

Harmful Algal Blooms (HABs)

Know it.

Blue-green algae can look like a crust on the water, grass clippings, green cottage cheese, scum or like spilled green paint or green pea soup.



Avoid it.

- Respect advisories and warnings announced by the NDDEQ. All water advisories and warnings are posted on this page.
- Do not swim, water ski, or boat in areas where the water is discolored or where you see foam, scum or mats of green or blue-green algae on the water; or let pets swim in or drink from affected waters.
- If you or your pet accidentally swims in water that might have a cyanobacteria bloom, rinse off with fresh water as soon as possible.
- Do not irrigate lawns with pond or lake water that looks scummy or has an awful odor.

Report it.

Report suspected blue-green algae blooms to the NDDEQ at 701-328-5210 or click [File a HAB Report](#). Because it can take time to receive laboratory test results, we urge people to be cautious and avoid waters that look discolored, scummy, or have a foul odor.

Active Harmful Algal Bloom Advisories/Warnings:

The NDDEQ responds to reported blooms across the state and tests water for toxins. If toxins are at an unsafe level, the NDDEQ issues advisories and warnings to the public.

An **Advisory** means a blue-green algae bloom is present in portions of the waterbody. The blue-green algae may be harmful to humans and pets. To reduce the risk of illness:

- Do not swim, waterski, or tube if the water looks like spilled green paint or pea soup.
- Avoid swallowing water and watch small children and pets who may ingest water.
- Rinse off with clean water after swimming.
- Stay away from areas of scum when boating.

A **Warning** means a blue-green algae bloom is present over a significant portion of the lake and excessive microcystin levels have been measured.

- Avoid contact with the water.
- Individuals should not take part in contact recreational activities (e.g., swimming, water skiing, kayaking and paddle boarding).
- Do not allow pets in the water.

The Harmful in Harmful Algal Bloom

A HAB is an overgrowth of, cyanobacteria (blue-green algae) in surface water. Cyanobacteria are microscopic organisms found in all types of water. They are more like bacteria than plants, but because they live in water and use sunlight to create food (photosynthesis) they are often called "blue-green algae." Cyanobacteria are important to freshwater ecosystems because they make oxygen as a by-product of photosynthesis, and they are a food source for other organisms.

Under certain environmental conditions, cyanobacteria (blue-green algae) can multiply quickly and form a bloom. Some species of cyanobacteria produce cyanotoxins that are released when the cells die and rupture. The toxins can cause harm to people, wildlife, livestock, pets and aquatic life. Almost every year in North Dakota, a few cases of pet and livestock deaths occur due to drinking water with HABs.

Specific human health effects are:

- Allergic-like reactions
- Skin rashes
- Eye irritation
- Gastroenteritis
- Respiratory irritation
- Neurological effects

What Grows Algae?

- Excess nutrients (phosphorus and nitrogen)
- Warm water temperatures
- Slow-moving water
- Sunlight

The major source of food for algae is nutrients that enter North Dakota lakes from:

- Fertilizers (fields and yards)
- Livestock and pet waste
- Septic systems

The Source of the Problem

Once a waterbody has an excess of nutrients, the problem cannot be fixed overnight. Nutrients must be removed mechanically and/or allowed to be reduced naturally through internal cycling, while limiting the sources of nutrients in the watershed. Several North Dakota lakes have hypolimnetic drawdown systems that remove nutrient-rich water from the bottom of the lake. These systems can be effective at removing nutrients, but they do not address the nutrient sources.