

I N T U N E

Corporate communications

New St. Lawrence Vision 2000 co-chair for Canada

Mimi Breton appointed SLV 2000
co-chair for Canada.

SLV 2000 Biennial Report 1998-2000

Highlights of the Biennial Report
1998-2000 are briefly reviewed, with
a summary of actions and activities
carried out in the first two years of
SLV 2000 Phase III.

Agriculture

Agro-environmental Pest Management Strategy Support Program

Apple growers can now take training
in integrated pest management to
help them protect their orchards.

Community Involvement

ZIP Chronicle

The Îles-de-la-Madeleine ZIP
Committee has launched an
education campaign to promote
integrated management of inland
bodies of water..

New Canada co-chair for St Lawrence Vision 2000 Action Plan



On April 2, Mimi Breton was appointed the chair for Canada of the Canada-Quebec Co-operation Agreement on the St. Lawrence, St Lawrence Vision 2000 (SLV 2000), as well as Director General, Quebec Region, Environment Canada. She takes over from Jean-Pierre Gauthier, who held both positions for several years and is now Special Advisor to Deputy Environment Minister Alan Nymark.

Ms. Breton will co-chair the SLV 2000 Agreement Management Committee with her Quebec counterpart, Me Jean Maurice Latulipe. Me Latulipe is Assistant Deputy Minister of the Quebec Department of the Environment. Congratulations and welcome to Ms. Breton!

"It's a great pleasure for me to be able to work with a group of people who are so professional and so committed to achieving concrete, measurable environmental results," Ms. Breton commented about joining the SLV 2000 team.

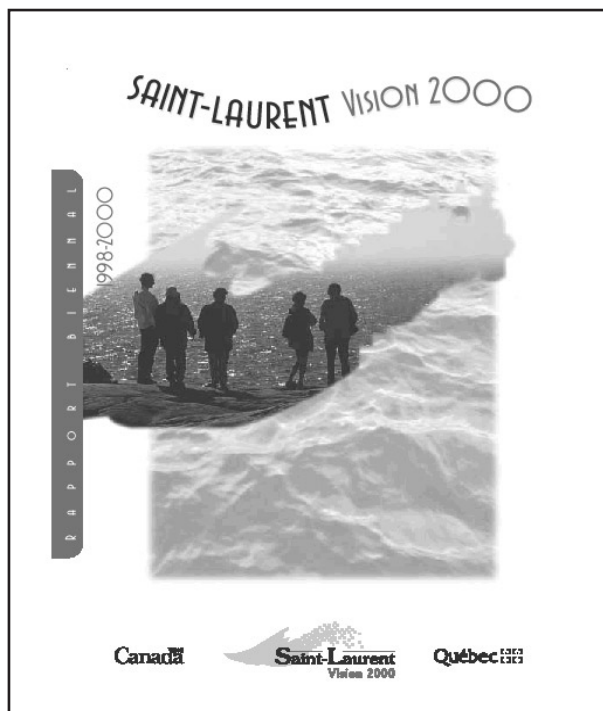
With a master's degree in marine biology, Ms. Breton has worked for the federal government since 1982. Most of her management experience was acquired at Fisheries and Oceans Canada, where she held various positions, from biologist to senior advisor and the head of different branches. She has also worked at Health Canada, meeting a number of formidable challenges in that department. In January 2000, Ms. Breton joined Environment Canada, Quebec Region, as Associate Regional Director General.

"I firmly believe that, through joint action by stakeholders, whether governmental or nongovernmental, and through the adoption of a multidisciplinary approach, the unique St. Lawrence ecosystem will be better managed, to improve the quality of life of all citizens."■

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Report on the first two years of the St. Lawrence Vision 2000 Action Plan — Phase III



June 8, 1998 marked the start of the third phase of the St. Lawrence Vision 2000 (SLV 2000) Action Plan, which runs until 2003. Continuing the work launched in 1988, SLV 2000 partners, supported by riverside communities, have gone on to lead efforts that have produced outstanding results. A few weeks ago, the Biennial Report 1998-2000 was published, presenting highlights for the period covered by the third phase of the action plan.

