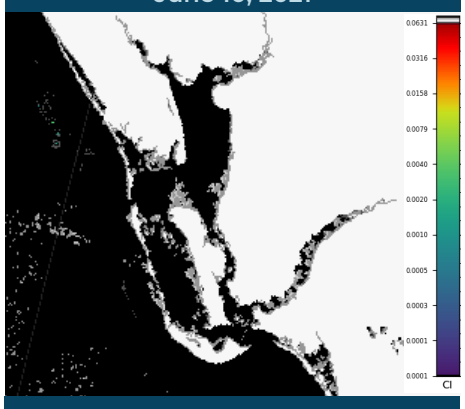
BLUE-GREEN ALGAL BLOOM WEEKLY UPDATE

REPORTING JUNE 4 - JUNE 10, 2021

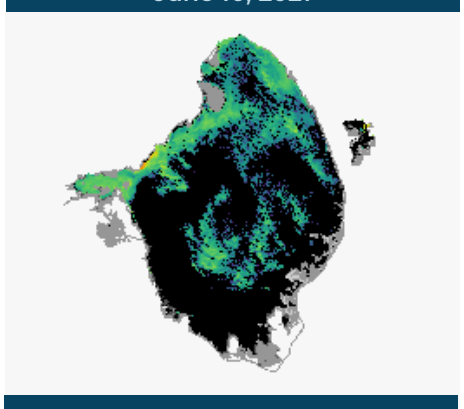
Satellite imagery provided by NOAA - Images are impacted by cloud cover.
A value of 0.004 is nominally equivalent to approximately 20-30 ug/L chlorophyll a of cyanobacteria, and 0.06 would be in the 300-500 ug/L chlorophyll a range.
Please keep in mind that bloom potential is subject to change due to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

Caloosahatchee Estuary
June 10, 2021



No significant bloom potential was observed in visible portions of the Caloosahatchee river or estuary, but algal bloom conditions were reported on the river at several locations between the S77 Structure and the Davis Boat Ramp.

Lake Okeechobee
June 10, 2021

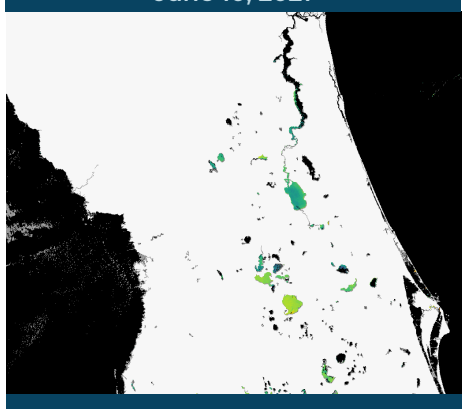


Lake Okeechobee was partially obscured by cloud cover in the 6/10 satellite imagery and showed moderate to high bloom potential on approximately 40% of the lake, with the heaviest accumulation along the northwestern shoreline.

St. Lucie Estuary
June 10, 2021

No bloom potential was observed in visible portions of the St. Lucie river or estuary; however, algal bloom conditions were observed on the C44 canal downstream of the S308 structure.

St. Johns
June 10, 2021



Satellite imagery from 6/10 showed moderate bloom potential over all of Lake George and on the St. Johns River immediately downstream from Lake George to Palmo Cove and in the western portion of Doctors Lake.

SUMMARY

There were 53 reported site visits in the past seven days (6/4 – 6/10), with 53 samples collected. Algal bloom conditions were observed by the samplers at 28 of the sites.

On 6/8 and 6/10, Florida Department of Environmental Protection (DEP) staff collected water samples at **14 locations in the area near Port Manatee in Tampa Bay** in response to the Piney Point emergency release. Cyanotoxins were not detected in the 6/8 samples, and the 6/10 sample results are pending. For daily updates and sampling data results, please visit ProtectingFloridaTogether.org/PineyPointUpdate.

