

CANADA'S SUSTAINABLE COMMUNITIES INITIATIVE

DESCRIPTION OF ACTIVITY

The Sustainable Communities Initiative (SCI) builds capacity in rural, coastal, Aboriginal and northern communities that wish to take better control of their future, by providing them with modern mapping technologies to make informed decisions for sustainable development. SCI provides this enabling capacity by helping communities learn, implement and use Geographic Information Systems (GIS) to make decisions about their economic, environmental and social development.

The Sustainable Communities Initiative is part of [GeoConnections](#). GeoConnections is a national partnership initiative launched in 1999 that makes geographical data available to Canadians through the Internet. The goal of SCI is to build or strengthen the capacity of Canada's communities to use digital geographic information and services via the Internet or traditional distribution means, for their social and economic development. SCI is focused on enabling communities to participate meaningfully in decision-making with regard to sustainable development and land use. It represents the community interface to GeoConnections, and links community needs and capabilities to government programs and information that can facilitate their transition to the knowledge-based economy.

The objectives of SCI are usually met within 12 to 18 months after a proposal has been submitted by the community and developed with SCI. The guiding principles of SCI include control of the project by the community within the federal government's financial guidelines, technical and managerial support throughout the project, and the welcoming of partnerships agreeable to the community. The budget is set at a maximum of \$30,000 per community. Items covered include GIS equipment, data, and training, as well as the execution of a confidence-building project of local interest by the trainees.

PARTNERS

SCI is a partnership initiative involving Natural Resources Canada (NRCan) and several other federal departments and agencies, including Industry, Indian and Northern Affairs, Environment, Agriculture and Agri-Food, as well as provincial/territorial and community governments, the private sector, and voluntary organizations.

INNOVATION

Geospatial information can describe forests, lakes, rivers, fields, geology, highways, and territorial boundaries - anything that can be defined geographically. By using this information to assess opportunities, evaluate options, and gauge tradeoffs, remote communities can make better and faster decisions and communicate much better with industrial interests and levels of government around them. For instance, a rural community might want to develop a watershed management plan as a framework for agro-business industrial development. By using mapping tools and software to assess the ecological and commercial impacts of choosing one location for development over another, the community would be in a better position to address the likely benefits, the risks and the opportunity costs. Geospatial tools and information accessible over the Internet can offer these communities valuable insights into managing their growth - economically, environmentally and socially.

MAINSTREAMING/SUSTAINABILITY

The Sustainable Communities Initiative is funded at present to reach 100 small communities by March 2005, equitably distributed among Canadian Provinces and Territories, and covering a representative range of environments and issues, from the agricultural and forested South to the Arctic North, including coastal communities.

SCI has made significant progress in achieving its objectives. It has already (March 2004) reached 109 communities, surpassing its overall objective of 100 communities by March 2005. A detailed description of the community projects is available on the SCI Web Site at: <http://sci.gc.ca>