Phase III of SLV 2000 has three main objectives: protecting the health of the ecosystem, protecting human health and encouraging the participation of riverside communities. It has a budget of \$239 million. For the period covered by the Biennial Report 1998-2000, the governments of Canada and Quebec committed approximately \$48 million and \$47 million, respectively.

Another step toward achieving sustainable development along the St. Lawrence

A new area of action devoted to navigation on the St. Lawrence came into being with Phase III of SLV 2000. "The work of the Navigation Co-ordinating Committee, which has already been highly conclusive, will lead to the implementation of a sustainable navigation strategy for the

St. Lawrence," explains Jean-Pierre Gauthier, co-chair for Canada of Phase III of SLV 2000 from 1998 to 2000. The Navigation area of action was added to the other areas already addressed in the previous phases — Agriculture, Biodiversity, Community Involvement, Industrial and Urban, and Human Health.

In addition, a pilot project was introduced to monitor the state of the St. Lawrence ecosystem and produce a portrait of the river and its evolving situation. "Monitoring the selected indicators will help to provide the public, researchers and decision-makers with an accurate idea of the present state of the St. Lawrence and the changes taking place," says George Arsenault, Quebec co-chair of Phase III of SLV 2000 from 1998 to 2000.

Drafting the Biennial Report 1998-2000 afforded SLV 2000 partners an opportunity to review actions in the course of many activities under each of the six components. Mr. Arsenault drew attention to two especially interesting projects that marked activities under the Biodiversity component. "First, substantial progress was made in protecting species in difficulty, as shown by the implementation of nineteen action plans aimed at maintaining and re-establishing threatened species or creating wildlife reserves such as the one at Pointe de l'Est in the Magdalen Islands. Moreover, as part of our efforts to address major issues during the last two years of Phase III, the impacts of water level variations on the St. Lawrence ecosystem were documented and modelled."

In addition to the results under the Biodiversity component, there were also noteworthy achievements in each of the other areas of action:

Agriculture:

- financial support under the agro-environmental support program pest management strategy (Programme agroenvironnemental de soutien à la Stratégie phytosanitaire) for the implementation of fifty projects to promote the adoption of integrated crop pest management
- forty-five farmers in the Boyer River drainage basin joined environmental groups.

Community Involvement:

- three new Area of Prime Concern (ZIP) committees were created, joining the ten other committees set up between 1993 and 1997;
- financial support under the Community Interaction segment for seventy-five projects to conserve, restore and enhance the resources of the St. Lawrence.

Industrial and Urban:

- first pollution prevention pilot projects introduced in SMEs (metallurgy, metal and chemical sectors);
- eighteen projects to perfect environmental technologies implemented.

Navigation:

- definition of environmental issues linked to commercial shipping and recreational boating;
- identification of zones where wakes are causing erosion and seeking of practical, appropriate means of reducing impacts.

Human health:

- evaluation of microbiological quality of water at thirty potential swimming sites;
- program introduced to monitor health risks of eating molluscs.

With respect to the Community Involvement area of action, Mr. Gauthier noted how pleased SLV 2000 government partners were with the activities of the ZIP committees. "Many committees have been working with communities along the river to enhance the shoreline and enable the public to rediscover the St. Lawrence."

Of course, this is just a brief overview of some of the projects undertaken and completed during the 1998-2000 period of Phase III of SLV 2000. The achievements of the various co-ordinating committees also include many other activities, all of them focused on the sustainable development of the St. Lawrence. As well, many communications exercises have taken place to inform the public and various partners about the work being done along the St. Lawrence.

A new management tool

The biennial report covers the period ending in March 2000. In June of the same year, the members of the co-ordinating committees were invited to a mid-term workshop to report on the progress of their projects, their successes and the problems encountered.