On 6/7, South Florida Water Management District (SFWMD) staff collected samples from **C43 Canal – S77 (upstream); C-43 Canal – S79 (upstream); Lake Okeechobee – FEBOUT**; and **Lake Okeechobee - FEBIN. The C43 Canal – S77 (upstream**) and **C-43 Canal – S79 (upstream)** samples were both dominated by *Microcystis aeruginosa* and had trace levels (0.35 parts per billion [ppb]) and 0.37 ppb microcystins detected, respectively. Neither the **Lake Okeechobee – FEBOUT** nor the **Lake Okeechobee – FEBIN** sample had a dominant algal taxon; trace (0.33 ppb) and non-detect levels of microcystins, respectively, were detected.

On 6/7, DEP staff sampled **M-Canal – Seminole Pratt Whitney Road; L-8 Tieback Canal; Lake Okeechobee – S308 (lakeside)**; and **C-44 Canal – S308 (canal side)**. Only the **C-44 Canal – S308 (canal side)** sample had a dominant algal taxon, *Microcystis aeruginosa*, or cyanotoxins detected (trace, 0.81 ppb).

On 6/7, Southwest Florida Water Management District staff collected a sample from the **Withlacoochee River – Nobleton**. The sample was dominated by *Dolichospermum circinale* and had no cyanotoxins detected.

On 6/8, SFWMD staff collected samples from the **C51 – S155; C51 – Bridge at Military Trail; C44 – S80 (upstream)**; and **Taylor Creek – 100 Yards Upstream of S390**. Only the **Taylor Creek – 100 Yards Upstream of S390** sample had a dominant algal taxon, *Microcystis aeruginosa*. The **C51 – S155** and **C51 – Bridge at Military Trail** samples had trace levels (0.13 ppb and 0.61 ppb) of microcystins, respectively, while the **C44 – S80 (upstream)** and **Taylor Creek – 100 Yards Upstream of S390** samples had no cyanotoxins detected.

On 6/8 and 6/9, SFWMD staff collected samples from **Lake Okeechobee** at the following stations. Cyanotoxin results follow each station name: **KISSRO.0** (trace, 7.4 ppb); **LZ2** (trace, 0.73 ppb); **NES191** (trace, 0.80 ppb); **L001** (5.2 ppb); **NES135** (1.2 ppb); **NCENTER** (1.4 ppb); **EASTSHORE** (trace, 0.78 ppb); **L004** (trace, 0.28 ppb); **L008** (trace, 0.45 ppb); **L005** (2.2 ppb); **POLESOUT** (trace, 0.56 ppb); **POLESOUT1** (13 ppb); **POLESOUT2** (trace, 0.81 ppb); **POLESOUT3** (2.3 ppb); **KBARSE** (2.0 ppb); **CLV10A** (non-detect); **LZ40** (non-detect); **PALMOUT** (1.5 ppb); **PALMOUT1** (1.9 ppb); **PALMOUT2** (non-detect); **PALMOUT3** (trace, 0.64 ppb); **LZ30** (non-detect); **POLE3S** (non-detect); **RITTAE2** (non-detect); **LZ25A** (non-detect); **L007** (non-detect); **L006** (trace, 0.30 ppb); and **PELBAY3** (non-detect). *Microcystis aeruginosa* was the dominant taxon in all samples with microcystin levels greater than 1 ppb.

On 6/8, Highlands County staff collected a sample from **Huckleberry Lake – Canal Entrance**. The sample was co-dominated by *Microcystis aeruginosa* and *Microcystis wesenbergii* and had a trace level (0.32 ppb) of microcystins detected.

On 6/8, St. Johns River Water Management District (SJRWMD) staff collected a sample from **Lake Weir – 60 Meters North of Center**. The sample was co-dominated by *Cylindrospermopsis raciborskii* and *Planktolyngbya limnetica*. No cyanotoxins were detected.

