BAY OF QUINTE REMEDIAL ACTION PLAN DELISTING TARGETS

PAST ISSUES & ACTIONS

NUTRIENTS
Excess nutrients (phosphorus) in the Bay of Quinte primarily come from sewage treatment plants, agricultural land practices, and storm sewers. Thanks to actions taken by municipalities and rural landowners, loadings to the Bay have decreased from 216 kg/day in the 1970's to the current loading of approximately 15 kg/day.

TOXINS
Generally, historical industrial sites were/are responsible for chemicals found in the Bay of Quinte. Many efforts have and are being taken to eliminate or reduce the amount of different toxins entering the Bay. On-going monitoring, such as the Ontario Sportfish Monitoring Program, provides guidelines to the general public for consumption of fish caught in the Bay. A 2007 study of the sediment in the Trent River mouth found no significant ecological or human health risk.

BACTERIA
The sources of potentially harmful bacteria, such as some strains of E. coli, are the same as those found with excess nutrients (sewage treatment plant bypass events, agricultural run-off, and storm sewers). Heavy rainfall is the primary trigger for poor water quality, which can lead to beach postings.

HABITAT
It has been estimated that 12,000 hectares of coastal wetland have been lost within 3.2 km around the Bay of Quinte. Much of the remaining 7,000 hectares has been impacted by development pressure and/or the expansion of cattails. Zebra mussels have also affected the entire ecosystem. Currently, there are habitat improvement projects being implemented around the Bay to protect and restore wetlands and shorelines.

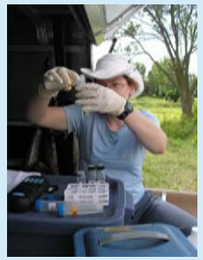
Delisting targets are measures of improvement that will help us:

- **Assess remediation progress each year**
- **Identify necessary additional actions**
- **Know when remediation efforts are complete**

Targets are:

- Stable, healthy and diverse fish, bird, and wildlife populations.
- Restrictions on fish and wildlife consumption are not significantly influenced by contaminant sources in the Bay.
- Fish tumours and other bird or wildlife deformities in the Bay are not significantly different than comparable unimpaired areas within the Great Lakes.

- A positive trend and change in communities of bottom-dwelling creatures (benthic invertebrates).
- Nutrient inputs managed to result in fewer nuisance algae blooms and related improvements in water quality.
- Drinking water demonstrates a positive trend in taste and odour with no restrictions related to toxic compounds.
- Fewer beach closures and acceptable water quality conditions in the Bay recreational waters.



- Demonstrate a positive improvement in water quality aesthetics.
- Positive trend in the health of phytoplankton and zooplankton communities (creatures that form the base of the aquatic food web) and are favourably compared to unimpaired areas in the Great Lakes.
- Fish and wildlife habitat protected and/or restored to acceptable levels.

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LOOKING FORWARD

COMMUNITY WILDLIFE MONITORING PROGRAM

The Community Wildlife Monitoring Program teaches volunteers how to identify various local bird and frog species. The program offers the Marsh Monitoring Program that includes bird and amphibian monitoring and volunteers can monitor for either or both species or they can participate in FrogWatch Ontario. By participating in this program you are helping in the long-term protection and restoration of the Bay's overall ecosystem.

HABITAT ENHANCEMENT PROGRAM

Shoreline areas are a critical and sensitive link between land and water, often called "the ribbon of life". These delicate areas provide: shelter and food for wildlife, support spawning beds for fish, enhance water quality, shade and cool water and discourage growth of excess algae. The shallow water and the first 30 meters of shoreland is essential to the survival of a variety of species. We are working with landowners who are interested in enhancing or restoring their shorelines.

COASTAL WETLAND MONITORING PROGRAM

Wetlands are transitional areas between land and water providing habitat, improved water quality, and flood protection. In the summer, the Bay of Quinte RAP partners monitors for birds, frogs/toads, fish, aquatic invertebrates, water chemistry, and vegetation in 15 representative coastal wetlands around Bay.







BAY OF QUINTE
REMEDIAL ACTION PLAN

A Remedial Action Plan or a "RAP" is an important scientific endeavour. A RAP is the response of government, industry, and the local community to environmental concerns that are believed to impair the use of various resources such as drinking water, fish and recreation. The environmental concerns are called Beneficial Use Impairments.

RESTORATION COUNCIL

Lower Trent Conservation
Quinte Conservation
Ontario Ministry of the Environment
Environment Canada
Ontario Ministry of Natural Resources
Fisheries and Oceans Canada
Ontario Ministry of Agriculture, Food, and Rural Affairs
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Quinte CONSERVATION

Bay of Quinte Remedial Action Plan

LOWER TRENT CONSERVATION

Bay of Quinte
Remedial Action Plan
Healthy Bay • Healthy Community

The Bay of Quinte is one of the most picturesque bodies of water in Lake Ontario. Its shoreline stretches in a Z-shape from Trenton to Bath for almost 100 kilometers. The Bay's watershed is the largest in southern Ontario and includes lands drained by the Trent, Moira, Salmon, and Napanee rivers and a host of smaller tributaries.