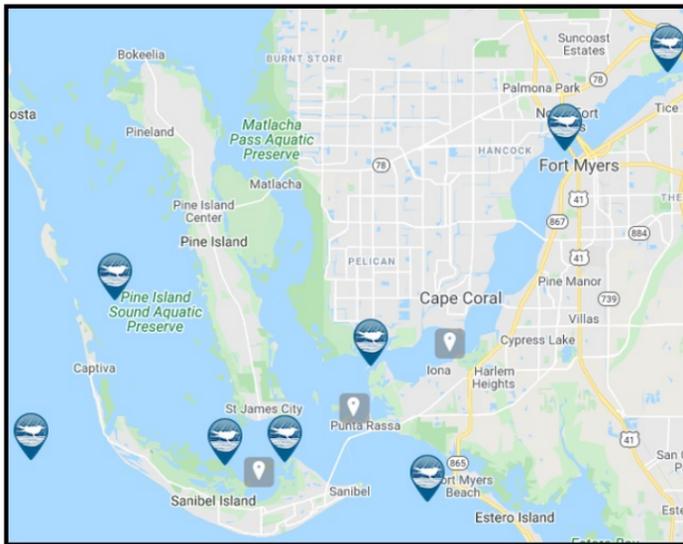




## This Week's Water Conditions Update

September 3, 2021

### Featured Water Quality Monitoring Tool: RECON



Continuous, in situ (on site), water quality data throughout the Caloosahatchee Estuary helps SCCF scientists, policy makers, and the general public monitor conditions using real time data. Our [River, Estuary, and Coastal Observing Network \(RECON\)](#) consists of eight water quality sensors that have been deployed since 2007 providing a comprehensive, long term data set of water quality parameters such as salinity, temperature, chlorophyll, oxygen, turbidity, and more. These data help us determine where nutrient and algal bloom hotspots occur and can be used to evaluate

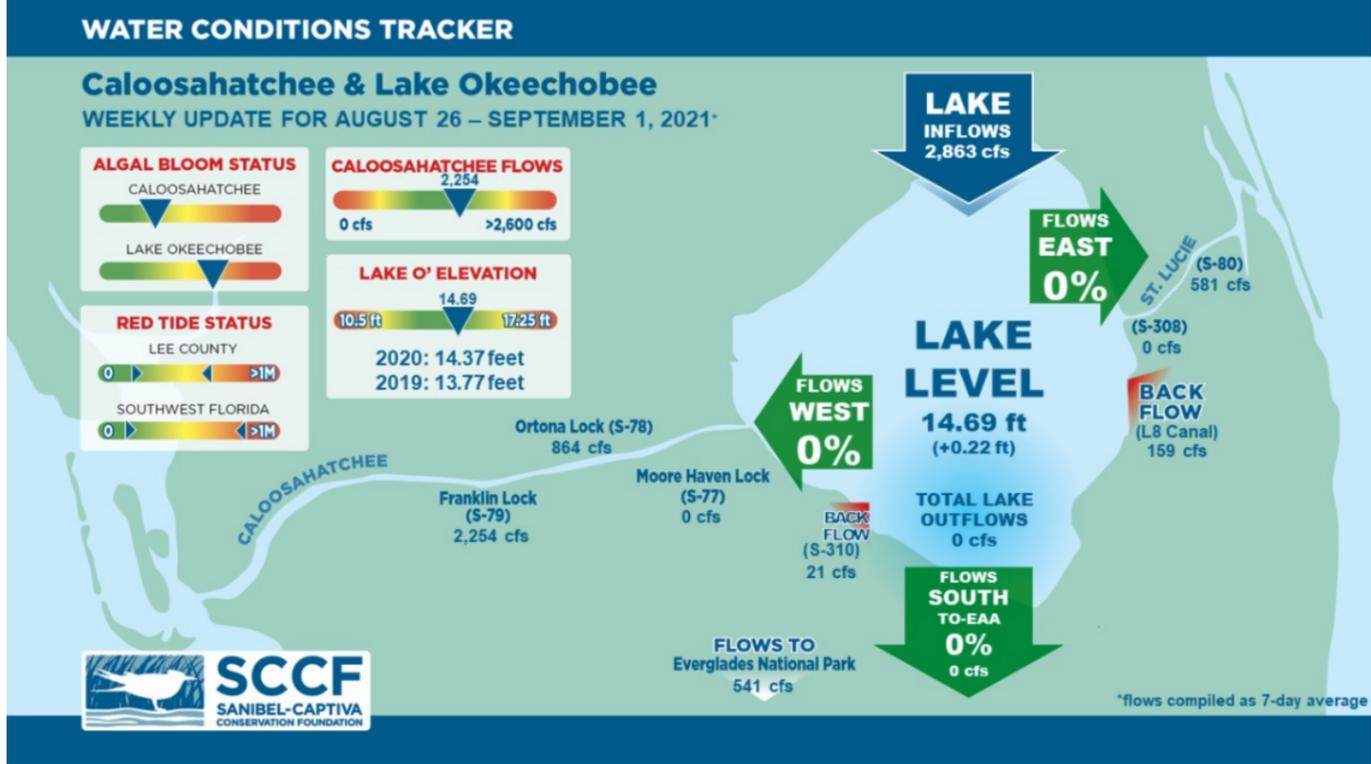
habitat quality for important species such as seagrass and oysters. SCCF recently received funding from Lee County, the City of Sanibel, and a few concerned and longstanding donors to fully replace and upgrade the RECON sensor network for the first time in 14 years. This generous support will help SCCF continue our scientific evaluation of water quality, advocate for policies that improve water quality, and educate the public on water conditions.



