

ECOSYSTEM INITIATIVES

7.1 Overview and Recommendations.....259
7.2 St. Lawrence Vision 2000: A Federal–Provincial Partnership.....264
7.3 Great Lakes 2000: Meeting Binational Commitments.....277



ECOSYSTEM INITIATIVES



The federal role and mandate

7.1 Overview and Recommendations

7.1.1 Most of the environmental issues and threats discussed in this chapter are addressed through national or department-wide policies and programs of the federal government. Some of the policies and programs are brought together under the government's regional ecosystem initiatives. Great Lakes 2000 (now Great Lakes 2020) and St. Lawrence Vision 2000 are two programs among six current ecosystem initiatives of the federal government (Exhibit 7.1).

7.1.2 Other sections of this chapter have described the results that federal programs have achieved. In this section, we focus on aspects of the federal governance of the basin ecosystem programs. In our view, good governance includes effective accountability within and among federal departments and their partners, clear roles and responsibilities, transparency, and the measuring and reporting of results. We believe that good governance is crucial to achieving open and accountable government.

7.1.3 A look at the basin ecosystem programs requires the perspective of time. The co-ordination of federal and provincial environmental programs in the Great Lakes began in the early 1970s, and in the St. Lawrence River basin in 1988. Both programs have evolved since then. Different models and approaches to governance have been tried, tested, and adjusted as the environmental challenges have changed, the numbers of players grown, and public expectations for involvement and accountability increased. The government's approach to governance will need to continue evolving.

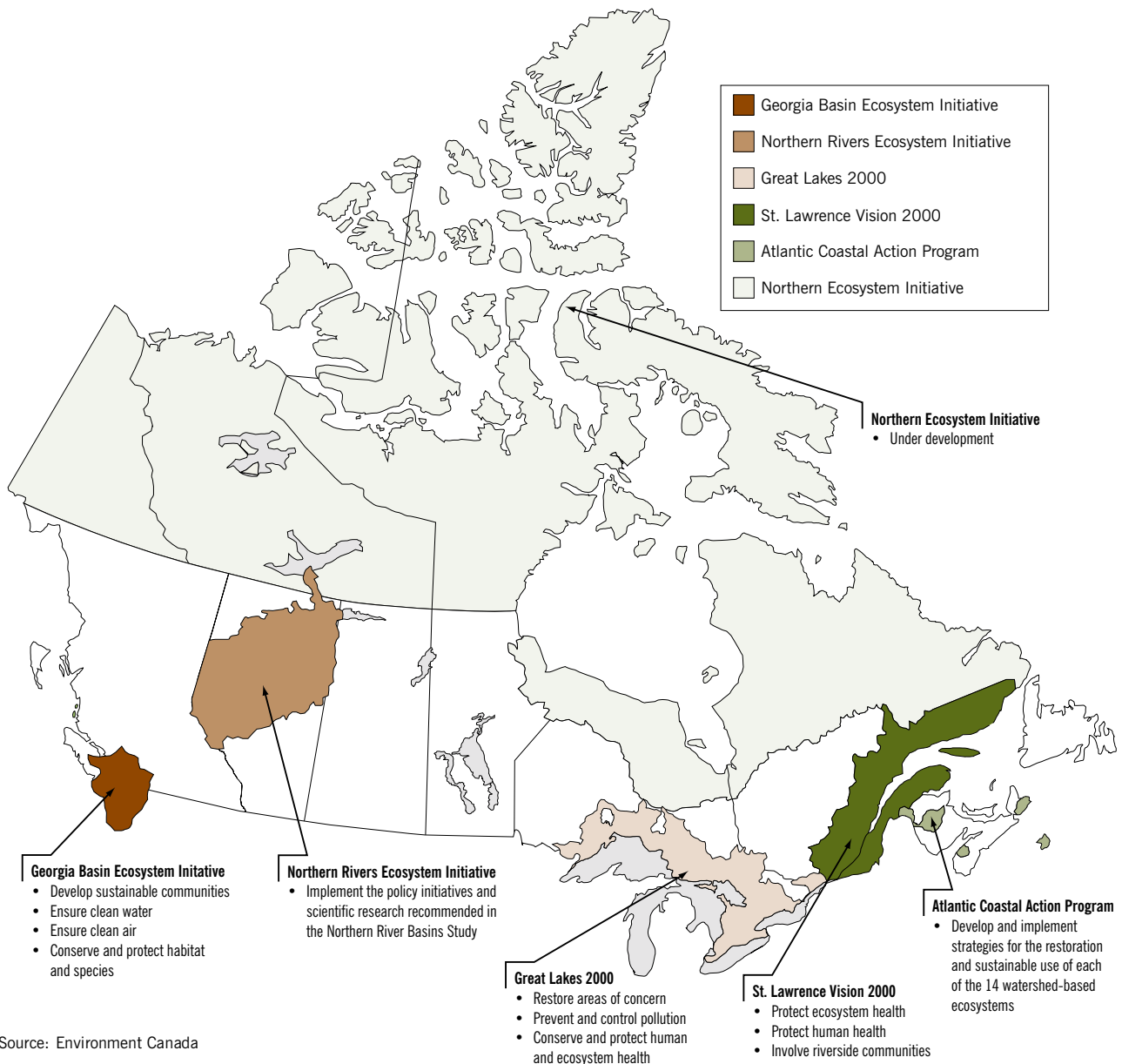
7.1.4 Environment Canada leads the ecosystem programs in the Great Lakes and St. Lawrence River basin through its Ontario and Quebec regional offices. It not only provides most of the federal funding for the programs but also attempts to co-ordinate the activities of the several other federal participants.

7.1.5 The programs share several major characteristics:

- Each has repackaged existing federal programs and funding and provided some new funding to manage several interrelated issues of the environment and sustainable development. These include water management, protection of species and spaces at risk, and reduction of the effects of farming activities, among others.
- Each program is selective in choosing the environmental issues it will address. Neither attempts to embrace all of the threats and issues in the basin or region.

- Each features a program that funds local projects and cleanup activities (the Great Lakes 2000 Cleanup Fund and, in the St. Lawrence River basin, the Community Interaction program).
- Both carry out community-based programs and actions in specific planning areas—the Great Lakes areas of concern and the St. Lawrence zones d’intervention prioritaires (ZIPs).

Exhibit 7.1 The federal government’s regional ecosystem initiatives



Source: Environment Canada

7.1.6 The challenges facing the government in the two regions are different, and the two programs reflect this. The federal government's role and the actions and results it plans are not always the same in both regions. By design, St. Lawrence Vision 2000 is an integrated partnership between the governments of Canada and Quebec. Underpinning this partnership is a Canada–Quebec Agreement. Taking into account federal and provincial priorities and available resources, the two governments jointly set the program's objectives for the St. Lawrence River basin and combine their activities toward achieving them.

