

### BLUE-GREEN ALGAL BLOOM WEEKLY UPDATE

**REPORTING APRIL 28 - MAY 4, 2023** 

Satellite imagery provided by NOAA - Images are impacted by cloud cover.

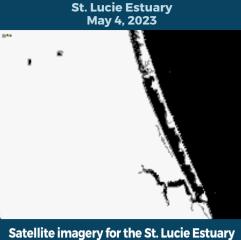
A value of 0.004 is nominally equivalent to approximately 20-30 ug/L chlorophyll a of cyanobacteria, and 0.06 would be in the 300-500 ug/L chlorophyll a range. Please keep in mind that bloom potential is subject to change due to rapidly changing environmental conditions or satellite inconsistencies (i.e.,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

Caloosahatchee Estuary May 4, 2023 Satellite imagery for the

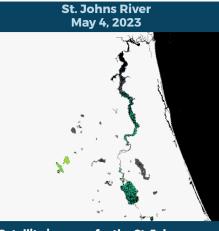
**Caloosahatchee Estuary shows no** bloom potential on visible portions of the estuary.

# Lake Okeechobee May 4, 2023

Satellite imagery for Lake Okeechobee shows low to moderate bloom potential on visible portions of the lake, predominantly along the south, west, north and northeast shore.



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



Satellite imagery for the St. Johns River shows moderate bloom potential on Lake George extending down the mainstem of the river to Green Cove Spring along with scattered low bloom potential from Green Cove Spring to downtown Jacksonville.

During this year's legislative session, both the Florida House of Representatives and Senate unanimously passed the department's comprehensive legislation, which supports the goals of Executive Order 23-06 (Achieving Even More Now for Florida's Environment), signed by Governor Ron DeSantis in January 2023. House Bill 1379/Senate Bill 1632 enhances protections for the Indian River Lagoon with funding appropriated for restoration projects; expands and improves water quality protections; expands the wastewater grant program to broaden funding opportunities for water quality improvement projects; strengthens basin management action plans by requiring identification of water quality improvement projects that achieve nutrient reductions; improves comprehensive planning with local governments by requiring long-term planning for future sewer connections; and expedites and dedicates funding to land conservation efforts.

#### **SUMMARY**

There were 55 reported site visits in the past seven days with 55 samples collected. Algal bloom conditions were observed by samplers at 17 of the sites. On 5/1-5/4, Florida Department of Environmental Protection (DEP) staff collected harmful algal bloom (HAB) response samples from 19 sites. Dominant algal taxa and cyanotoxin results follow each waterbody name.

- Peace River Brownville Park: No dominant algal taxon; trace level (0.67 parts per billion [ppb]) microcystins detected.
- **Lake Hancock South Central:** *Microcystis aeruginosa*; 1.9 ppb microcystins detected.
- Lake Whistler at Dock: Microcystis aeruginosa; no cyanotoxins detected.
- Lake Haines Boat Ramp: Microcystis aeruginosa; microcystins estimated to be 1.3 ppb.
- Tiger Lake Center: No dominant algal taxon; microcystins estimated to be 3.8 ppb.
- Lake Hollingsworth at Lakeland Water Ski Club: Microcystis aeruginosa: trace level (0.18 ppb) microcystins detected.
- **Peace River at Bartow SR60:** *Microcystis aeruginosa*; microcystins estimated to be 1.3 ppb.
- Peace River Fort Meade Outdoor Recreation Area: Microcystis aeruginosa; trace level (0.92 ppb) microcystins detected.
- Scott Lake at Fitzgerald Rd Boat Ramp: No dominant algal taxon; trace level (0.58 ppb) microcystins detected.
- Georges Lake Center: Microcystis aeruginosa; trace level (0.12 ppb) microcystins detected.
- Georges Lake Boat Ramp Rd: Microcystis aeruginosa and Microcystis wesenbergii co-dominant; microcystins estimated to be 2.3 ppb.
- Lake Maitland Kraft Azalea Garden: No dominant algal taxon; no cyanotoxins detected.
- Lake Baldwin Park Boat Ramp: Planktolyngbya limnetica; trace level (0.10 ppb) microcystins detected.

