

# Beach Closings FAQ

## What is an Area of Concern (AOC)?

AOCs are locations within the Great Lakes that have been identified by the Canadian and United States federal governments as having experienced high levels of environmental harm.

## What is the St. Lawrence River (Cornwall) AOC?

In the late 1980s, both the northern (Cornwall, ON) and southern (Massena N.Y.) shores of the St. Lawrence River were designated as one AOC, with Canada, Ontario and the Mohawk Council of Akwesasne working on the northern portion, and the United States, New York State and the Saint Regis Mohawk Tribe working on the southern portion.

## What are Beneficial Use Impairments (BUIs)?

It is a name given to an environmental service or use, such as being able to swim in the St. Lawrence River, which has been degraded by historic human activity. For a 'Beneficial Use' to be redesignated as 'not impaired' it needs to meet a set of criteria. BUIs are used to guide restoration efforts and track progress in the AOC.

## What is the Remedial Action Plan (RAP)?

For every AOC, a RAP is written which includes the identification of Beneficial Use Impairments (BUIs) and their causes, and outlines actions towards restoring them. The focus of the RAP is to change BUIs from "impaired" to "not impaired", and ultimately restore the AOC so it is no longer identified as a problem area.

## Who is the St. Lawrence River Restoration Council (SLRRC)?

The development and implementation of the RAP is done in consultation with the local community through a local council called the St. Lawrence River Restoration Council (SLRRC). The SLRRC includes governmental organizations, the Mohawk Council of Akwesasne, industry, local organizations and community members.

## What is the Beach Closing BUI?

This BUI addresses waters commonly used for total body contact or partial body contact recreation such as swimming, kayaking, or standup paddle boarding. AOC waters should meet provincial water quality objectives, and people should be able to perform recreational activities without the risk of getting ill. The primary cause of beach postings is when the average levels of *E. coli* are higher than the Provincial Water Quality Objectives. The goal of the RAP is to have beaches open (i.e., not posted) more than 80% of the swimming season.

## What is the difference between a beach closing and a beach posting?

Beaches are actually not 'closed' due to high levels for bacteria, but 'posted' - signs are often placed at area beaches and notices are sent out through social media when beaches do not meet water quality standards.

Beaches are closed when there are hazards in the area, such as blue-green algae or some sort of spill. Closed beaches restrict access, posted beaches are warnings.

Back in the 1980s the term 'beach postings' did not exist. The term 'beach closure' is not reflective of current beach management process. Instead, we track the number of 'beach postings', which occur over the swimming season (generally from the May long week-end, through to the September Labour Day week-end) and are typically the result of swimming advisories due to the presence of *E. coli* above the Province of Ontario recreational water threshold value.

#### Who is responsible for ensuring beach water stays safe to swim in?

In the Cornwall area, regular monitoring and beach postings are performed by the Eastern Ontario Health Unit, and in Akwesasne this is performed by the Mohawk Council of Akwesasne (MCA) Department of Health. A beach is posted if high levels of *E. coli* are detected in water samples or if an exceedance is expected to occur based on the use of a mathematic model correlating weather conditions with the beach water quality.

#### What is *E. coli* and how can it make you sick when swimming?

*E. coli* is a strain of bacteria found the intestines of humans and other animals. Swimming at public beaches is not recommended when *E. coli* levels in the water exceed provincial objectives because it can cause severe stomach cramps, diarrhea and vomiting.

#### Which beaches were assessed in the Assessment Report?

Glengarry Park Beach, Charlottenburgh Park Beach and 28 Akwesasne Beaches were assessed in this report. Other areas along the Cornwall Waterfront, and other water body contact areas were assessed as well.

#### What impacted water quality at local beaches?

In the Cornwall area, some common *E. coli* inputs into local waters included:

- Combined sewer overflows
- Storm sewer runoff
- Leaky septic systems
- Improper agricultural management practices
- Droppings from birds and waterfowl
- Industrial runoff

It is also important to note that high rainfall can also lead to exceedances, and this is a naturally occurring event at all beaches.

#### What local measures have been put in place through the RAP to improve beach health?

- Best Management Practices (BMPs) for agriculture, such as keeping livestock away from streams and preventing their waste from flowing off-site.
- Inspecting and upgrading septic systems through a voluntary inspection program.
- Municipal stormwater and wastewater infrastructure maintenance and upgrades.

- Cornwall wastewater treatment plant conducted a \$55.5-million upgrade, resulting in the addition of secondary treatment and an increase in capacity.
- Relocation of the Cornwall snow dump to Fly Creek stormwater facility with updated storage, containment, and treatment protocols.

#### Where can I find water quality on my beach before I go swimming?

Visit [swimguide.ca](http://swimguide.ca) to find out whether your local beach's water quality before you go swimming.

#### Where does the criteria for public beach health come from?

The reference to beach postings not exceeding 20% of the annual swimming season was based on the standards for the internationally-recognized Blue Flag program, which is being implemented at many beaches around the Great Lakes. The AOC beaches should be meeting Ontario's standards for recreational water quality (the most stringent in North America) at least 80% of the swimming season in order to be considered to be 'not impaired'.

#### Why are *E. Coli* exceedances associated with high rainfall events not considered in the assessment?

Although stormwater runoff from rainfall as well as windy conditions results in increases in bacterial contamination at beaches, the intent of the Beach Closings BUI is to address beaches that have persistent anthropogenic sources of *E. coli* rather than sporadic exceedances that are weather-related.

Exceedances of *E. coli* at beaches due to rainfall events is a global phenomenon. Urban stormwater runoff from roads, lawns, and other impervious surfaces can pick up a variety of pollutants, including bacteria. The bacteria may be from domestic animals, such as dogs and cats, and horses and cattle in more rural areas.