7.1.7 The Great Lakes 2000 priorities were established chiefly to help meet the federal government's commitments under the Great Lakes Water Quality Agreement with the United States. The federal government and the Ontario government co-ordinate their efforts through the companion Canada–Ontario Agreement. Federal commitments in the Great Lakes—to restore areas of concern, develop lakewide management plans, foster international partnerships, and respond to the International Joint Commission—do not exist for the St. Lawrence River basin.

What we audited

7.1.8 Effective governance is doing things right, more than doing the right things. We looked at whether the programs are structured effectively to achieve their objectives. We also reviewed whether the federal government has followed good management practices. We did not evaluate whether St. Lawrence Vision 2000 and Great Lakes 2000 are working on the right problems. Nor did we assess the quality of the actions undertaken in the programs.

What we found

7.1.9 Roles, actions, and accountabilities. We found that in both programs, the key federal departments were involved in planning and management. In St. Lawrence Vision 2000, most of the funds committed by the federal government were actually spent. In Great Lakes 2000, however, most federal departments other than Environment Canada significantly reduced their financial commitments and involvement after the budget reductions of 1995. Of \$125 million in new funds announced by the Minister of the Environment, only \$14.9 million was distributed to the departments participating in Great Lakes 2000. Although both programs carried out a number of actions, neither achieved all of the results it had planned.

7.1.10 The key roles and responsibilities of both the federal and the provincial partners in St. Lawrence Vision 2000 are clear, and the key results expected of all parties are specified. The program managers have established strong accountability mechanisms as well as management systems capable of tracking actions toward established targets.

7.1.11 The initial design of Great Lakes 2000 clearly identified the role of each participating federal department. But when budget reductions substantially curtailed their participation, their planned actions, targets, and associated accountabilities were never revised accordingly. The companion Canada–Ontario Agreement did not clearly identify the respective roles and

responsibilities of the federal and provincial departments involved. The Agreement expired in 2000; at the end of our audit it had not been renewed.

7.1.12 Local communities. Both programs tried to set up structures that would involve the local communities, though for different reasons. Both have learned valuable lessons about the challenges of mobilizing volunteer community groups, and both have encountered difficulties. In the Great Lakes, a key challenge will be to develop a sense of the permanence—or sustainability—of local structures set up to act on environmental issues. Communities need support from governments to get started but also ongoing support to carry out actions that are beyond local resources or expertise. St. Lawrence Vision 2000 formed ZIP committees as forums to build consensus for action on local issues between the governments and community representatives. It gives these groups stable funding and effective oversight.

7.1.13 Reporting results. St. Lawrence Vision 2000 progress reports, published every two years, provide information on actual spending by each partner and on results achieved toward each key target of the program. Great Lakes 2000 reports its results in the progress reports of the Canada–Ontario Agreement. These reports summarize progress toward targets but do not show federal spending. Reporting by Great Lakes 2000 is out-of-date. We are very concerned that neither program was able to demonstrate a link between the achievement of its planned results and changes in the state of the environment.

7.1.14 The broad ecosystem approach. One of the principles underlying both these programs is the ecosystem approach. Both have features of such an approach; they both deal with not just one aspect of the environment but a series of interrelated environmental and sustainable development issues.

7.1.15 An ecosystem approach considers the effects that a program's activities in one part of the ecosystem may have on other parts. Recognizing that roughly 40 percent of the pollution in the St. Lawrence River originates upstream in the Great Lakes, we expected to find some form of co-ordination between Great Lakes 2000 and St. Lawrence Vision 2000.

7.1.16 Basin-wide perspective. In 1997, departmental officials of both programs identified several areas where better integration of upstream and downstream activities would benefit the environment, among them the following:

- toxic substances;
- water levels, including environmental criteria and regulation;
- technologies for cleaning up contaminated sediment and soil; and
- indicators of the state of the environment.

We found, however, that co-ordination between the two programs has been limited.

7.1.17 We are particularly concerned that they have done little to co-ordinate their use of indicators of the state of the environment. Common indicators

would make it easier for managers, Parliament, and the public to understand the evolution of the whole Great Lakes and St. Lawrence River basin ecosystem.

7.1.18 Finally, we found no formal means of sharing information and lessons learned. At the community level, Quebec ZIP committees and the Ontario public advisory committees have little knowledge of what their counterparts have achieved. For example, the Haut Saint-Laurent and Jacques-Cartier ZIP committees were both involved in projects to clean up contaminated sediment. They were not aware that the public advisory committee in the Collingwood area of concern had succeeded with similar cleanup activities in 1994.

What we recommend

7.1.19 Our findings suggest the need to provide clear and specific descriptions of federal roles, actions, and accountabilities; report better how program results contribute to improving the environment; and co-ordinate activities better across the basin.

7.1.20 Environment Canada, possibly in collaboration with its partners, should develop and adopt key common indicators of the state of the environment in the basin. It should also use program performance indicators to report publicly how the results of the renewed Great Lakes 2020 program and St. Lawrence Vision 2000 contribute to environmental changes.

7.1.21 Before they measure changes in the environment, Environment Canada and its partners should allocate enough permanent resources to monitor the state of the environment in the basin.

7.1.22 Environment Canada should ensure that Great Lakes 2020 and a renewed Canada–Ontario Agreement clearly identify the respective roles and responsibilities of the federal departments and provincial ministries and the resources needed to carry them out.

7.1.23 In the renewed Great Lakes 2020 program, Environment Canada should report the spending of each federal partner at least every two years, and relate the spending to the results achieved.

(See Summary for departmental responses.)

7.2 St. Lawrence Vision 2000: A Federal–Provincial Partnership

The issue



7.2.1 The current St. Lawrence Vision 2000 program has evolved considerably from its earliest days. Phase I (1988 to 1993) focussed on measures to reduce toxic liquid emissions from 50 plants that were the biggest polluters of the St. Lawrence River. At the time, the Quebec government had efforts under way to upgrade its municipal treatment of waste water. Phase II of the program (1993 to 1998) extended the measures to another 56 plants, some of them on the river’s tributaries. The program also emphasized the need for better knowledge of the environmental threats to the St. Lawrence River.

7.2.2 Phase III (1998 to 2003) expanded further to involve communities in tackling local issues, reduce pollution from other sources (agricultural runoff and emissions from small and medium-sized enterprises), and deal with navigation issues such as shoreline erosion. These expanded measures are addressed in the program’s current three broad objectives:

- protect ecosystem health;
- protect human health; and
- involve riverside communities in “helping to make the St. Lawrence more accessible and recover its former uses.”

St. Lawrence Vision 2000 is a combination of federal and provincial actions to achieve those objectives.

