



BLUE-GREEN ALGAL BLOOM WEEKLY UPDATE

REPORTING JUNE 19 - 25, 2020

SUMMARY

There were 48 reported site visits in the past seven days (6/19-25), with 48 samples collected. Algal bloom conditions were observed by the samplers at 20 sites.

Satellite imagery from 6/25 shows bloom potential in Lake Okeechobee on approximately 75% coverage concentrated in the center of the lake, while visible portions of the Caloosahatchee and St. Lucie rivers and estuaries show no observable bloom activity. Over the course of the week, the area of potential algal bloom may have decreased, but the intensity of potential algal blooms on Lake Okeechobee has increased, which is being verified by South Florida Water Management District (SFWMD) field sampling efforts.

Satellite imagery from 6/25 for the St. Johns River is partially obscured by cloud cover, but shows little bloom potential in visible portions of Lake George or on the mainstem of the St. Johns River downstream of Lake George. The imagery indicates there may be an uptick on some of the lakes associated with the St. Johns River System. 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).

On 6/22, Florida Department of Environmental Protection (DEP) staff collected a sample at Lake Okeechobee West that was dominated by *Dolichospermum circinale*; however, cyanotoxins were not detected.

On 6/23, SFWMD staff collected samples in the northern portion of Lake Okeechobee at KISSR0.0, LZ2, NES191, L001, NES135, NCENTER, EASTSHORE, L004, L008, L005, POLESOUT3, POLESOUT2, POLESOUT1, POLESOUT and KBARSE. Blue-green algae observations by samplers at stations closer to the north and center of the northern portion on the lake corresponded well to satellite imagery.

Samples from sites L004, NCENTER, L001, L008 and KBARSE were dominated by *Microcystis aeruginosa*. Total microcystins were detected at L004 (800 parts per billion), NCENTER (10 ppb), L001 (3.7 ppb) and L008 (1.1 ppb). Trace level concentrations were detected at KBARSE (0.32 ppb). Dominant algal taxa were found in samples from EASTSHORE (*Microcystis aeruginosa*), L005, POLESOUT1 (*Cylindrospermopsis raciborskii*), and co-dominant in samples from POLESOUT3, POLESOUT2 and POLESOUT (*Microcystis aeruginosa* and *Cylindrospermopsis raciborskii*). Cyanotoxins were not detected in the samples. No dominant algal taxa and no cyanotoxins were detected in the KISSR0.0, LZ2, NES191 and NES135 samples.

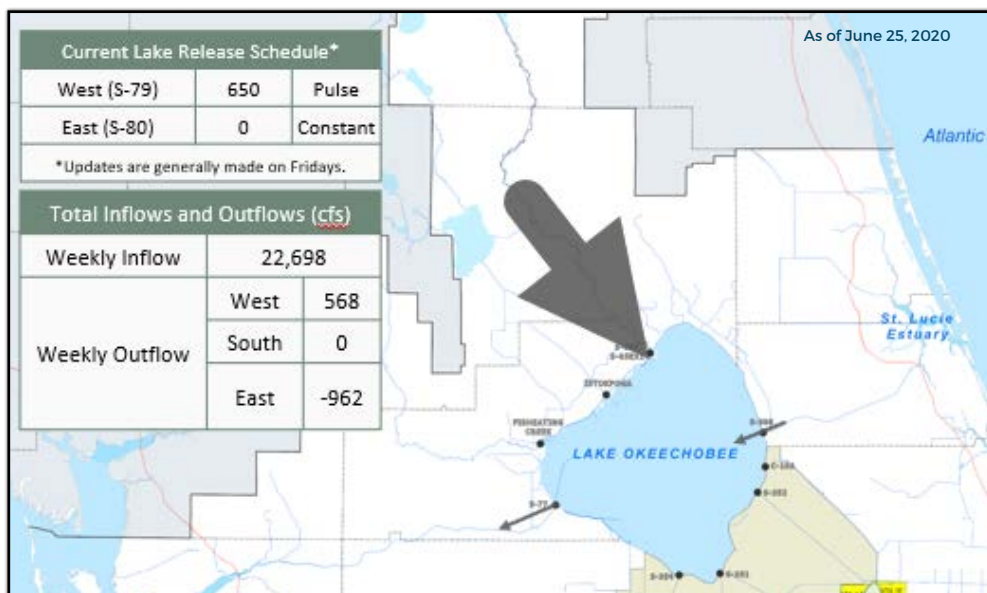
On 6/24, SFWMD staff collected samples on Lake Okeechobee at CLV10A, LZ40, PALMOUT3, PALMOUT2, PALMOUT1, PALMOUT, LZ30, POLE3S, LZ25A, L007, L006 and PELBAY3. Blue-green algae observations by samplers at stations closer to the center of the southern portion on the lake corresponded well to satellite imagery. Results are pending.

