

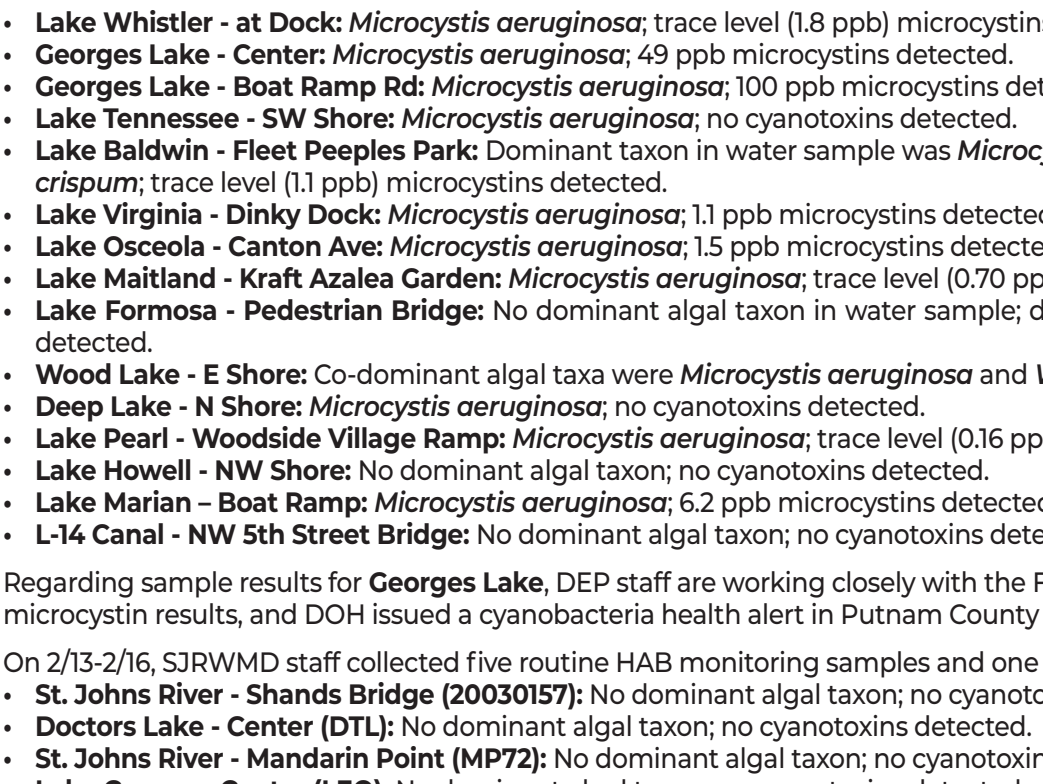
Regarding sample results for **Georges Lake**, DEP staff are working closely with the Florida Department of Health (DOH). DEP staff notified DOH staff of the microcystin results, and DOH issued a cyanobacteria health alert in Putnam County on 2/17/23.

On 2/13-2/16, SJRWMD staff collected five routine HAB monitoring samples and one HAB response sample.
- **St. Johns River - Shands Bridge (20030157):** No dominant algal taxon; no cyanotoxins detected.
- **Doctors Lake - Center (DTL):** No dominant algal taxon; no cyanotoxins detected.
- **St. Johns River - Mandarin Point (MP72):** No dominant algal taxon; no cyanotoxins detected.
- **Lake George - Center (LEO):** No dominant algal taxon; no cyanotoxins detected.
- **Crescent Lake - Mouth of Dunns Creek (CRESLM):** No dominant algal taxon; no cyanotoxins detected.
- **Center of Newnans Lake:** No dominant algal taxon; trace level (estimated 1.0 ppb) microcystins detected.

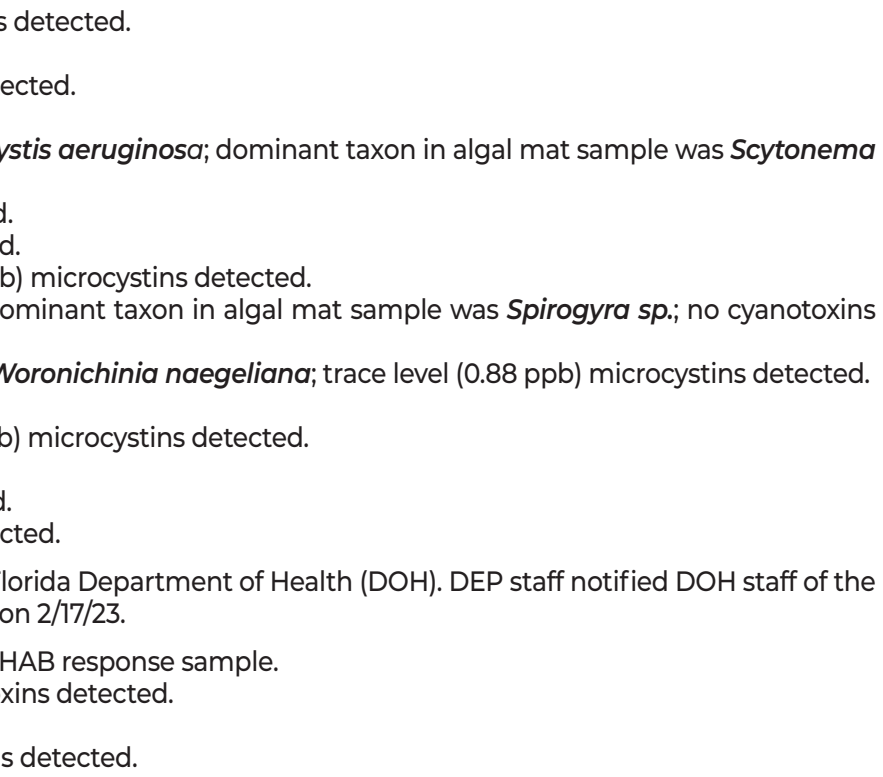
Results for completed analyses are available at FloridaDEP.gov/AlgalBloom.

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