The federal role

7.2.3 The partnership between the two governments is forged through the Canada–Quebec agreement for joint action on the St. Lawrence. Through the Agreement, the federal government has committed \$123 million to phase III of the program, and the government of Quebec \$116 million. Of this budget, \$184 million came from existing programs; the federal and provincial treasury boards provided \$55 million in new funds. (In phase II, the federal and provincial governments committed \$100 million and \$91 million respectively; in phase I, the federal share was \$110 million.)

Our audit questions

7.2.4 Is St. Lawrence Vision 2000 structured adequately to meet the federal objectives of managing ecosystem and human health issues and promoting community involvement?

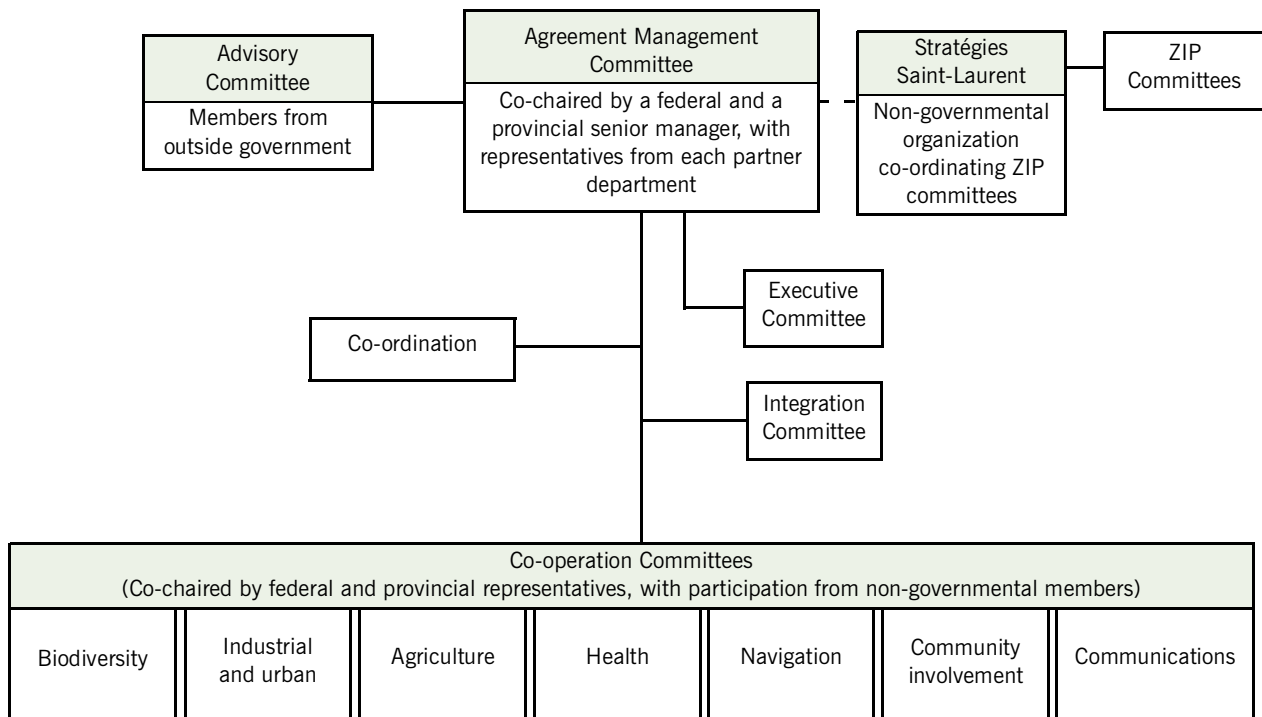
- Are the roles and responsibilities of both the federal departments and their partners clear? Are there effective mechanisms for accountability?
- Is the program measuring progress and reporting in a credible and transparent way to Parliament and the public?
- Did the federal government consider environmental, social, and economic information in deciding to renew the program?
- Do the federal departments involved in St. Lawrence Vision 2000 share information and lessons learned with their Great Lakes 2000 counterparts?

The story **A management structure built around issues**

7.2.5 Eight federal departments participate in phase III of St. Lawrence Vision 2000: Environment Canada, Fisheries and Oceans, Health Canada, Agriculture and Agri-Food Canada, Parks Canada Agency, Canada Economic Development for Quebec Regions, Public Works and Government Services Canada, and Transport Canada. They are formal partners in the program with five Quebec departments: Environment; Wildlife and Parks; Health and Social Services; Transport; and Agriculture, Fisheries and Food. The program's management structure reflects the federal–provincial partnership in protecting the St. Lawrence River (Exhibit 7.2). In our view, important and strong features of this structure include the following:

- The Agreement Management Committee, co-chaired by Environment Canada's regional director for the Quebec region and an assistant deputy minister of the Quebec Department of the Environment. Senior-level people represent the partner departments on the Committee.
- Co-operation committees (comités de concertation), established to address activities under six broad issues as well as communications. A federal and a provincial representative co-chair each of these committees except for the agriculture committee.

Exhibit 7.2 Management structure of St. Lawrence Vision 2000, phase III



Source: St. Lawrence Vision 2000, phase III, 1998–2003

- An Advisory Committee, comprising members from outside government with wide-ranging expertise on environmental and sustainable development issues who provide regular advice to the Agreement Management Committee.
- Stratégies Saint-Laurent, a non-government organization that has signed a formal agreement with the Agreement Management Committee and co-ordinates the activities of 14 community-based committees established in ZIPs (zones d'intervention prioritaires or areas of prime concern). The ZIP committees employ full-time co-ordinators, funded by the governments.
- The Community Interaction program, which provides funding to local projects.
- Several other associations, enterprises, and environmental organizations involved less formally in the partnership.

7.2.6 The necessary partners. Three federal departments and two provincial departments were involved in phase I of the program. Since then, the partnership has expanded to the eight federal departments whose mandates include the issues addressed by the program and whose participation is essential to get results.

7.2.7 In phase II, co-operation committees were limited to government members. In phase III, membership was opened to other stakeholders whose participation was considered essential; five of the seven committees now have at least three members from outside government, selected for their expertise in the subject area. The case study Reducing ship speed on the St. Lawrence River to minimize erosion shows how a co-operation committee with an extensive network of participants can help get results.

Reducing ship speed on the St. Lawrence River to minimize erosion

Riverside communities have long argued that the high speeds of commercial boats and pleasure craft have accelerated erosion in many parts of the St. Lawrence River. The St. Lawrence Vision 2000 navigation committee decided to tackle that problem.

The Navigation Co-ordination Committee has 18 members and is co-chaired by Fisheries and Oceans and the Quebec Department of Transport. Federal members represent Environment Canada and Transport Canada; eight other members are from organizations outside government. They include private industries and associations involved in marine transportation and environmental groups who want to protect the river for local residents' use.