Mr. Gauthier feels it is important to underline the innovative nature of this evaluation exercise halfway through the action plan. "This management tool gives the partners a new means of ensuring that the expected results have been achieved by the end of Phase III." He said the review made it possible in some cases to fine tune strategies so that objectives can be met, adding that, "In general, we saw that the work of the co-ordinating committees is going well and that the objectives set in the beginning are on their way to being met."

Source:

St. Lawrence Vision 2000, 2001. Biennial Report 1998-2000, Government of Canada and gouvernement du Québec, 33 pp.

(The Biennial Report is available on the SLV 2000 web site at the following address: www.slv2000.qc.ec.gc.ca)

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Training suited to the needs of apple producers



Photo : Éric Labonté, MAPAQ

The trees in an apple orchard are host to a multitude of insect and mite species. Although these tiny animals may not be visible to most people, apple growers have to devote special attention to them and be able to distinguish between those that are beneficial and those that are harmful. The agri-environmental program supporting the Pest Control Strategy, which was implemented under St Lawrence Vision 2000 (SLV 2000), is now providing apple growers with training on the integrated management of apple pests.

Apple pests cause a great deal of damage to orchards and hence to harvests. Some insects and mites pose a threat by laying eggs in the fruit, chewing it or damaging the leaves, thereby also interfering with the growth of fruit buds the following season. Nature provides apple growers with a way to control pests: specific insects and mites that are predators or parasites of pests. The lady beetle, for example, is a predator of aphids.

In addition to harmful insects and mites, apple producers have to be on the lookout for the fungus that causes apple scab—the main disease affecting orchards.

Decisions that require considerable expertise

Because of their desire to use effective, low-cost and environmentally friendly practices, more and more producers are seeking to cut down on the number of times they apply insecticides and fungicides in their orchards. Now they

can receive training that will help them make informed decisions as part of an integrated orchard pest management approach.

An orchard manager must have various types of knowledge to be able to make important decisions with potentially serious consequences. It is necessary to be able to differentiate between insect species that pose a threat to the orchard and those that can serve as natural allies because they feed on insect pests. This knowledge is indispensable because growers have to consider the effects of the control measures they adopt on all pests and not just on the species they are seeking to eradicate. In fact, growers have to plan their treatments very carefully so as to avoid eliminating a given species which, if present later in the summer, would help to get rid of a new apple pest.

The training program has been developed under the agri-environmental program in support of the Pest Control Strategy, in collaboration with the Fédération des producteurs de pommes du Québec and the Institut de technologie agroalimentaire de Saint-Hyacinthe. An eight-day program, the training course is aimed at enabling apple producers to implement an effective scouting strategy as well as helping them adopt the most suitable intervention method.

Participants first receive information on the main insect and mite species found in orchards, as well as on techniques for capturing and counting them. This allows them to compare current insect numbers with the population thresholds at which action must be taken to control the pests. They also learn to assess whether intervention is absolutely necessary and how and when they should treat

the orchard in order to ensure optimal treatment efficacy.

Scouting activities, decision-making and control measures for insect pests are described in relation to the various stages in the growing season. This knowledge allows growers to assess the risk of damage from pests that are present at each stage in the development of apple trees. A producer can therefore decide to intervene only when the risk level justifies a prompt response.

Tools for use in the orchard

Apple producers already have a useful tool, the Guide d'identification des ravageurs du pommier et de leurs ennemis naturels, published last year by the Institut de recherche et de développement en agroenvironnement, through the agri-environmental program in support of the Pest Control Strategy. This identification guide contains information and many photos of more than 50 species that inhabit apple orchards. Descriptions are given of the period of activity and preferred food resources of the different species, along with the damage they are likely to cause. The new training program on integrated management of apple pests allows producers to gain in-depth knowledge, under the guidance of an experienced trainer, of an environmentally sound approach to protecting the trees and fruit.