Results are pending for Caywood Pond - SW Dock; Lake Formosa - SW Park; Lake Apthorpe - Boat Ramp; Lake Estelle - NE Lobe; Lake Rowena near **NE corner**; and **Alligator Creek - Bel Air Dr**.

On 5/1-5/3, South Florida Water Management District (SFWMD) staff collected 36 HAB routine and HAB response samples.

- Lake Okeechobee S352 (lakeside): Microcystis aeruginosa; 150 ppb microcystins detected. SFWMD has treated this area. Preliminary results from the follow-up sample collected show microcystin below 2 ppb post-treatment. DEP will continue to monitor this site.
- Lake Okeechobee S308C (lakeside): Microcystis aeruginosa; 2.8 ppb microcystins detected.
- Lake Okeechobee POLESOUT2: No dominant algal taxon; trace level (0.93 ppb) microcystins detected.

Samples collected at C44 canal - S308C (canal side), Pahokee Marina Boat Ramp, and Lake Okeechobee stations KBARSE, NES135, PELBAY3, POLE3S and **LZ25A** were dominated by *Microcystis deruginosd* and had no cyanotoxins detected.

No dominant algal taxon and no cyanotoxins were detected in samples collected at C43 canal - S79 (upstream), C43 canal - S77 (upstream), and Lake Okeechobee stations FEBOUT, FEBIN, POLESOUT, POLESOUT1, POLESOUT3, NCENTER, EASTSHORE, L004, L008, L005, KISSR0.0, LZ2, NES191, L001, L007, PALMOUT, PALMOUT1, PALMOUT2, PALMOUT3, LZ30, RITTAE2, CLV10A, LZ40 and L006.

#### **Last Week**

On 4/27, DEP staff collected HAB response samples from six sites.

- Lake Virginia Dinky Dock: Cylindrospermopsis raciborskii; trace level (0.17 ppb) cylindrdospermopsin detected.
- Peace River Crews Park Boat Ramp: Microcystis aeruginosa; trace level (0.92 ppb) microcystins detected. Lake Osceola - Canton Ave: Cylindrospermopsis raciborskii; no cyanotoxins detected.
- Sunset Lake W Shore: Aphanizomenon flos-aquae; no cyanotoxins detected.
- Como Lake Canoe Launch Beach: Oedogonium sp.; no cyanotoxins detected.
- Caywood Pond SW Dock: Microcystis aeruginosa; 1.7 ppb of microcystins and 10 ppb of saxitoxins detected.

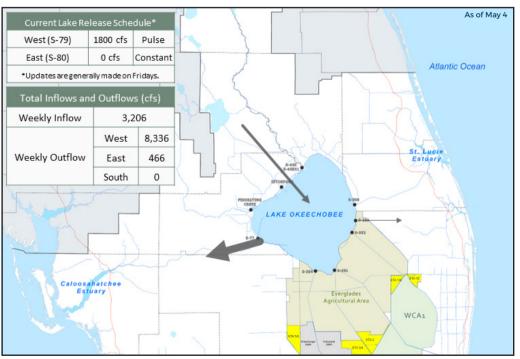
On 4/27, St. Johns River Water Management District staff collected four HAB routine samples. There was no dominant algal taxon or cyanotoxins detected in the St. Johns River - Mandarin Point, Doctors Lake - Center or St. Johns River - Shands Bridge samples. The Lake Jesup - Center sample was dominated by Cylindrospermopsis raciborskii and had no cyanotoxins 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 REPORT PUBLIC HEALTH ISSUES **HUMAN ILLNESS**

can be reached 24/7 at 800-222-1222 (DOH provides grant funding to

**Florida Poison Control Centers** 

the Florida Poison Control Centers)

#### **OTHER PUBLIC HEALTH CONCERNS**

CONTACT DOH

(DOH county office) HEALTH FloridaHealth.gov/ all-county-locations.html

#### **SALTWATER BLOOM Observe stranded wildlife**

or a fish kill. Information about red tide and other saltwater algal

Algal Bloom Observed

Yes (17)

## 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.

Palm Bay

Information about bluegreen algal blooms.