Through the efforts of the navigation committee, three major marine transportation associations that affect a significant portion of ship traffic on the St. Lawrence announced in November 2000 that their members would voluntarily reduce their speed along a 25-kilometre stretch of the St. Lawrence. That stretch is particularly sensitive to erosion. The Canadian Coast Guard agreed to monitor boat speed in the area to see whether this voluntary measure would work. Preliminary results are encouraging and show a reduction in boat speeds.

7.2.8 Clear roles and responsibilities. We examined the management structure of the program's phase III to determine whether, for each issue area, the roles of each federal department and the Province are clear and accountability well defined. We found that the federal and provincial partners clearly identified in the Canada–Quebec Agreement the key results they planned to achieve and what each would contribute to achieving each result (Exhibit 7.3).

Exhibit 7.3 Key intended results and partners—St. Lawrence Vision 2000, phase III

Key intended results	Federal departments	Provincial departments
Community involvement		
Support community involvement in 14 riverside communities (ZIPs).	Environment Canada*	Wildlife and Parks*
Disseminate scientific knowledge to the population and to decision makers.	Fisheries and Oceans	Environment
Biodiversity		
Protect species.	Environment Canada*	Wildlife and Parks*
Protect habitats.	Parks Canada	Environment
Assess impacts of water level variations.	Canada Economic Development for Quebec Regions	
Implement an integrated monitoring system.	Fisheries and Oceans Public Works and Government Services Transport Canada	
Human health		
Reduce public exposure to contaminated recreational waters and drinking water and to consumption of contaminated aquatic products.	Health Canada* Environment Canada	Health and Social Services*
Industrial and urban issues		
Control and inspect industrial sector.**	Canada Economic Development for Quebec Regions	Environment*
Provide technical expertise and financial support for new pollution prevention technologies.	Environment Canada*	
Support pollution prevention measures in small and medium enterprises.		
Navigation issues		
Develop a sustainable navigation strategy.	Coast Guard (Fisheries and Oceans)*	Transport*
Protect the banks of the St. Lawrence against erosion.	Environment Canada	Environment
Develop guidelines for management of environmental risks, sediment management, discharge of ballast water.	Transport Canada Public Works and Government Services	Wildlife and Parks
Agriculture issues		
Control and inspect agricultural industries.**	Environment Canada	Agriculture, Fisheries and Food*
Reduce use of pesticides by 50% until 2003.	Agriculture and Agri-Food Canada	Environment*

* Departments co-chairing the co-operation committee are managing the issue.

** The federal government is not involved in achieving this result.

Source: Canada-Quebec Agreement for Joint Action of the St. Lawrence, 1998

7.2.9 The management framework developed in phase III defines the role of each committee. The agreement that Stratégies Saint-Laurent signed with the Agreement Management Committee explains its role and responsibilities.

7.2.10 Environment Canada has co-ordinated the federal efforts since St. Lawrence Vision 2000 began in 1988. Other federal departments and their provincial counterparts recognize and value its leadership. We observed good collaboration and regular communication among departmental officials. Provincial officials said, anecdotally, that they sometimes know more about their federal partners' activities than those of their own departmental colleagues.

7.2.11 The Agreement specifies that the federal and provincial co-chairs of the Agreement Management Committee are jointly accountable for the whole program. It also identifies the departments accountable for each intended result.

Periodic public reporting on progress

7.2.12 The last two progress reports the program published were *St. Lawrence Vision 2000: Five Year Report 1993–1998* in phase II and *St. Lawrence Vision 2000 Biennial Report 1998–2000* in phase III. The reports show what each federal and provincial department spent on each main program issue and the results they achieved toward each key target (see Exhibit 7.4 for key results of phase II).

7.2.13 The 1998–2000 progress report acknowledges some of the difficulties encountered—notably, in introducing pollution prevention measures in small and medium-sized firms. But the report was not as straightforward as a midterm internal review conducted in 2000. The review identified more specifically areas where intended results would likely not be achieved without adjustments.

Exhibit 7.4 Key results—St. Lawrence Vision 2000, phase II

Issues	Intended results for 1998	Results achieved in 1998*
Biodiversity	Protect 7,000 hectares of habitat.	6,738 hectares protected (96%).
Agriculture	Produce agricultural cleanup action plans for four basins.	Action plans produced for all four basins.
Community involvement	Prepare 11 environmental reports to support ecological remedial action plans for the 10 existing ZIP committees.	13 environmental reports prepared (since beginning of program) and 11 remedial action plans submitted by ZIP committees.
Decision support	Publish a second joint state-of-the-environment report on the St. Lawrence.	<i>The State of the Environment Report on the St. Lawrence</i> was published in 1996. A second report, comprising five issue sheets, was published in 1998.
Health	Evaluate the risks associated with contaminants by developing exposure indicators and other tools.	38 studies were conducted. Two types of indicators of human exposure to chemical contaminants were developed.

Exhibit 7.4 (Continued)

Issues	Intended results for 1998	Results achieved in 1998*
Protection	Implement measures targeting 106 priority industrial plants in order to do the following: <ul style="list-style-type: none"> • reduce by 90% the amount of toxic effluent discharged from 11 plants with inadequate wastewater treatment; • optimize the reduction of discharges of toxic effluent at 22 plants where treatment technologies have already been installed; and • assess the toxic effluents discharged by 23 regulated plants and determine the corrective measures needed to minimize effects on the environment. 	Significant corrective action needed for 5 of the 11 plants; corrective actions still to be implemented. Most establishments in the group have adopted improved production practices and technologies. Up to six of these plants could undertake additional cleanup initiatives or minor corrective action. Reduction of 89% in liquid toxic effluent discharged into the environment (Chimiotox index) was achieved by the end of 1996. Reduction of 96% in liquid toxic effluent from 1988 to 1995 was achieved for the 50 plants initially targeted in 1988 (the reduction target was 90%). An environmental assessment of the 50 plants was conducted.
Restoration	Clean up Lachine Canal.	Following public hearings, a federal–provincial environmental assessment panel recommended against the large-scale decontamination of sediment in the Lachine Canal because it was not a threat to public health and the expected environmental gain was small. Models have shown that the reopening of the canal does not pose any risk of raising the contaminated sediments.

* As presented in the 1993–1998 five-year report on phase II of St. Lawrence Vision 2000. The report discusses the results achieved for 33 of the 34 key intended results. We did not audit these results. We are presenting, for illustrative purposes only, 9 key intended results and the actual results achieved.

The ZIP committees: People can make a difference

7.2.14 Involving communities is one of three key objectives of St. Lawrence Vision 2000. A federal program under phase II, Community Interaction is now a joint federal–provincial program. This signals the importance that both governments attach to community involvement, and it is consistent with the federal government’s commitment to promoting sustainable communities. The case study Reclaiming the Îles de la Paix shows how communities can make a difference.