So far 46 apple growers have taken the course, given between November and March 2001 in the Montérégie and Quebec City regions. The level of satisfaction of the participants is greater than 80 per cent, and their comments have been highly favourable. The training will be given again in fall 2001.

Other courses on the drawing board

The training on integrated apple pest management was developed based on information gathered in an analysis of needs conducted among potential clients. The content and approach were then validated in a pilot project in which producers participated. The training offered at present, which received financial support totalling \$87,000 from the agri-environmental program, thus provides apple growers with suitable tools they can apply in the field.

Potato and field crops (grains, corn, soybeans), two other production sectors that have been targeted on a priority basis under the program, will also be the object of training programs tailored to producers' needs. These training programs will be established using the same approach.

As you will recall, the Pest Control Strategy established by the Quebec Department Agriculture, Fisheries and Food has two goals, namely to reduce the quantity of pesticides used in agriculture in Quebec and to increase cultivated acreages by using integrated pest management—an environmental approach based on experimentation and observation, as well as on the application of environmentally responsible practices for managing crop pests (weeds, insects and diseases).

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strategie-slv.html](http://www.agr.gouv.qc.ca/dgpar/agroenv/strategie-slv.html)■

Chronicle

ZIP Committees in
the Heat of the Action

The Îles-de-la-Madeleine ZIP Committee



Fishing harbour at Cap-Vert, Lagune du Havre-aux-Maisons
Photo : Îles-de-la-Madeleine ZIP Committee

Integrated management of inland water bodies

The Magdalen Islands contain many inland bodies of water. These areas not only provide habitat for numerous species of plants and animals but also support economic and recreational activities important to the inhabitants of the islands. The Îles-de-la-Madeleine ZIP Committee is working to increase awareness of the importance of conserving the water bodies. Five consultative committees have recently been formed to ensure the harmonization of activities in and around these crucial natural habitats.

The Magdalen Islands, located in the middle of the Gulf of St. Lawrence, consist of a dozen rocky islands and islets, eight of which are inhabited. Seven of the larger islands are linked together by narrow sand dunes, between which inland water bodies have been formed. The water bodies cover a total area of 118 km².

The five largest are the Bassin aux Huîtres, Baie du Bassin, Baie du Havre-aux-Basques, Lagune de Grande-Entrée and Lagune de Havre-aux-Maisons. With the exception of the Baie du Havre-aux-Basques, which was cut off almost completely from the sea when Highway 199 was constructed, they are all connected to the Gulf of St. Lawrence. As a result, the water bodies contain a mixture of freshwater and saltwater, the latter pushed inland by the winds and tides.

Essential ecosystems in many ways

The inland water bodies and their environs contain several different habitats, ranging from beaches and dunes to mudflats and lagoons of varying depths. These highly productive ecosystems support diverse species of plants, molluscs, crustaceans, fish and birds. In terms of flora, three species of plants that are likely to be designated as threatened or vulnerable grow on the shoreline: *Triglochin gaspense* (Gaspé Peninsula arrowgrass), *Aster laurentianus* (Gulf of St. Lawrence aster), and *Bidens heterodoxa* (Connecticut beggarticks). In Quebec, the last two species are found only on the Magdalen Islands.

Over 100 species of birds frequent these habitats at different times of the year. Terns and ducks use the areas to nest and raise their broods. In addition, several species of concern, such as the Piping Plover and Roseate Tern, depend on the ecosystems associated with the water bodies.

The lagoons also contain eel, smelt and herring, as well as several species of crustaceans and molluscs, some of which are harvested non-commercially by islanders and tourists.

Changes accelerated by human pressures

The landscapes of the inland water bodies undergo a natural cycle of change. Over the years, channels open up that allow the water in the lagoons to be renewed. Then these channels are slowly cut off or change their course.

In the 1950s, the construction of road and port infrastructures quickly altered the natural dynamics of the lagoons. Since then, human activities that may threaten the integrity of the inland water bodies and their

surroundings have proliferated: mariculture; pleasure boating; herring, smelt and eel fishing; vehicle traffic; waterfowl hunting; shellfish harvesting; birdwatching; water sports and others.