On 6/22, St. Johns River Water Management District (SJRWMD) staff collected two samples from Indian River Lagoon, 1 mile north of NASA Parkway Bridge and 1 mile south of A. Max Brewer Parkway Bridge. Both samples were dominated by *Pyrodinium bahamense*. No microcystins were detected; saxitoxins results are pending. On 6/24 and 6/25, the SJRWMD collected 12 samples from the St. Johns River and associated lakes. The Blue Cypress Lake-Center (BCL) sample had no dominant algal taxa, the Lake Monroe-Center (LMAC) sample was dominated by *Microcystis aeruginosa*, and the Lake Jesup-off Grassy Point (OW-2) sample was dominated by *Cylindrospermopsis raciborskii*. Cyanotoxins were not detected in these three samples; saxitoxins results are pending. Results for the remaining nine samples are pending.

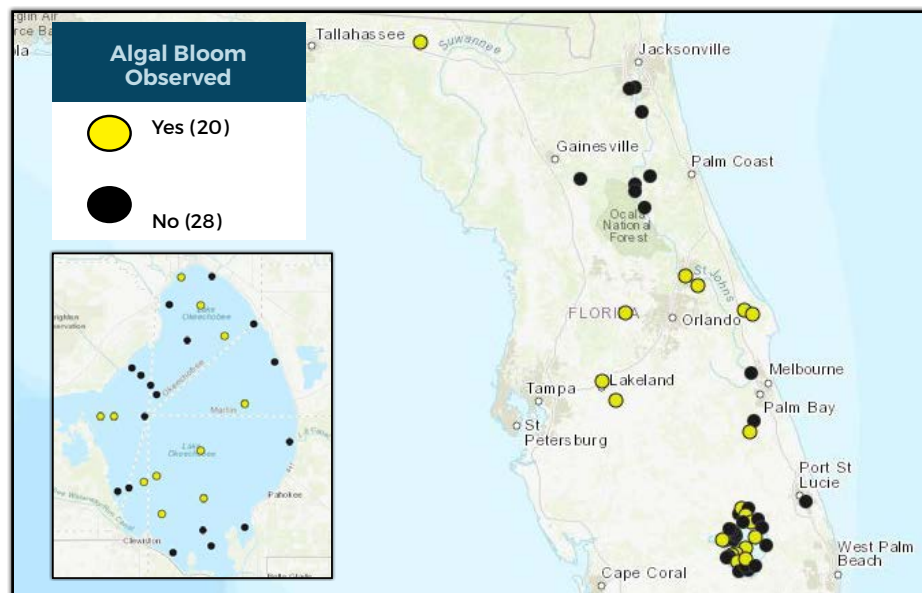
On 6/24, DEP staff collected a sample from the North Fork St. Lucie River. No bloom was observed. Cyanotoxins were not detected; algal taxa and saxitoxins results are pending. From 6/22 to 6/25, DEP staff collected samples from various lakes around Florida. The Lake Hancock (Polk County) sample had no dominant algae, the Lake Francis (Madison County) sample was dominated by *Microcystis wesenbergii*, and the Lake Minneola (Lake County) sample was dominated by *Microcystis aeruginosa*. Cyanotoxins were not detected in any of the three samples. Results from Lake Lochloosa (Alachua County) and Little Lake Parker (Polk County) are pending.

This is a high-level summary of the sampling events for the reported week. For all field visit and analytical result details, please refer 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 to stay out of water where algae is visibly present as specks, mats or water is discolored pea-green, blue-green or brownish-red. Additionally, pets or livestock should not come into contact with the algal bloom-impacted water, or the algal bloom material or fish on the shoreline.