On 6/9 and 6/10, DEP staff collected samples from **Lake Howell – SW Corner; Lake Eustis – NW Corner; Dead River – Residential Canal South of US 441; Orange River – Manatee Park; Caloosahatchee River – Baron Park; Caloosahatchee River – Sebastian Court;** and **Caloosahatchee River – South Olga Drive**. The **Lake Howell – SW Corner** and **Lake Eustis – NW Corner** samples were dominated by *Microcystis aeruginosa* and had a trace level (0.60 ppb) and non-detect level of microcystins detected, respectively. The **Dead River – Residential Canal South of US 441** sample was co-dominated by *Microcystis aeruginosa* and *Cylindrospermopsis raciborskii* and had a trace level (0.27 ppb) of microcystins detected. Sample results are pending for **Orange River – Manatee Park; Caloosahatchee River – Baron Park; Caloosahatchee River – Sebastian Court;** and **Caloosahatchee River – South Olga Drive**.

On 6/9 and 6/10, SJRWMD staff collected samples at **Crescent Lake – Mouth of Dunns Creek, Stick Marsh – North** and **Blue Cypress Lake – Center**. The **Crescent Lake – Mouth of Dunns Creek** sample did not have a dominant algal taxon and no cyanotoxins were detected. **The Blue Cypress Lake – Center** and **Stick Marsh – North** sample results are pending.

Last Week

On 6/3, DEP staff collected samples from **Caloosahatchee River – Labelle; Caloosahatchee River – Sebastian Court Canal; Caloosahatchee River – South Olga Drive;** and **Orange River – Manatee Park**. All sites except for **Orange River – Manatee Park** were dominated by *Microcystis aeruginosa* and each had trace levels (0.65 ppb, 0.52 ppb and 0.778 ppb, respectively). The **Orange River – Manatee Park** sample was dominated by *Cylindrospermopsis raciborskii* and had a trace level (0.45 ppb) of microcystin detected.

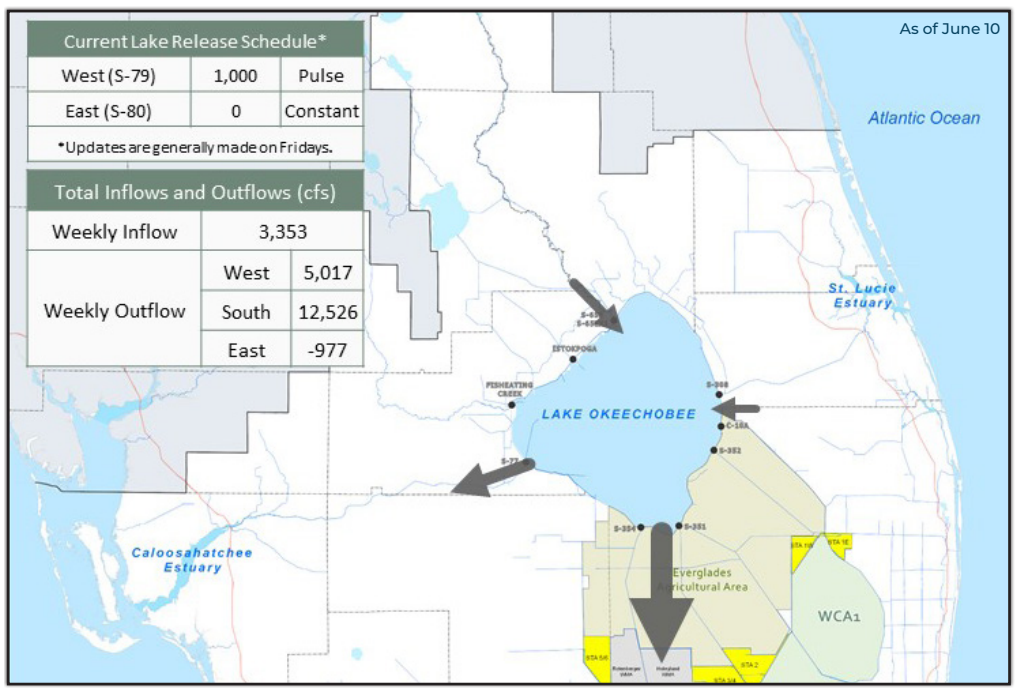
On 6/3, DEP staff collected samples at **Lake Otis – Boat Ramp**, **Lake Haines – Four Lakes Dock** and **Lake Myra – 202 Baker Road**. The **Lake Otis – Boat Ramp** and **Lake Haines – Four Lakes Dock** samples had no dominant algal taxon and had trace (0.78 ppb) and non-detect levels of microcystins, respectively. The **Lake Myra – 202 Baker Road** sample was dominated by *Cylindrospermopsis raciborskii* and had no cyanotoxins detected.

