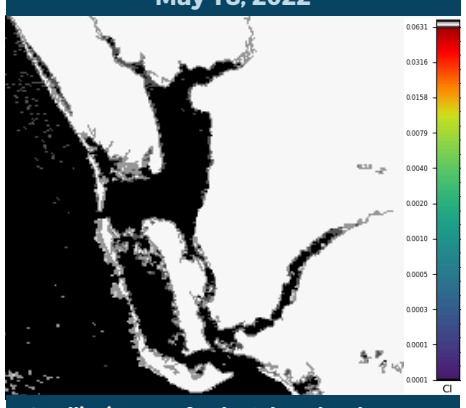
BLUE-GREEN ALGAL BLOOM WEEKLY UPDATE

REPORTING MAY 13 - 19, 2022

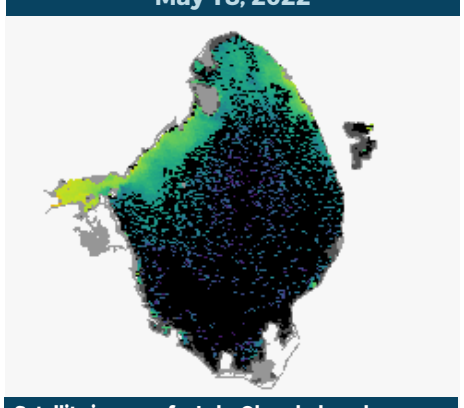
Satellite imagery provided by NOAA - Images are impacted by cloud cover.
A value of 0.004 is nominally equivalent to approximately 20-30 ug/L chlorophyll a of cyanobacteria, and 0.06 would be in the 300-500 ug/L chlorophyll a range.
Please keep in mind that bloom potential is subject to change due to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

Caloosahatchee Estuary
May 18, 2022



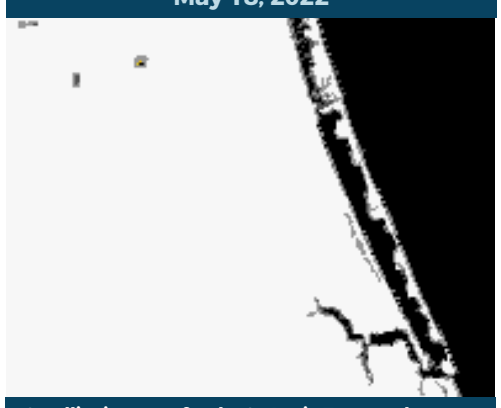
Satellite imagery for the Caloosahatchee Estuary shows no significant bloom potential.

Lake Okeechobee
May 18, 2022



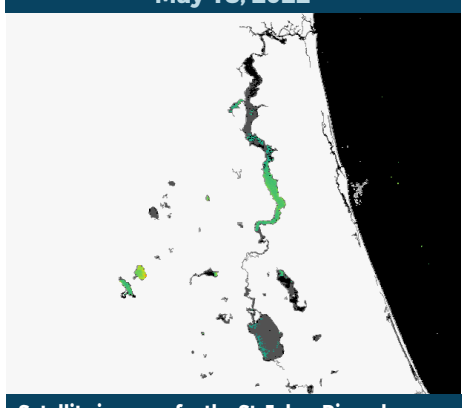
Satellite imagery for Lake Okeechobee shows approximately 40% coverage of low to moderate bloom potential along the northwestern, northern, northeastern shore, and scattered spots throughout the lake.

St. Lucie Estuary
May 18, 2022



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

St. Johns River
May 18, 2022



Satellite imagery for the St. Johns River shows areas of low to moderate bloom potential on Lake George and on the mainstem of the St. Johns River downstream of Lake George to Doctors Lake, although much of Lake George is obscured by cloud cover. Previous imagery of Lake George showed widespread coverage of low to moderate bloom potential on the lake.

SUMMARY

There were 71 reported site visits in the past seven days, with 67 samples collected. Algal bloom conditions were observed by samplers at 32 sites.

On 5/16, South Florida Water Management District (SFWMD) staff collected a sample from the **C43 Canal – Upstream S77 Structure, Lake Okeechobee – S308C** and **C44 Canal – S308C (canal side)**. The **Lake Okeechobee – S308C** and **C44 Canal – S308C (canal side)** samples were both dominated by *Microcystis aeruginosa* and neither sample had cyanotoxins detected. The **C43 Canal – Upstream S77 Structure** sample did not have a dominant algal taxon and had no cyanotoxins detected.