7.2.15 ZIP committees are the way the program involves riverside residents. The committees began as local initiatives supported by an environmental organization. Phase II integrated them with St. Lawrence Vision 2000 and gave them significantly more resources. Stratégies Saint-Laurent was created to co-ordinate their activities.

7.2.16 A local forum for consensus building. Although they get involved directly in small restoration projects, the ZIP committees’ role is to build local consensus on actions needed to address local environmental issues, create an action plan, and mobilize efforts to carry out the plan. Each committee is required to include representatives from a range of community interests: environmental associations; industry and commerce; and social, cultural, and municipal organizations. Their specific composition and levels of

Reclaiming the Îles de la Paix

February 2000. It was minus 25 degrees Celsius (without the wind chill factor), but the three volunteers standing on the ice in the middle of the St. Lawrence River were smiling. The ice bridge they were building from the mainland to the Îles de la Paix was now three feet thick. Just two more inches, and trucks could begin carrying the 10,000 tonnes of stone needed to protect the islands' shoreline from excessive erosion.

A week later, the volunteers were no longer smiling. Temperatures much higher than normal had thawed their winter road to the islands before it was safe to use. Disappointed but not discouraged, they resolved to try again in 2001 because this was the most economical way to carry the needed equipment and material. They were successful in building a snow bridge the next winter and completed the planned restoration work in spring 2001.

The Îles de la Paix are a national wildlife and migratory bird reserve, one of the last natural wetlands in Lake St. Louis (a widening of the St. Lawrence River west of Montreal). From 1964 to 1993, the islands lost 52 percent of their surface to erosion.

The Îles de la Paix restoration project is one of 20 in the Lake St. Louis action plan prepared by the Haut-Saint-Laurent ZIP committee. The project is also one of 105 that the Community Interaction program has financed since 1998.

participation vary from one ZIP committee to another. And the results they produce vary, too.

7.2.17 The case study Building consensus for action on contaminated sediments illustrates the important role that community groups can play. It also shows the limits of local capacity and the ever-present need for governments to act.

7.2.18 Good provision for clear accountability. We examined whether the ZIP committees have the capacity to deal with the responsibilities given to them under St. Lawrence Vision 2000. The federal and provincial governments do not impose environmental priorities on the ZIP committees. Rather, the committees prepare action plans that reflect a range of community priorities, including but not limited to environmental ones. These action plans are supported by an Environment Canada evaluation of environmental issues. Action plans identify projects at the local level. The majority of projects funded by the Community Interaction program are aimed at protecting species and restoring habitat.

7.2.19 The agreement between the federal and provincial governments and Stratégies Saint-Laurent states that ZIP committees are to link their activities to their action plans and report on them regularly. Every year, each ZIP committee must produce a business plan that sets out its projects for the coming year. Six months into the year, it has to produce a progress report and, at the end of the year, a final report on its activities and the results it has achieved. These reports are reviewed by Stratégies Saint-Laurent; then Environment Canada, which funds the ZIP committees, evaluates the reports before authorizing any payment of government money. ZIP committee members are directly accountable for prudent management of the funds.

Building consensus for action on contaminated sediments

ZIP committees do not have the mandate or the resources to play an active part in cleaning up contaminated sediment or in any other large-scale project. Finding that contaminated sediment was a problem in their areas, two ZIP committees attacked it with the only means they had: trying to build consensus.

Each of the committees is unique. The Haut-Saint-Laurent ZIP is in a fairly industrialized region with medium-sized cities; the Jacques-Cartier ZIP is in the heart of industrial Montreal.

In the Haut-Saint-Laurent zone is the St. Louis River, which flows into the St. Lawrence. A stretch of its bed is loaded with contaminated sediments from industrial activities in the past. The governments believe the two industries on the riverside are now respecting regulations. In the spring of 2000, both industries agreed to spend about \$4 million together on cleaning up the contamination, and they proposed a schedule for the work. Since then, they have hired a consulting firm to develop the project and conduct impact studies.

In the Jacques-Cartier zone, a contaminated area of the Port of Montreal called sector 103 had residents worried. Over the years, several petroleum and metal-refining companies had been active in the area. In July 2001, three of the four companies involved, the Port of Montreal, and Environment Canada were negotiating an agreement to address the decontamination of the sector.

In both cases, ZIP committees made a difference. Environment Canada and its provincial counterpart had been unable to convince the riverside companies to commit to decontamination until communities got involved.

Stratégies Saint-Laurent also has to submit a business plan and progress reports to Environment Canada.

The federal government meets most of its financial commitments

7.2.20 Given the budget cuts that followed Program Review, in phase II the federal government spent only \$84 million of the \$100 million it had committed to spend (Exhibit 7.5). Federal officials evaluated the impact of the cuts on the delivery of certain program activities. We could not get formal evidence that they had shared that information with their provincial partners. Monitoring of the state of the St. Lawrence was one of the activities affected by Program Review. Now, three years into phase III, all federal departments except Health Canada appear to be meeting their financial commitments.

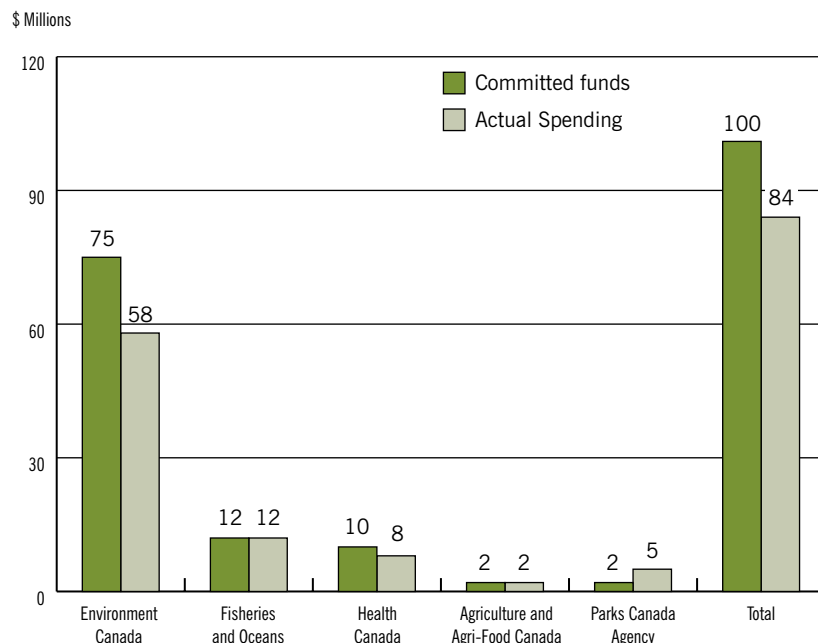
7.2.21 By January 2001, Health Canada had spent only 27 percent of the \$11 million it had committed for the five-year program, not the expected 55 percent. Furthermore, its continued participation in 2001–02 was in doubt. This has had an impact on the provincial contribution, which is directly related, and thus on the research and communication activities conducted by both governments to reduce public exposure to contaminated water and contaminated fish. The participation of Health Canada has since been confirmed, but at a reduced level.