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 the algal bloom-impacted water, or the algal bloom material or fish on the shoreline.

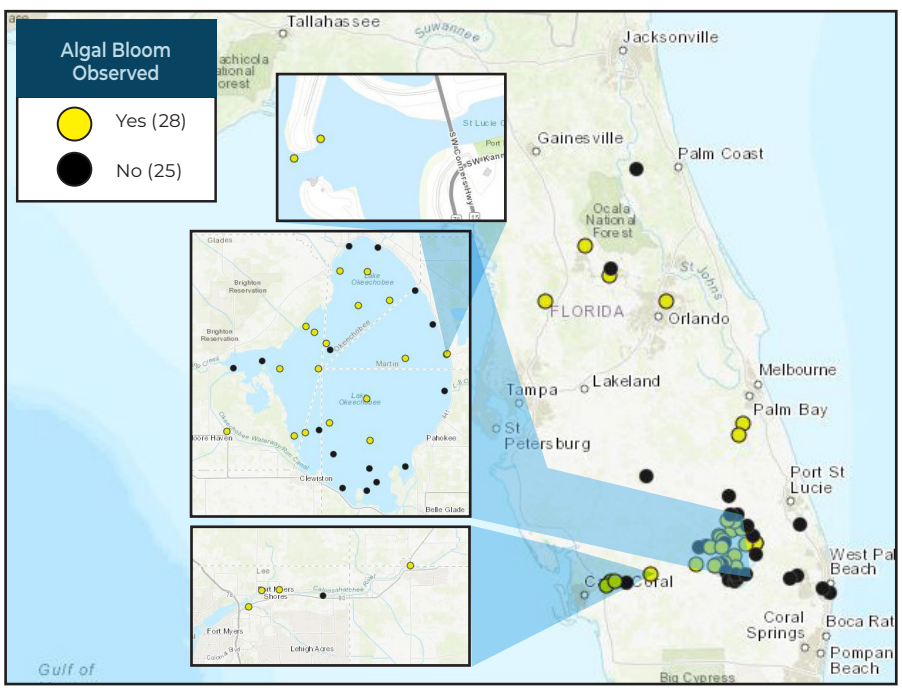
LAKE OKEECHOBEE OUTFLOWS

Current Lake Release Schedule*		
West (S-79)	1,000	Pulse
East (S-80)	0	Constant
*Updates are generally made on Fridays.		

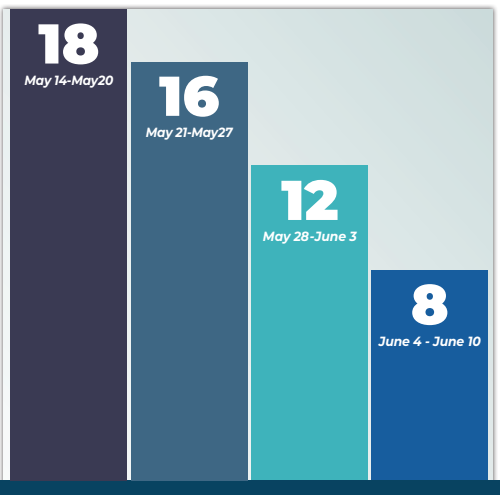
Total Inflows and Outflows (cfs)		
Weekly Inflow	3,353	
Weekly Outflow	West	5,017
	South	12,526
	East	-977



SITE VISITS FOR BLUE-GREEN ALGAE



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

Learn more about Florida's Algal Bloom Monitoring and Response visit our Water Quality website to check the current status and to receive updates.

PROTECTING TOGETHER
ProtectingFloridaTogether.gov