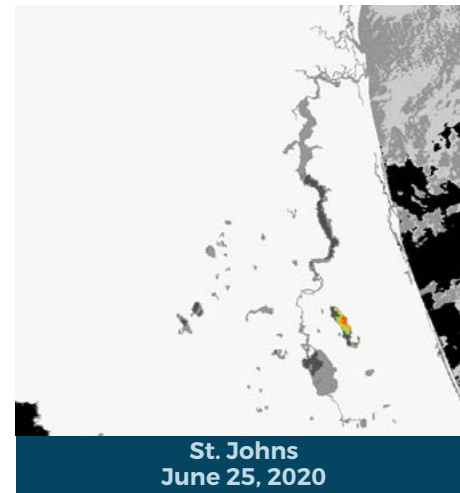
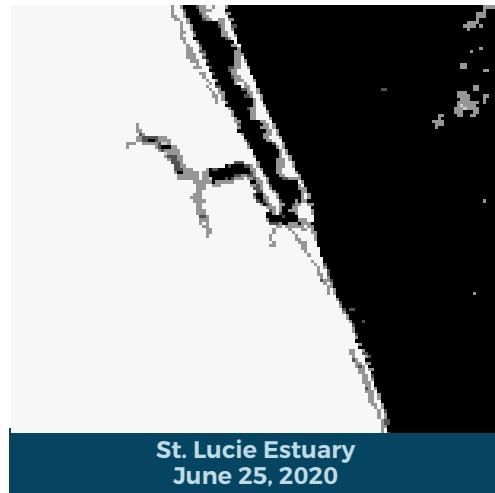
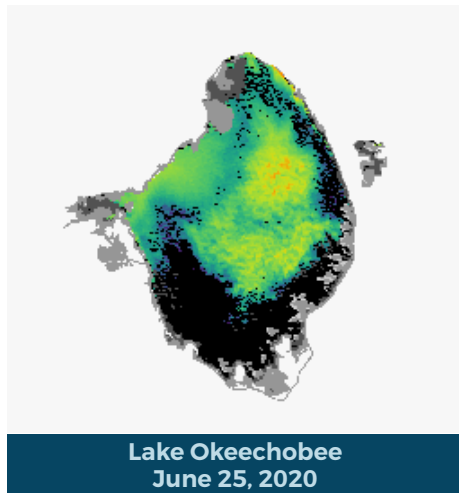
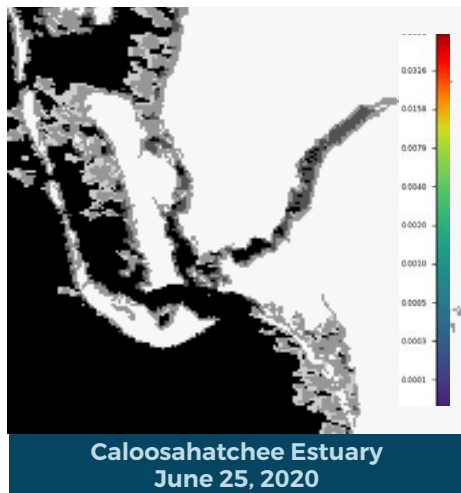
LAKE OKEECHOBEE OUTFLOWS



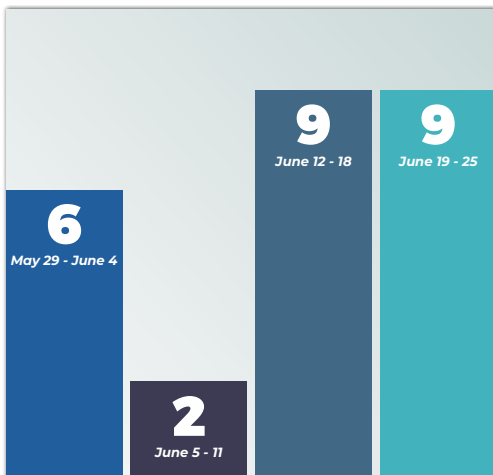
SITE VISITS FOR BLUE-GREEN ALGAE



Satellite Imagery provided by NOAA - Images are impacted by cloud-cover



REPORTS FROM HOTLINE



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