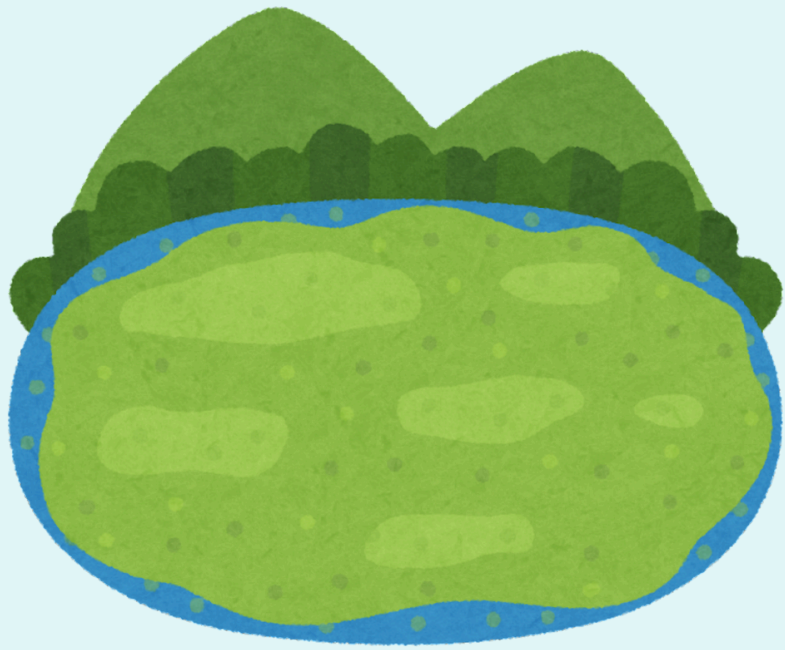


# HARMFUL ALGAL BLOOMS (HABS)

## UNDERSTANDING A PUBLIC HEALTH CONCERN AND KEEPING BEACHES SAFE



Cyanobacteria, or blue-green algae, can grow rapidly to form large algal blooms

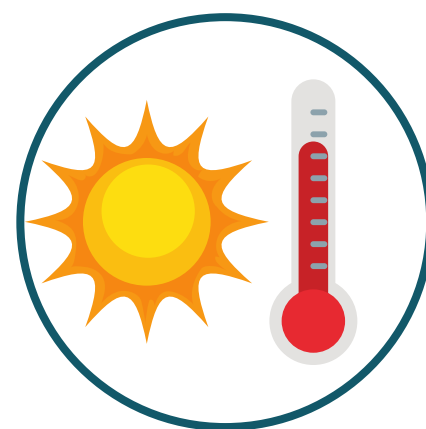
Cyanobacteria blooms often occur when there are high amounts of nutrients in lakes. The toxins in some cyanobacteria (cyanotoxins) can be harmful to people and animals.

### FACTORS THAT CONTRIBUTE TO HABS



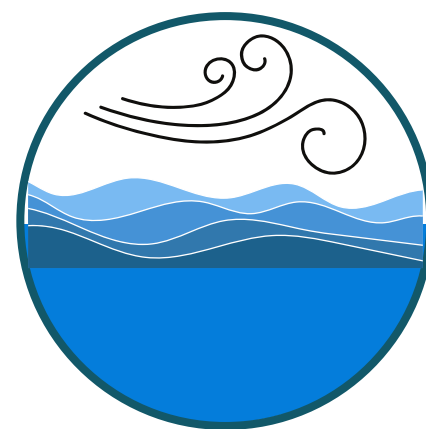
#### RAIN

Environmental events such as rain and high temperatures can allow for algae to outcompete other organisms



#### TEMPERATURE

Increased water temperatures in the late summer are when most HABS form, die, and release toxins, but this can occur any time between May and October.



#### WIND AND WAVE DIRECTION

Strong wind or wave patterns can contribute to HAB events by sending large amounts of algae and nutrients into a small area of a lake.

### Negative effects of Harmful Algal Blooms (HABS)

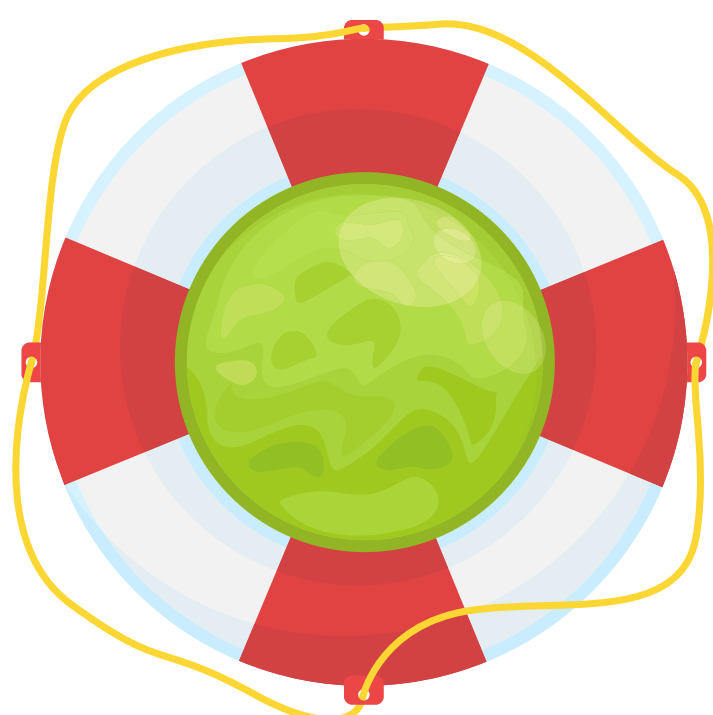
- Water with cyanotoxins can make people very sick if swallowed. Contact with water can cause skin irritation. Excessive boating in HAB areas can cause eye, throat, and nose irritation.
- Dogs and livestock can get sick if they swallow cyanotoxins while swimming, grooming, or drinking from a lake with a HAB.

### Is it a HAB?

- Habs are hard to identify, but common traits include a green paint-like sheen on the water that is foul smelling.
- The Department of Environment, Great Lakes, and Energy (EGLE) has a HAB report map and more information in the QR code below.

### How to stay safe around HABS

- Avoid swimming or contact in lakes with scums or harmful algal blooms.
- Look for signs at beaches showing information about Harmful Algae
- Limiting fertilizers, pet wastes, and other sources of nutrient runoff near water can help limit HAB growth.



HAB report and information



Interested in learning more about Harmful Algal Blooms?

[cdc.gov/harmful-algal-blooms](https://cdc.gov/harmful-algal-blooms)