Measuring the impact: a long way to go

7.2.22 Protecting ecosystem health and human health and recovering the various uses of the river for the population are the three overarching goals of St. Lawrence Vision 2000. The program activities were selected for their potential contribution to achieving one or more of those goals. From the beginning of the program in 1988, its managers took a “managing for results” approach and tried to measure whether they were achieving the intended results for each activity. In phases I and II, for example, one of the key targets of the program was a 90 percent reduction in liquid toxic effluents by a group of large industries; the actual performance was measured and the results reported in St. Lawrence Vision 2000 progress reports.

7.2.23 One big gap remains. Although program managers tracked whether targeted results were achieved for each activity—whether they had done what they said they would do—they did not verify whether those results did indeed contribute to protecting the environment and human health, the overall goals of the program. Very few of the performance measures used before 2001 indicated the program’s impact on the environment. The size of the reduction in liquid toxic emissions by industry, for example, is a useful indicator but does not tell us what the quality of the water is now, or whether it has improved since the program began. More information is needed on how the state of the environment has evolved during the past several years so we can estimate the program’s impact on the St. Lawrence over its three phases.

Exhibit 7.5 Federal spending under St. Lawrence Vision 2000, phase II



Source: Canada–Québec Agreement for joint action on the St. Lawrence, 1998
Five-Year Report 1993-1998 St. Lawrence Vision 2000
(We did not audit the information from the five-year report.)

7.2.24 Improved ability to monitor the state of the environment was one intended result of phase III and one of two priorities recognized after the summer 2000 midterm review. A proposal for monitoring the state of the St. Lawrence described the shortcomings of existing indicators and proposed new ones. It also insisted that monitoring had to continue permanently, beyond the end of St. Lawrence Vision 2000. In spring 2001, the only public document integrating the available information on the state of the environment was dated 1998, and it used data from 1996 and earlier. Managers are planning to present and share updated information before the end of phase III.

7.2.25 We found that managers have developed program performance indicators and indicators of the state of the St. Lawrence as two separate sets, when they should be linked. Finally, we observed that there is little co-ordination with Great Lakes 2000 managers to identify and use some common indicators of the state of the environment. We discuss these findings in Subsection 7.1.

Good management practices for learning and adapting

7.2.26 A system in place for follow-through. St. Lawrence Vision 2000 has developed a computerized system for managing each of its elements, known as *Système de suivi de gestion*. Managers regularly track actual spending and activities compared with commitments. Progress can be tracked by agency or by commitment. For example, partners can see which department or agency is responsible for what activities in the five-year program; which activities have been completed; and what actions still need to be completed. Partners in the program have easy access to that information. Co-ordinators of the co-operation committees enter information in the system on progress toward each intended result, using the indicators from the recently developed performance framework. The system provided key information for the 2000 midterm review. We observed that the quality of the information and the frequency of its updating vary from one issue to another.

7.2.27 An inclusive and extensive planning process for phase III. In planning for phase III, the federal and provincial partners first agreed on the highest-priority environmental threats. These include the impact of endocrine-disrupting chemicals on health, variations in water levels, invasion by exotic species, agricultural use of pesticides, and the impact of liquid effluents. The discussion was then opened to potential new partners and to the Advisory Committee. The committees and working groups on specific issues included 200 people, representing both levels of government as well as other interested groups.

7.2.28 Social, economic, and environmental information used in deciding on phase III. Social concerns were well reflected in the discussions and documents of working groups on health, community involvement, and navigation. Participants also considered the economic dimensions of resolving navigation, industry, and agriculture issues, among others. And working groups used environmental science information. The Development Committee and the Advisory Committee integrated the three dimensions in

their analysis and in their recommendations to the Agreement Management Committee.

7.2.29 Decision makers took into account a number of those recommendations—for example, to step up the role and interventions of Stratégies Saint-Laurent and the ZIP committees, widen the base of stakeholders, and create a navigation committee.

7.2.30 In 2000, the program’s managers prepared a long-term strategy for the St. Lawrence. The strategy built on the strategic plan for 1999 to 2020 by Environment Canada’s Quebec region, and on long-term social indicators. It stated the long-term vision for the St. Lawrence: an environment full of life, prosperous and sustainable, and contributing to the well-being of the population.

7.2.31 Regular reviews . . . but inability to implement one key recommendation. Environment Canada reviewed its participation in St. Lawrence Vision 2000 at the end of phase II. The Department addressed a number of the weaknesses by better defining roles and responsibilities, preparing a long-term strategy for the St. Lawrence, and improving tracking systems. Other deficiencies, however, still have to be corrected—for example, the lack of linkages between this program and other ecosystem programs and the need for performance indicators that define environmental results.

7.2.32 Officials from Environment Canada and Environment Quebec conducted a joint midterm review of phase III. They presented the results to program partners and to representatives of Stratégies Saint-Laurent and the Advisory Committee at a two-day workshop. The purpose was to allow for any early adjustments needed. The review showed that two key areas needed more resources: monitoring the environment, and the navigation issue. The Agreement Management Committee allocated more funds to these two priorities for the two years left in phase III. But the amounts were significantly less than program managers had asked for. Whether these midcourse adjustments will work remains to be seen.

7.2.33 The Advisory Committee is, in itself, a regular source of independent review. It, too, stressed the need for more information on the state of the environment in its notice to the Agreement Management Committee about the midterm review.

7.2.34 In 1993, our Office conducted an audit of phase I of the program. Management applied most of our recommendations—one of which dealt with the need for program evaluations—in phase II or III. A key weakness that was not addressed adequately was, again, the need for the progress reports to explain better the relationship between the program’s objectives and the overall health of the ecosystem.

7.2.35 Sharing information and lessons learned within the program. The management and co-ordination structure, the presence of Stratégies Saint-Laurent, and the personal networks developed over the years allow for a regular exchange of information and lessons learned among the partner departments and the community organizations.

7.2.36 Limited linkages with the Great Lakes 2000. We found limited sharing of information and lessons learned with the other ecosystem program in the basin, Great Lakes 2000. We also found limited co-ordination in identifying and selecting indicators of the state of the environment. (We discuss this in Subsection 7.1.)