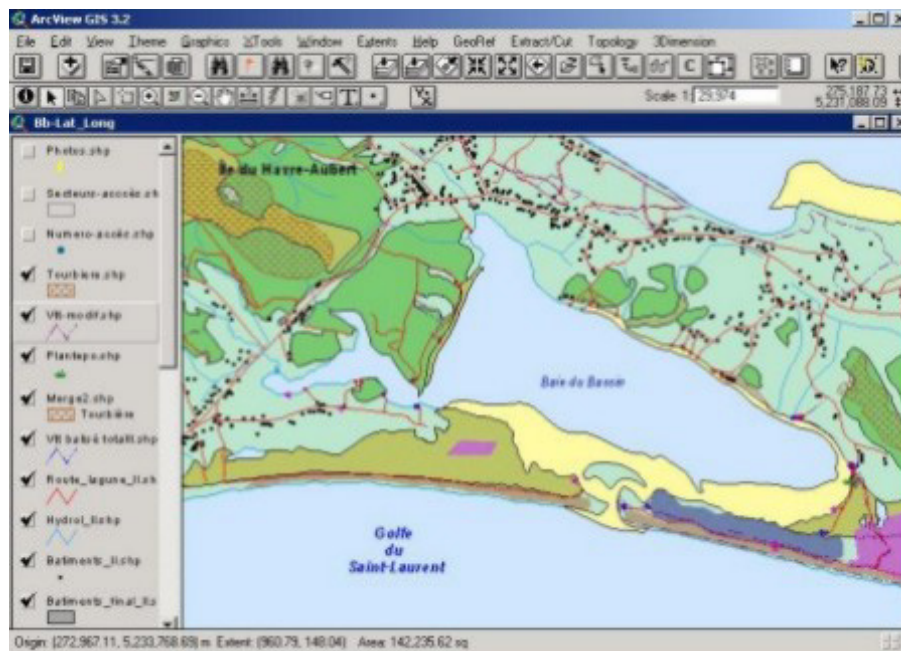
REPLICATING THE INITIATIVE

The Sustainable Communities Initiative can be adopted by both developed and developing countries alike. Possible sustainable development issues that often arise include: *inter alia*, land use, including opportunities and limits of economic development within traditional values and the carrying capacity of local and regional ecosystems; forest, wetlands and agricultural management; water resources management; coastal zone protection (fish habitat, pollution control); wildlife management; road mapping; emergency measures organization; environmental protection, and; mapping point source pollution.

A SUCCESS STORY: LES ÎLES DE LA MADELEINE

Nestled between the Maritimes and the Gaspé Peninsula in the Gulf of St. Lawrence, les Îles de la Madeleine is a small group of islands about 180 square kilometres in total. The islands are home to over 100 species of birds, including the endangered [Piping Plover](#) and the [Roseate Tern](#), which depend on the Islands' lagoons for their survival. Some of the Islands' marine species, such as eel, smelt and herring also depend on good fish habitat for feeding.

With a population of 13,500 and an annual tourist population of 40,000, however, the Islands' lagoons and inlets, among others, are suffering from erosion and over-sedimentation that is affecting the local wildlife and the fishing. To meet the challenges, the Priority Intervention Zone/Comité ZIP teamed up with Natural Resources Canada's Sustainable Communities Initiative. Using data sets and geomatic equipment supplied by SCI, the Priority Intervention Zone/Comité ZIP has now mapped two of its inland water bodies, Baie du Bassin and Bassin aux Huîtres, in an effort to plan for the future of the areas. Augmenting SCI's contribution, there has been tremendous cooperation among other groups including the Department of Fisheries and Oceans (DFO), the Regional Municipality of the Îles-de-la-Madeleine, and the local residents.



Five lagoons will eventually be mapped, and an integrated management committee oversees each water body. Fishing and tourism may have taken their toll on the Madeleine Islands, but the Priority Intervention Zone/Comité ZIP is confident that, with the tools and resources they now have, they can assist the integrated management committees in making sound planning decisions that will help them take control of the Island's future. As just one example, the Priority Intervention Zone/Comité ZIP has proposed rationalizing and limiting the access along the water bodies to minimize the damage.

LESSONS LEARNED

The application of the GIS technology and skills acquired through the SCI have indeed led to numerous social, economic and environmental benefits for participating communities.

Virtually all the communities with completed projects now possess improved effectiveness in land and natural resource administration and have also gained access to and are now able to use existing geodatabases. Rural communities, First Nations and NGOs have achieved enhanced governance capabilities resulting from the SCI projects.

Their new geomatic capability has already enabled the communities to seize opportunities and enter into new or more effective partnership roles with other government agencies, industry as well as other communities. First Nations have gained noticeably increased self-reliance and independence in their ability to administer their reserve lands and manage the natural resources related to them. NGOs are now able to much more effectively participate in municipal and other government affairs through their ability to graphically present their areas of concern to local governments and industry.