

Bay of Quinte Algae Watch

Ministry of the Environment photo



Algae Watch

Since 2010, Quinte Conservation has been working with Bay of Quinte Remedial Action Plan, the federal government, provincial government, local agencies and municipalities collecting water quality data in order to learn more about when, where and why blue-green algae (cyanobacteria) bloom and produce toxins. Water quality samples are collected by staff and sent to a laboratory to be tested for cyanobacteria toxins as well as other parameters known to contribute to algae production, such as phosphorus. Quinte Conservation takes water samples every other week from offshore sites in the Bay of Quinte and from sites in rivers flowing into the Bay of Quinte.

The desired outcome of the program is that the data will contribute towards the improvement in water quality in the Bay of Quinte by enhancing the ability of agencies to predict when Harmful Algae Blooms will occur and to help develop a proactive Harmful Algae Bloom response and control program. The Algae Watch program supports the goals of the Bay of Quinte Remedial Action Plan and will contribute to the delisting of the Bay of Quinte as a Great Lakes Area of Concern. Area of

Concern is a designation given to the Bay of Quinte area in 1985 by the International Joint Commission under the Great Lakes Water Quality Agreement for being a pollution hot-spot. The Bay of Quinte is one of 43 Areas of Concern in the Great Lakes. To learn more about the Bay of Quinte Remedial Action Plan and what its partners are doing to rehabilitate the bay, please visit their website, www.bqrap.ca.

Algae Facts

Algae are microscopic plants that are found in all natural waters. They are an important source of food for the insects, fish, and animals that live in water environments (first step in the food chain).

Warm water temperatures, ample amounts of sunlight, shallow and slow moving waters, in combination with an abundant amount of available nutrients (such as phosphorus) can result in algae populations growing into a large mass ("blooms" or scum). Algae blooms are often seen floating on the surface of water in ponds and in lakes. Fresh blooms can smell earthy, muddy, musty, sulphurous, and fishy or like cut grass, cucumber, hay or tobacco while older blooms can smell like rotting garbage.



For more information:
www.quinteconservation.ca
613-968-3434





safe alternative water source including bottled, carted or tanked water or call a water treatment service provider for help.

If you are concerned about symptoms or have health related questions, please call your family doctor or the local Health Unit. The Hastings and Prince Edward Counties Health Unit can be reached at 613-966-5513 or www.hpechu.on.ca

To report a blue-green algae bloom, please call the Ontario Ministry of Environment Belleville office at 613-962-9208 during business hours or 1-800-268-6060 after business hours.

What are Blue-green algae?

Blue-green algae are also called cyanobacteria. They have some characteristics of algae and some of bacteria as they are photosynthesizing bacteria. Blue-green algae blooms typically look like pea soup or spilt paint with a bluish or greenish colour. With the right conditions (listed in the prior section) blue-green populations can rapidly grow into blooms.

Why should we monitor?

The concern is that with the right environmental conditions some blue-green algae may produce toxins that can impair the quality and safety of the water. Blue-green algae toxins, if present in sufficient amounts and ingested, can cause headaches, fever, diarrhea, abdominal pain, nausea or vomiting. Contact may cause rashes and mucous membrane irritation. While most blooms are harmless, identification of Harmful Algae Blooms are only possible with laboratory analysis to determine the composition and toxicity of the bloom. The existence of blue-green algae is a natural phenomenon, but much is still unknown about what favorable conditions allow blue-green algae to produce toxins.

What you can do

If you see a blue-green algae bloom, please avoid contact with the water during the bloom period. This includes keeping pets and livestock away from the water. If your water supply is a shore well, do not use the water. Do not boil it or cook with it, do not use it for laundry, dishes, bathing, showering or swimming. Switch to a

The Bay of Quinte is a source of drinking water and recreation for many people living and playing in the Quinte area. Protecting source water is important because it is the first line of defense to ensure everyone has access to plentiful, safe, high quality drinking water. It is also important because good water quality means a healthy bay and a healthy community.

Actions that can be done at home to help protect source waters include:

- Leaving shorelines naturalized (un-mowed) to reduce soil erosion and nutrient runoff.
- Not altering natural water courses by removing plant or soil material, adding fill or organic matter, or restricting water flow.
- Using phosphorus-free products including lawn fertilizers and soaps.
- Storing fertilizers and other toxic materials properly preventing them from being exposed to precipitation or runoff.
- Maintaining properly functioning septic system.
- Storing and disposing of animal waste properly.
- Be aware that any use or application of chemicals (e.g. soaps/fertilizers/motor oil) on your lawn or driveway eventually will make their way into lakes, streams and drinking water sources.