On 5/16, Alachua County staff collected a sample from **Camps Canal - CR 234** and **Lake Wauberg**. The **Camps Canal - CR 234** and **Lake Wauberg** samples were both dominated by *Microcystis wesenbergii* and had non-detect and a trace level [1.9 parts per billion (ppb)], respectively, of microcystins detected.

On 5/16 – 5/19, St. Johns River Water Management District (SJRWMD) staff collected bi-monthly routine harmful algal bloom monitoring (HAB) samples at **Crescent Lake – near Pomona Landing Rd, Crescent Lake – mouth of Dunns Creek, Lake Washington, Lake George, St. Johns River – Shands Bridge, St. Johns River – Mandarin Point** and **Doctors Lake**. SJRWMD staff also collected HAB response samples from **St. Johns River – Buzzard Island, St. Johns River – Green Cove Springs, St. Johns River – Mouth of Trout Creek, St. Johns River – Near Mouth of Tocoi Creek** and **St. Johns River – Watson Island**. Neither the **Crescent Lake – near Pomona Landing Rd**, nor the **Crescent Lake – mouth of Dunns Creek** sample had a dominant algal taxon and only the **Crescent Lake – mouth of Dunns Creek** sample had a trace level (0.30 ppb) of microcystins detected (anatoxin-a and saxitoxin results pending). Neither the **Lake Washington** nor the **Lake George** sample had a dominant algal taxon and trace levels (0.49 ppb and 0.48 ppb, respectively) of microcystins were detected (anatoxin-a and saxitoxin results pending). The **St. Johns River – Buzzard Island** sample had no dominant algal taxon and no microcystins detected (anatoxin-a and saxitoxin results pending). The **St. Johns River – Shands Bridge, St. Johns River – Mandarin Point, Doctors Lake, St. Johns River – Green Cove Springs, St. Johns River – Mouth of Trout Creek, St. Johns River – Near Mouth of Tocoi Creek** and **St. Johns River – Watson Island** analysis results are still pending.

On 5/16 – 5/19, Florida Department of Environmental Protection staff collected samples from **Harbor Isle Lake** (three locations), **Pasadena Lake, Doctors Lake, Lake Hamilton, Lake Munson** (two locations), **St. Johns River – 2930 SR 13, Caloosahatchee River at Alva Boat Ramp, Caloosahatchee River at Davis Boat Ramp, Caloosahatchee River at River Forest Kayak Launch, 183rd Ave Canal – off Cross Creek, Lake Mariam, Dot Lake, Perdido Bay – South Fairfield Park, Perdido Bay – Outside Weekly Bayou Mouth, Perdido Bay – Blue Angel Recreational Area** and **Perdido Bay – 12990 Odegen Drive**. All three **Harbor Isle Lake samples** were dominated by *Microcystis aeruginosa* and had trace levels (0.79 to 0.87 ppb) of microcystins detected. The **Pasadena Lake** sample was dominated by *Microcystis wesenbergii* and had 1.5 ppb of microcystins detected. The **Doctors Lake** sample was dominated by *Aphanizomenon flos-aquae* and had a trace level (0.49 ppb) of microcystins detected (anatoxin-a and saxitoxin results pending). The **Lake Hamilton** sample was dominated by *Microcystis aeruginosa* and had a trace level (0.55 ppb) of microcystins detected. The water sample from **Lake Munson – Munson Slough Inlet** sample was dominated by *Microcystis aeruginosa* and had a trace level (0.31 ppb) of microcystins detected, while the algal mat sample was co-dominated by the filamentous cyanobacterium, *Scytonema crispum*, and the green alga, *Oedogonium sp*. The **Lake Munson – North Lobe** water sample had no dominant algal taxon and 1.1 ppb of microcystins was detected, while the algal mat sample was dominated by *Oedogonium sp*. The **St. Johns River – 2930 SR 13** sample was dominated by *Dolichospermum circinale* and had no microcystins detected (anatoxin-a and saxitoxin results pending). The **183rd Ave Canal – off Cross Creek** sample was co-dominated by *Microcystis aeruginosa* and *Microcystis wesenbergii* and had 3.0 ppb of microcystins detected (anatoxin-a and saxitoxin results pending). The **Lake Mariam, Dot Lake, Perdido Bay – South Fairfield Park, Perdido Bay – Outside Weekly Bayou Mouth, Perdido Bay – Blue Angel Recreational Area** and **Perdido Bay – 12990 Odegen Drive** analysis results are still pending.

