Advocacy Report

by Sarah Ashton & Jim Metzler, Advocacy Committee Co-Chairs

The recent environmental attack on the Refuge has two primary components: blue-green algae (cyanobacteria) and red tide (*Karenia brevis*). Blue-green algae requires warm fresh water, sunlight, and a high concentration of nutrients such as nitrogen and phosphorus. The record rain we had in May caused a heavy load of nutrients to flow into Lake Okeechobee which added to the substantial load of nutrients already in the lake to create a toxic cocktail of blue-green algae.

Saltwater in the gulf typically serves to limit algae blooms in the Caloosahatchee estuary. However, in early June the Army Corps of Engineers began large-scale discharges of freshwater out of Lake Okeechobee into the Caloosahatchee and St. Lucie rivers. The result was algae blooms making their way to the Refuge.

For more on blue green algae and some of the steps being taken to combat these outbreaks, read more.

Red tide forms 10 to 40 miles offshore and is carried in by bottom currents. It is a naturally occurring phenomena, and while there is no unequivocal scientific proof that nutrient pollution either causes this form of red tide nor increases its frequency, data indicates that nutrient pollution can enhance the severity of outbreaks. In 2006 the National Oceanic and Atmospheric Administration launched a six-year research project on this topic. Researchers concluded the sources of nutrients that feed red tides are "multiple, diverse and complex," and included runoffs from estuaries like the one fed by the Caloosahatchee. For more on red tide click here.

We continue to work with a broad range of organizations to better understand the environmental threats to the Refuge and what can be done to mitigate them. We will update you as more is known and, where appropriate, will request your active engagement in defending the Refuge.