

Resources for Harmful Algal Blooms in Florida

	Issue and Causes	Impacts	Federal Roles and Responses	State Roles and Responses
Red Tides	<p>Seasonal blooms develop offshore. They are pushed towards shore by currents and wind, mostly on the west coast.</p> <p>Nutrient input may enhance or prolong blooms.</p>	<p>Health: Toxins cause respiratory illnesses and Neurotoxic Shellfish Poisoning. Respiratory impacts are localized, often with beaches nearby experiencing different impacts. Impacts outdoor recreation, hospitality industries, and real estate values</p> <p>Fish kills: Severe impacts on fisheries, killing up to 30% of some important species in a single year.</p>	<p>Forecasting: NOAA produces a beach-level respiratory forecast of respiratory irritation. Goal is to forecast every beach, every day.</p> <p>Monitoring: Each week, FWC and partners collect and screen 100-150 coastal water samples for HABs and 50-70 samples for toxins. NOAA supplements this with imagery for Lake Okeechobee and SW FL, rapid response resources, and offshore samples from fishermen.</p>	<p>Report: An observed fish kill with the Fish Kills hotline (800-636-0511) or stranded wildlife with the Wildlife Alert hotline (888-404-3922).</p> <p>Daily Reporting Map: represents the abundance of Karenia brevis in samples collected statewide over the last eight days, up-to-date information on respiratory irritation and dead fish at local beaches.</p> <p>Current Status: An overview of the past week's current conditions including K.brevis observations, fish kills, respiratory irritation, and forecasts. Call 866-300-9399 anytime to hear about red tide conditions throughout the state.</p> <p>Prediction and Tracking: Two red tide tracking products are available. One is based on the West Florida Coastal Ocean Model (WFCOM), and the other is based on the higher resolution Tampa Bay Circulation Model (TBCOM).</p>
Freshwater Cyanobacteria	<p>CyanoHABs (aka blue-green algae) bloom in freshwater, caused by excess nutrients.</p>	<p>Health: Toxins can cause liver damage under chronic exposure to water. Humans drinking untreated water can get sick. Dogs, livestock, and other domestic animals drinking untreated water can get sick or die. Inhalation may be an issue (more research needed).</p> <p>Quality of life: Blooms clog canals, look and smell foul. Impacts real estate values and recreation.</p>	<p>Lake Okeechobee: NOAA provides high resolution satellite imagery to the South Florida Water Management District and U.S. Army Corps of Engineers for decision-making on where to monitor and when to release lake water.</p>	<p>Current Weekly Updates: FL DEP provides weekly updates using satellite imagery and site sampling.</p> <p>Reporting hotlines: Online 24/7 or Call Toll-free Mon-Fri 8 a.m.-5 p.m: 855-305-3903.</p> <p>More Information</p>
Sargassum	<p>Since 2011, annual blooms of seaweed have moved onshore in the Caribbean and now FL.</p>	<p>Beach debris: High volumes washed ashore disrupts tourism and beach ecosystems. Lack of best management practices for disposal.</p>	<p>Tracking: NOAA uses satellite imagery to track the movement of seaweed masses. Sargassum Watch System provides an outlook bulletin.</p> <p>Assessing impacts: NOAA is assessing societal impacts of macroblooms in the Caribbean, and contaminants in <i>Sargassum</i></p>	<p>Learn more: Florida Department of Health provides a Sargassum fact sheet and FWC provides information to regularly asked questions about this seaweed.</p>

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Other HABs	There are many different species of algae that cause HABs in FL that impact the environment and can impact human health.	<p>Ecological Health: Many HABs can cause shifts in the environment and result in fish kills, degradation in water quality, and overall economic and environmental issues</p> <p>Human Health: shellfish poisoning, asthmatic symptoms, nausea, and skin irritation</p>	<p>HAB-Associated Illness: The CDC provides information on how to protect yourself and pets, sources of exposure, and health reporting. FL SeaGrant also provides a well detailed fact sheet to protect your dog.</p> <p>Educational Information: For more fact sheets and cards pertaining to different HABs, please visit the U.S. National Office for Harmful Algal Blooms.</p> <p>USGS in cooperation with Florida Atlantic University's Center for Environmental Studies created a website with a series of short educational videos about HABs that are targeted for resource managers</p>	<p>Protecting Florida Together: Sign up to receive email alerts for up-to-date information on red tide and blue-green algae changes.</p> <p>Public Health: Report Human Illness with Florida Poison Control Centers 24/7 hotline: 800-222-1222.</p> <p>HAB General Info: Learn about algae blooms in FL.</p> <p>Interactive Shellfish Map: created by FDACS to determine where shellfish harvesting is allowed.</p>