ReACT Tool Kit

Report Algae Blooms

What is a Toxic Algae Bloom? Algae are simple plantlike organisms that grow in marine, estuarine, fresh water lakes, rivers, canal systems and even pools. Water with an oversupply of nutrients, such as fertilizer, which are warm and slow moving encourage an overgrowth of algae, called an algal bloom. (Picture 1) Algae can be as a green, red or vellowish brown scum that floats on the surface of the water.

Most algae is not harmful, but some "blue-green" algae, and algae that produce "red tide" make harmful toxins (picture 2). Algae scum will stop sunlight from reaching plant life below, killing it and the marine life that depends on it. The dead material on the bottom feed more algae and bacteria growth.

How is climate change related to algae blooms?

Heavy rain falls flush fertilizers from lawns and fields into the retention ponds and canals. This, along with warmer water temperatures create favorable conditions for algae blooms. Conversely, during droughts, lower water levels allow ponds and canals to get warmer and move less, creating favorable conditions for algae.

What residents need to know. It's not possible to distinguish between toxic and non-toxic algae by looking at or smelling the water. Report algae blooms to local or state authorities so the water can be tested.

- Don't swim or wade in water with algae and keep children and pets away from algae waters.
- Do not fish or eat shell fish from contaminated areas. Toxic algae can cause neurological liver and kidney problems in eaten.
- The algae toxins can be aerosolized by waves and wind and inhaled by people living around the ponds and streams. It will aggravate respiratory illnesses like asthma.

The bacterial concentration in algal water can poses a risk to humans and animals.





Sore throat, coughing Difficulty breathing, wheezing Skin rashes Headaches Vomiting/diarrhea Tingling in fingers and toes Liver and kidney failure

Who is at high risk?

- Children and pets that come it contact water and ingest it accidentally.
- Fisherman and people that catch or eat contaminated fish from toxic algae water.
- People with asthma or respiratory illness that inhale toxins that get into the air.

Report Algae Blooms to Department of Environmental Protection Bureau of Labs, Biology Section in Tallahassee (850)245-8159 http://www.dep.state.fl.us/labs/ or the Department of Health Aquatic Toxins Program (850) 245-4250 phtoxicology@FLHealth.gov

Key websites

http://www.epa.gov/nutrientpollution/harmful-algal-blooms http://www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/algalblooms.