

The importance of estuaries

A vital marine environment

Estuaries are transition zones between rivers and the ocean. They are full of life and activity. They are rich in nutrients and serve as habitat for many different species of fish and birds. Estuaries are coastal areas that are extremely sensitive to human activity.



Our economic, social and cultural activities can easily unbalance these delicate ecosystems. Estuaries are threatened by industrial, commercial, residential and recreational development as many people live and work along the coast and take advantage of its beauty and natural resources.

How can you contribute to healthy estuaries?



By getting involved in CAMP you can be an important player in monitoring the health of our bays and estuaries. By collecting data that can be analyzed, you are working to ensure the long-term conservation of the marine environment.



Thank you for being a steward of the environment.

To become a CAMP volunteer
E-mail: camp-psea@dfo-mpo.gc.ca, or
Call one of the Fisheries and Oceans Canada offices listed below.

For more information, call the office nearest you or visit our website:
www.glf.dfo-mpo.gc.ca/os/camp-psea/index-e.php

FISHERIES AND OCEANS CANADA
Oceans and Habitat Division
MONCTON, New Brunswick
Telephone: (506) 851-7768

Oceans and Habitat Division
TRACADIE-SHEILA, New Brunswick
Telephone: (506) 393-3036

Oceans and Habitat Division
ANTIGONISH, Nova Scotia
Telephone: (902) 863-5670

Oceans and Habitat Division
CHARLOTTETOWN, Prince Edward Island
Telephone: (902) 566-7839



Fisheries and Oceans
Canada

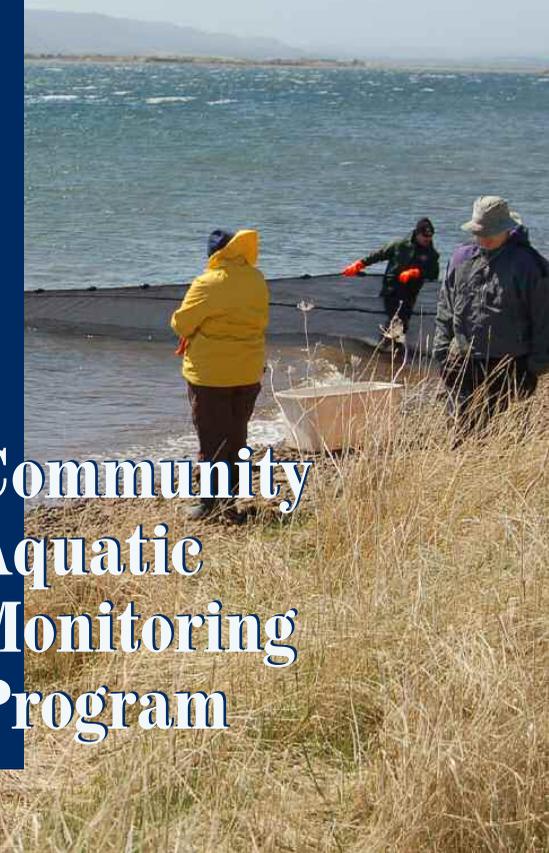
Pêches et Océans
Canada

Canada



Coalition pour la viabilité du
sud du Golfe du Saint-Laurent
Southern Gulf of St. Lawrence
Coalition on Sustainability

A healthy estuary, a coast full of life



Community Aquatic Monitoring Program

March 2009

Conception : DPG Communication

See yourself as a steward of the coasts and estuaries

Environmental stewardship is a way of thinking and acting, an attitude, a form of dedication and a sense of responsibility to do the best we can for the coasts and estuaries entrusted to our care for future generations.

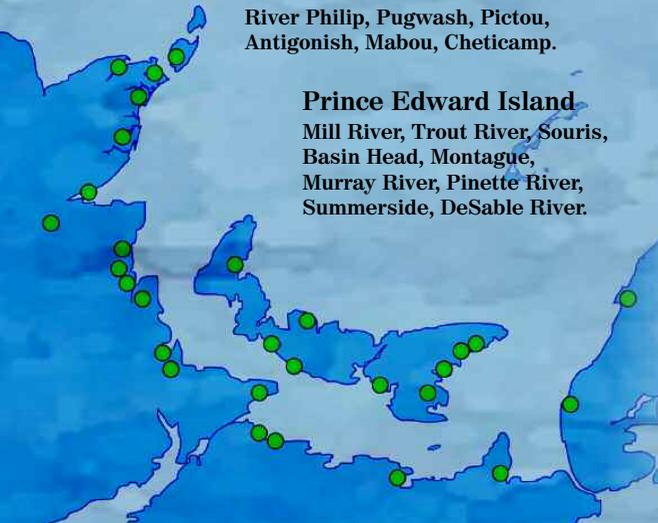


2008 CAMP sites in the Southern Gulf of Saint Lawrence

New Brunswick
 Caraquet, Lameque, Shippagan, Tracadie, Tabusintac, Miramichi, Eel Ground, Saint-Louis de Kent, Richibucto, Bouctouche, Cocagne, Shediac, Scoudouc, Cape Jourmain.

Nova Scotia
 River Philip, Pugwash, Pictou, Antigonish, Mabou, Cheticamp.

Prince Edward Island
 Mill River, Trout River, Souris, Basin Head, Montague, Murray River, Pinette River, Summerside, DeSable River.



How does the Community Aquatic Monitoring Program (CAMP) work?



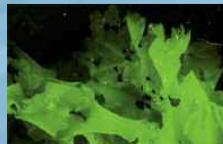
CAMP is based on a method of collecting species found in a coastal area of an estuary. The program began

in 2003 as a stewardship initiative to raise awareness of the ecology of estuaries and coastal areas in the Southern Gulf of St. Lawrence, to collect baseline data on coastal species and to test whether healthy coastlines are characterized by a particular number and type of fish, invertebrates and aquatic plants. This community-led monitoring program is also supported by the Southern Gulf of St. Lawrence Coalition on Sustainability – an organization mandated to facilitate and coordinate Gulf-wide sustainability projects.

Once a month from May to September, six locations are sampled within each bay or estuary.



The volunteers use a beach seine to sample an area of water measuring 225 m². The beach seine is brought back to shore where all captured fish and other species are identified, counted and recorded. The animals are then released alive back into the water in order to minimize the impact on the environment. The program also monitors for invasive species and species at risk.



The water is also checked to measure its salinity, temperature, dissolved oxygen and nutrient concentrations. In addition, the bottom substrate and the type of aquatic vegetation are recorded.

During the winter, staff at the Gulf Fisheries Centre analyze the information collected to see how animals vary among sites and whether they change over time. The purpose of this activity is to determine whether the data collected can give us an indication of the effect of human activities in bays and estuaries. This may include siltation due to shoreline development, municipal or domestic sewage, or runoff from agriculture, fish processing plants, peat harvesting or other industrial sources.



You can become a volunteer!

The Community Aquatic Monitoring Program relies on community volunteer groups who care about the environment.

The sampling activity itself is easy to do and supervise. Program participants learn how to identify local species of fish, crustaceans and aquatic plants. Tasks include: transporting equipment from one site to the next, pulling a beach seine in the water, identifying and counting species, collecting different water quality parameters, and data recording out in the field.

Benefits for volunteers:

- Opportunities to gain field experience and acquire new skills
- Spend time outdoors in nature
- Discover our rich coastal environments and contribute to the monitoring of it's health