Conclusion 7.2.37 St. Lawrence Vision 2000 has a good structure for managing issues that involve several departments and governments. It generally follows good management practices. But despite repeated recommendations by outside observers and by program participants themselves, the program’s managers have not been able to fill a major gap: there is still little information on the state of the environment of the St. Lawrence River. Without this information, Parliament, the public, and program managers themselves cannot estimate how St. Lawrence Vision 2000 has contributed to protecting the environment and human health, the overall goals of the program.

Our audit objectives and main findings

Holding the federal government to account		
① Has the government fulfilled its commitments?	Commitments	Results
	The federal government committed \$100 million to St. Lawrence Vision phase II.	The federal government actually spent \$84 million.
Assessing the government’s performance		
② Has the government applied good management practices?	Program managers have been measuring progress made against St. Lawrence Vision 2000 (SLV2000) targets. A system is in place to track spending and progress achieved. An inclusive and extensive planning process for phase III used social, economic, and environmental information. The Advisory Committee provides regular internal reviews and advice. There is good sharing within SLV2000 of information and lessons learned.	There is not enough information on the state of the environment of the St. Lawrence. So it is difficult to know what global effect the SLV2000 program has had on the environment of the St. Lawrence over its three phases. Managers were unable to act on one key recommendation for more performance indicators that define environmental results. There is limited sharing with Great Lakes 2000 of information and lessons learned. There is limited co-ordination with GL2000 on state-of-the-environment indicators.

Our audit objectives and main findings

Assessing the government's performance		
③ Has the government established good governance structures?	Strengths	Weaknesses
	<p>The eight federal departments whose involvement was essential to achieve the intended results of SLV2000 are partners of the program.</p> <p>The Canada–Quebec Agreement clearly identifies key intended results as well as the financial contribution of each federal and provincial department.</p> <p>ZIP committees are forums for consensus building on local environmental and sustainable development issues.</p> <p>ZIP action plans identify projects at the local level. The plans we examined reflect community priorities and capacities.</p> <p>Good provision is made for clear accountability of ZIP committees.</p> <p>SLV2000 progress reports, published at least every two years, provide information on actual spending by each federal and provincial department. They also present results achieved for each key program target.</p>	<p>SLV2000 progress reports do not show what impact the federal and provincial efforts have had on the environment of the St. Lawrence.</p>

7.3 Great Lakes 2000: Meeting Binational Commitments

The issue



7.3.1 Canadians and Americans together witnessed a slow deterioration of the Great Lakes in the last half of the 20th century. Throughout the 1960s, the governments of both countries recognized the need for a concerted effort to prevent further harm and reverse the damage to the Great Lakes. The Great Lakes Water Quality Agreement between the two countries was designed to co-ordinate their efforts in the Great Lakes basin.

7.3.2 Recognizing the need to also co-ordinate federal and provincial action to fulfil Canada's obligations under the Great Lakes Water Quality Agreement, the federal government and the Province of Ontario signed the first Canada–Ontario Agreement in 1971. It was revised in 1994, and expired in 2000; at the end of our audit, its renewal was still being renegotiated.

7.3.3 In 1989 the federal government launched its \$125 million Great Lakes Action Plan. A second phase, the \$150 million Great Lakes 2000 program, was approved in 1994. In 2000, another \$40 million was allocated to the third phase, Great Lakes 2020. These are wholly federal programs.

The federal role

7.3.4 The federal partners in Great Lakes 2000 were Environment Canada, Fisheries and Oceans, Health Canada, Agriculture and Agri-Food Canada, Transport Canada, Parks Canada Agency, and Public Works and Government Services Canada. The provincial partners, through the Canada–Ontario Agreement, were the Ontario ministries of the Environment; Natural Resources; Health and Long-Term Care; and Agriculture, Food and Rural Affairs. The far-reaching commitments in the Great Lakes Water Quality Agreement require the federal government to also work with partners outside government—scientists, academia, citizens, and industry—to restore and protect the Great Lakes ecosystem.

Our audit questions

7.3.5 Was Great Lakes 2000 structured adequately to meet the federal government's objectives, including its commitments under the Great Lakes Water Quality Agreement?

- Were the roles and responsibilities of both the federal departments and their partners clear? Were effective mechanisms for accountability in place?
- Is the program measuring progress and reporting in a credible and transparent way to Parliament and the public?
- Did the federal government consider environmental, social, and economic information in deciding to renew the program as Great Lakes 2020?
- Did the federal departments involved in the program share information and lessons learned with their St. Lawrence Vision 2000 counterparts?

The story

7.3.6 Great Lakes 2000 is the means the federal government uses to co-ordinate its activities under the Great Lakes Water Quality Agreement and the Canada–Ontario Agreement. Program officials work with U.S. agencies on many binational issues; they work with provincial agencies to

co-ordinate federal–provincial activities. This makes for a complex, three-tiered management structure (Exhibit 7.6). Features of this structure and the program include the following:

- a binational executive committee for the Great Lakes Water Quality Agreement, co-chaired by Environment Canada and the U.S. Environmental Protection Agency;
- a review committee to co-ordinate federal–provincial priorities and actions under the Canada–Ontario Agreement;
- a management committee and an executive committee to co-ordinate federal priorities and actions under Great Lakes 2000; and
- funding from the Great Lakes Sustainability Fund (previously the Great Lakes 2000 Cleanup Fund) for cleanup actions in areas of concern.

Good initial planning compromised by Program Review

7.3.7 An initial design with clear roles and responsibilities, well-defined expected results. Great Lakes 2000 was designed to respond to Canada's obligations in the Great Lakes Water Quality Agreement and to move broadly to counter the most critical environmental threats to the Great Lakes basin. It had four general objectives:

- clean up degraded areas of concern and restore their beneficial uses;
- prevent and control the presence of persistent toxic substances in the Great Lakes ecosystem;
- conserve human and ecosystem health, primarily through lakewide management plans; and
- manage the ecosystem in an integrated way.

7.3.8 For each of these four major objectives, managers identified specific expected results—24 in all (Exhibit 7.7). In each area of activity, the program established milestones for the first year, defined the results expected in the six years of the program, and identified the federal departments accountable for achieving those results. It also established specific federal accountability for each expected result shared with the Province under the Canada–Ontario Agreement.

Funding—here today, gone tomorrow

7.3.9 In April 1994, the federal Minister of the Environment announced the six-year, \$150 million Great Lakes 2000 program as evidence of the government's commitment to the basin ecosystem in a time of fiscal restraint. The amount included \$125 million in new funds and \$25 million in continued support for developing and demonstrating cleanup technologies.

7.3.10 Ministers approved \$14.9 million of the promised \$125 million. It was distributed to the seven participating federal departments for the first year's activities. In 1995, however, the departments were informed that they would not get any funds for the remaining five years of Great Lakes 2000. The Treasury Board told them to find the funds in their own annual budgets.