Local citizens respond enthusiastically to project

In 2000, the first phase of the project was launched, entitled *Comprendre le passé pour mieux gérer l'avenir* (Understand the Past To Better Manage the Future), overseen by the Îles-de-la-Madeleine ZIP Committee. The project was funded under the Community Interaction program of St. Lawrence Vision 2000 and by Fisheries and Oceans Canada.

The first step was to characterize the Baie du Bassin, Baie du Havre-aux-Basques, Bassin aux Huîtres and Havre-aux-Maisons and Grande-Entrée lagoons, to improve our knowledge of these ecosystems. Surveys in the field and a literature search were carried out to identify the resources and uses of each water body. This information was then used to generate thematic maps and posters.

The results of the fieldwork and the maps were presented to islanders at public meetings. These meetings gave users a chance to validate and improve the information shown on the maps. In addition, the ZIP committee wanted to inform the public about the integrated coastal zone management approach that it planned to adopt. This approach involves implementing measures that allow both resource conservation and economic development in a coastal zone, based on a consensus among all users.

The public meetings resulted in the formation of five integrated management committees, each made up of about a dozen members representing different sectors such as

hunting, fishing, birdwatching, shellfish harvesting, recreation and tourism, the fishing and aquaculture industries, the mining industry and pleasure boating. Environmental organizations, municipalities and federal and Quebec departments are also represented.

The mandate of the committees is to promote the harmonization of activities practised in the lagoons and bays of the islands to ensure sustainable development. "Three consultative committees have already met to determine priority actions for the coming year," states Isabelle Hubert, who is in charge of the project for the Magdalen Islands ZIP committee. "These involve mainly clean-up projects, measures to deal with water pollution and knowledge acquisition projects," she explains. Members of the committees have asked the ZIP committee to help co-ordinate committee activities and provide technical and scientific support during the second phase of the project.

The establishment of the management committees should encourage community involvement in environmental protection, and result in improved co-operation among users of the inland water bodies.

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News *in* BRIEF

CONTINUITÉ

The summer issue of *Continuité*, the Quebec heritage and history magazine, features a special section on Quebec's maritime heritage. Over the centuries, Quebecers have established a special relationship with the St. Lawrence and the province's other rivers and lakes. Fishing, boating, construction and guiding are just some of the activities that have led to this rich heritage of traditions, many of which have been centuries in the making.

The special issue contains articles on the lighthouses of the St. Lawrence, Quebec's shipyards, the fate of our piers, the schooners of the St. Lawrence, the shipwreck of the *Empress of Ireland* and other fascinating topics. Publication date: June 2001. Don't miss it!

BIOSPHERE

The Bas-Saint-Laurent Marine Mammal Ecowatch Network (ROMMBSL), one of 30 projects in the Biosphere's Ecowatch Network, celebrates its third birthday this spring. For the occasion, Environment Canada's Biosphere will officially welcome three new members into the ROMMBSL network, which is based in the Lower St. Lawrence region: Aqua-Tour (Saint-Fabien), Centre de découvertes Explorama (Sainte-Anne-des-Monts) and the Société d'écologie des battures de Kamouraska (Kamouraska). This brings the number of partners in the region to 11. The Corporation promotion, aménagement, ressources et conservation (PARC) Bas-Saint-Laurent, which coordinates the ROMMBSL network, will also present data gathered in 1999 and 2000. The ROMMBSL is made up of organizations involved in marine ecotourism and boating. It gathers information on cetaceans (marine mammals) and pinnipeds (seals) in the estuary and Gulf of St. Lawrence. We would like to welcome ROMMBSL's new members and wish the Ecowatch Network a long and prosperous life! For more information, contact Thérèse Baribeau at the Biosphere at (514) 496-8279 or by email at therese.baribeau@ec.gc.ca. ■

LE FLEUVE

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