On 5/17– 5/18, SFWMD staff performed the first of their 2022 bi-monthly routine HAB monitoring on **Lake Okeechobee** at the following stations. Microcystin results are included in parentheses in parts per billion (ppb) following each station name: **KISSRO.0** (trace, 0.26 ppb); **LZ2** (trace, 0.28 ppb); **NES191** (non-detect); **L001** (non-detect); **NES135** (non-detect); **NCENTER** (non-detect); **EASTSHORE** (non-detect); **L004** (non-detect); ***L008*** (non-detect); **L005** (non-detect); **POLESOUT** (non-detect); **POLESOUT1** (trace, 0.25 ppb); **POLESOUT2** (non-detect); **POLESOUT3** (non-detect); **KBARSE** (non-detect); **CLV10A** (trace, 0.44 ppb); **LZ40** (trace, 0.27 ppb); **PALMOUT** (non-detect); **PALMOUT1** (trace, 0.31 ppb); **PALMOUT2** (trace, 0.28 ppb); **PALMOUT3** (trace, 0.29 ppb); **LZ30** (non-detect); **POLE3S** (non-detect); **RITTAE2** (non-detect); **LZ25A** (trace, 0.25 ppb); **L007** (trace, 0.26 ppb); **L006** (non-detect) and **PELBAY3** (non-detect). There were 22 routine HAB monitoring sites that had no dominant algal taxon. The **POLESOUT** sample was co-dominated by *Microcystis aeruginosa* and *Cylindrospermopsis raciborskii* and the **L005, KISSRO.0, CLV10A, PALMOUT1** and **PELBAY3** samples were dominated by *Microcystis aeruginosa*. SFWMD staff also collected HAB Response samples from **C51 Canal – S155 (upstream), Lake Okeechobee – Pahokee Marina, Lake Okeechobee – 900 meters west of Pahokee Marina, Lake Okeechobee – S352 (lakeside)** and **Lake Okeechobee – S271 (lakeside)**. The **C51 Canal – S155 (upstream)** sample had no dominant algal taxon and had a trace level (0.33 ppb) of microcystins detected. **The Lake Okeechobee – Pahokee Marina, Lake Okeechobee – 900 meters west of Pahokee Marina, Lake Okeechobee – S352 (lakeside)**, and **Lake Okeechobee – S271 (lakeside)** samples were all dominated by *Microcystis aeruginosa* and had trace (0.47 ppb), trace (0.62 ppb), 2.6 ppb, and non-detect, respectively, of microcystins detected.

On 5/17, Highlands County staff collected samples from **Lake Josephine** (two locations). Both samples were dominated by *Dolichospermum circinale* and had no cyanotoxins detected.