### Virtual Water Quality Tour from Lighthouse Beach

[Click here](#) or on the image above to take a virtual tour from above Lighthouse Beach Park to see how the water looked this week.

With no flows from Lake Okeechobee, water clarity and quality is only being affected by the watershed and stormwater runoff from rain. Hurricane Ida's outer bands enhanced rainfall throughout the region, but water clarity remains similar to last week.

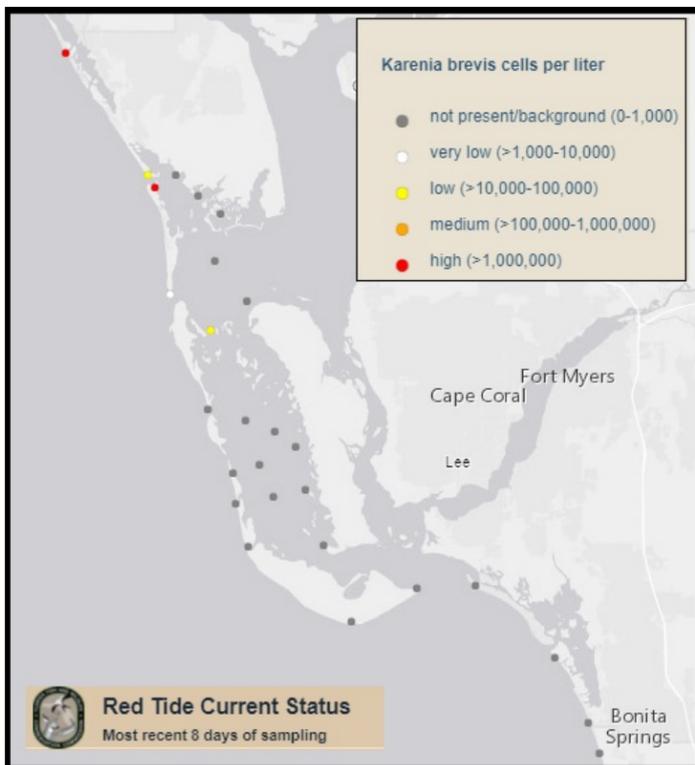


## Lake Okeechobee Levels & Caloosahatchee Flow Impacts

On September 1, 2021 Lake Okeechobee was at 14.69 feet (+0.22 feet). The lake stage increased from enhanced rainfall throughout the region and has been above the preferred ecological envelope since early July. The preferred ecological envelope for Lake Okeechobee is based on conditions that facilitate healthy littoral (nearshore) and wetland ecosystems around the lake. To learn more about Lake Okeechobee's complex and important ecosystem functions and the preferred ecological envelope, you can read the scientific and technical document called the [Lake Okeechobee Performance Measure for Lake Stage](#) that is part of [RECOVER \(REstoration COordination & VERification\)](#).

The volume of water reaching the Caloosahatchee from the watershed has increased to an average of 2,254 cfs this week. However, the 14-day average flow on 9/1/21 was 1,919 cfs which is in the optimum flow envelope for the Caloosahatchee estuary. We have been in the optimum flow envelope for 6 days after 7 weeks of being above the optimal flow envelope. This volume is measured at the Franklin Lock and Dam (S-79) in Alva.

For more information on Lake Okeechobee and estuary conditions go to the latest [Caloosahatchee Conditions Report](#)



## Red Tide

Currently, red tide has a patchy and rapidly changing distribution in Southwest Florida. [Satellite imagery](#) over the past week has shown high levels of chlorophyll off of the coast of Sarasota and Lee Counties. This imagery corresponds to water samples with bloom concentrations of *Karenia brevis*, and other algal species may be contributing to the high chlorophyll levels as well. In Lee County, FWC reported very low to low levels of *Karenia brevis* in Gasparilla Sound, not present to low concentrations in Pine Island Sound and not present concentrations on the Gulf side of Sanibel and Fort Myers Beach. CROW, the wildlife hospital on Sanibel received 12 patients with toxicosis symptoms (from red tide or blue-green algae) from 8/22/21 - 8/30/21.

## Blue-Green Algae

Cyanobacteria was present upstream of S-79 in Alva on 8/26/21 and 8/29/21 and downstream of S-77 in Moore Haven on 8/31/21. On 8/30/21 algal blooms covered 220 square miles of Lake Okeechobee, mostly in the western and northern regions of the lake. There is presently a 30% bloom-potential on Lake Okeechobee based on the most recent satellite imagery.

## Resources To Follow:

To learn more about our current water conditions, click on the following links:

### **Caloosahatchee Conditions Report**

A collaborative, weekly analysis, including recommendations for water managers regarding Lake Okeechobee flows.

### **RECON**

SCCF's River, Estuary, and Coastal Observing Network is a network of eight optical water quality sensors deployed throughout the Caloosahatchee and the Pine Island Sound estuary to provide real-time water quality data.

### **Red Tide Resources**

### **NOAA HAB Monitoring System - Lake Okeechobee**

### **Algae Reporting App.**

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