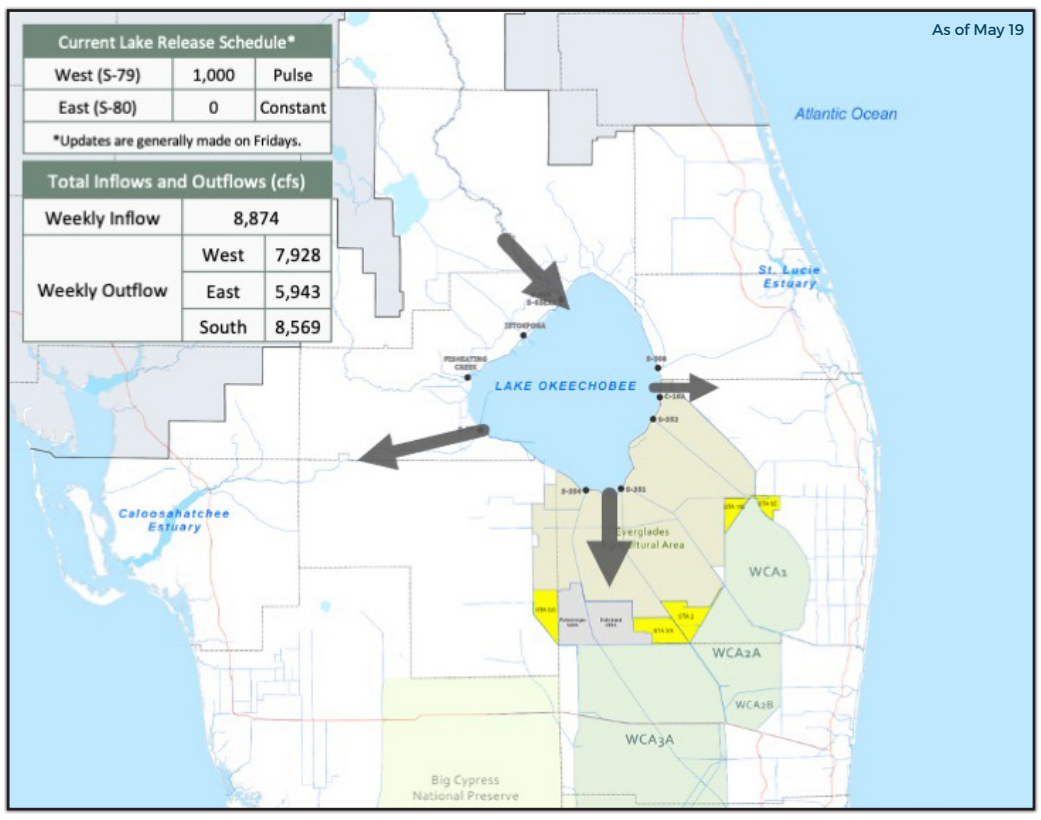
Last Week

On 5/9 – 5/12, DEP staff collected samples from **Lake Mann, Newnan's Lake, Lake Ivanhoe, Lake Sue, Santa Fe Lake** and **Lake Winnott**. The **Lake Mann** and **Lake Sue** samples were dominated by *Microcystis aeruginosa*. The **Lake Mann** sample had a trace level (0.47 ppb) of microcystins detected but the **Lake Sue** sample had no cyanotoxins detected. The **Newnan's Lake** sample was co-dominated by *Microcystis aeruginosa* and *Microcystis wesenbergii* and had a trace level (0.31 ppb) of microcystins detected. The **Lake Ivanhoe** sample was co-dominated by *Microcystis aeruginosa* and *Cylindrospermopsis raciborskii* and had no cyanotoxins detected. The **Santa Fe Lake** sample was dominated by *Aphanizomenon flos-aquae* and had no cyanotoxins detected. The **Lake Winnott** sample had no dominant algal taxon and had no cyanotoxins detected.

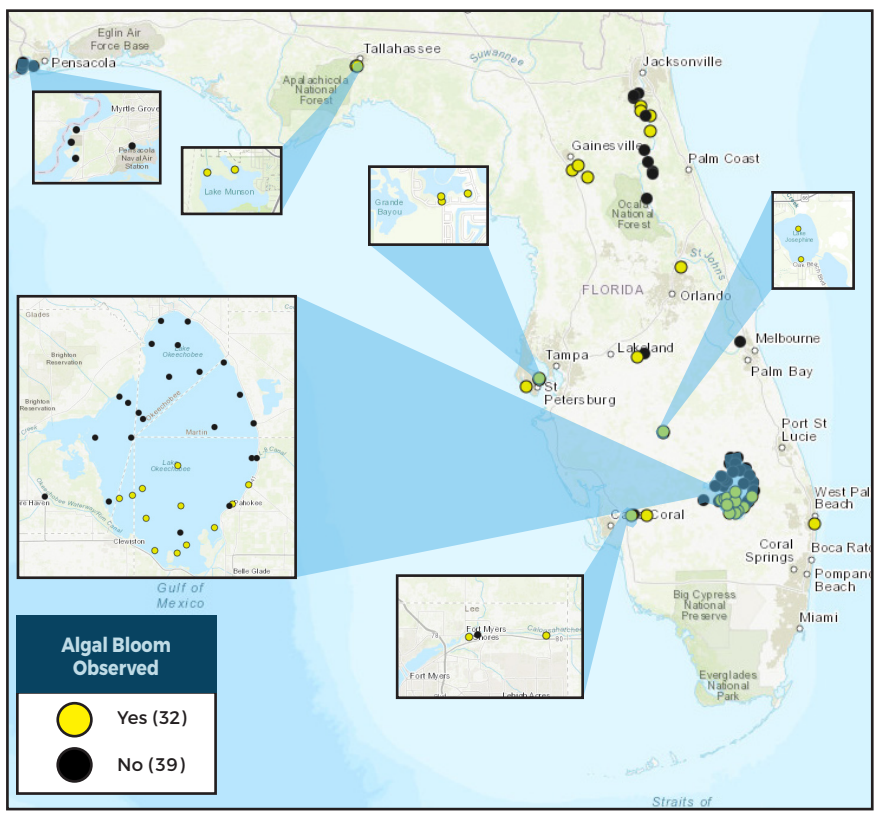
Results for completed analyses are available and posted at FloridaDEP.gov/AlgalBloom.

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

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