Exhibit 7.6 Great Lakes 2000 management structure

Linkages with the Canada–Ontario Agreement and Great Lakes Water Quality Agreement structures

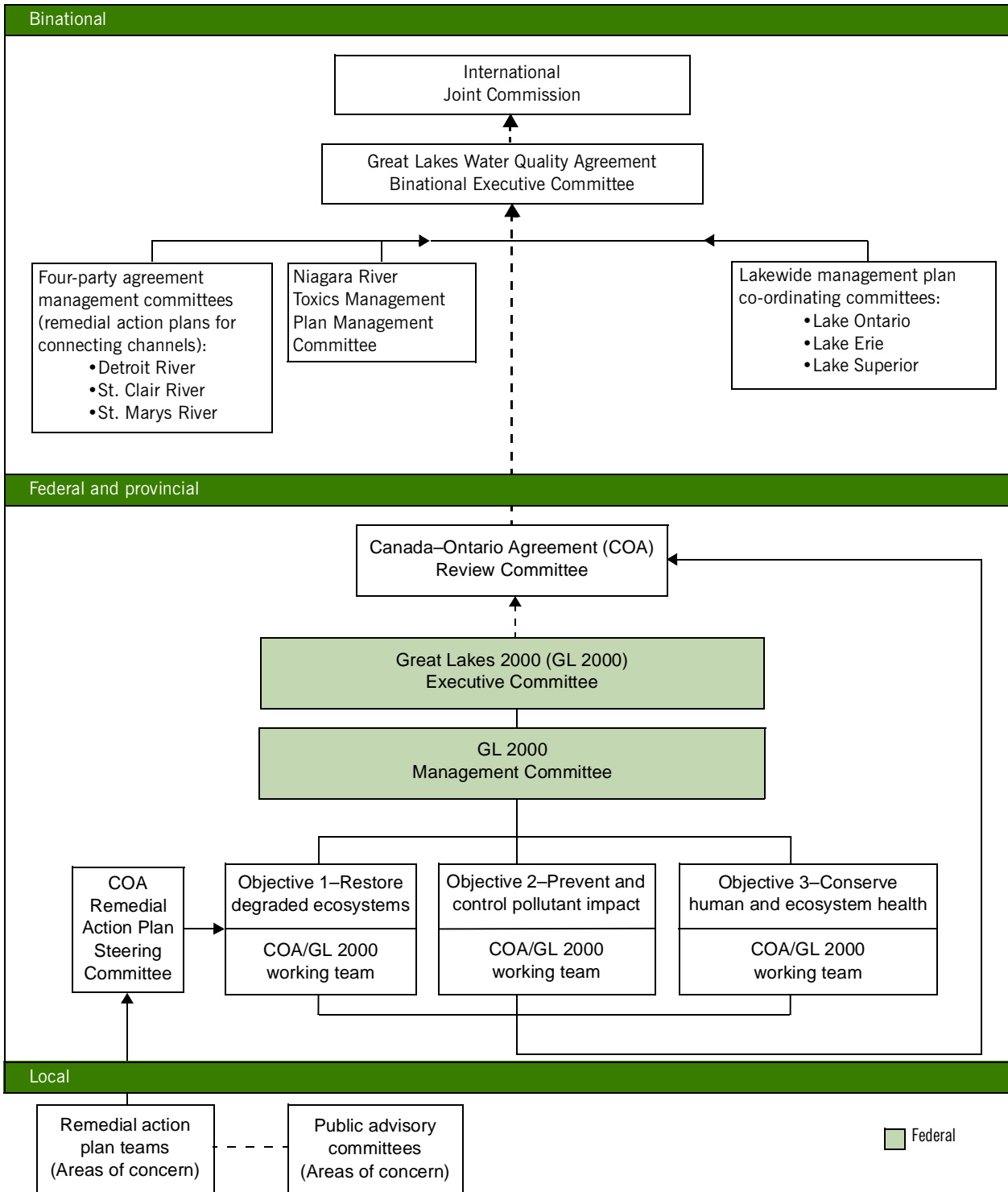


Exhibit 7.7 Expected results and federal partners in Great Lakes 2000

Expected results	Federal departments
Objective 1—Restore degraded ecosystems	
Remediate areas of concern Rehabilitate habitats and populations Remediate groundwater Clean up waste sites Remediate contaminated sites Protect humans at risk	Environment Canada Health Canada Fisheries and Oceans Transport Canada Public Works and Government Services Canada Canadian Heritage
Objective 2—Prevent and control pollutant impacts	
Virtually eliminate persistent and bioaccumulative toxic substances Reduce releases of toxic substances Improve drinking water and sewage treatment Minimize solid and hazardous waste Prevent and control spills and reduce fugitive emissions Reduce long-range air pollution	Environment Canada Health Canada Transport Canada Agriculture and Agri-Food Canada Canadian Heritage
Objective 3—Conserve human and ecosystem health	
Protect and promote human health Sustain healthy ecosystem populations and processes Protect special areas Enhance sustainable land use Prevent or manage nuisance exotic species Prevent or mitigate climate change impacts	Environment Canada Agriculture and Agri-Food Canada Fisheries and Oceans Health Canada Canadian Heritage Transport Canada
Objective 4—Integrated ecosystem management	
Implement existing policies and enforce legislation Focus on citizenship and partnerships Share strategic ecosystem information Conduct ecosystem research and monitoring Develop and promote sustainable technologies and practices Harmonize and co-ordinate programs	Environment Canada Health Canada

Source: Great Lakes Action Plan, phase II.

7.3.11 At the same time, however, those budgets were taking hits from Program Review. With 30 to 50 percent of their annual funds gone, most federal departments focussed on their core statutory responsibilities. They gave little or no consideration to the consequences for integrated programs such as Great Lakes 2000. The cuts also affected the departments' ability to participate effectively in the committees and working groups under the binational Great Lakes Water Quality Agreement.

7.3.12 The careful design of the program began to unravel with the withdrawal of some federal departments, notably Fisheries and Oceans (see Long-term impact of program reductions on Fisheries and Oceans). Federal officials at the time agreed on the need to adjust the program and seriously rethink the targets, given the budget constraints imposed on them. However, targets were never revised. The uncertainty of funding made it hard to plan. Health Canada spent less than half the amount it had committed to spend, and it had to suspend work and cancel contracts.

Long-term impact of program reductions on Fisheries and Oceans

The effects of program reductions will not be immediately apparent to outside clients. Research and monitoring data from the 1994 season will be available in 1995 and much time will be required to analyze and report on the 1994 results. However, the impact will become more obvious as long-term monitoring programs disappear. The absence of chemical trends and ecosystem health data will be badly missed when we have to assess the impact of remedial actions at remedial action plan sites or the impact of zebra mussels or contaminants on the lakes Erie and Ontario ecosystem.

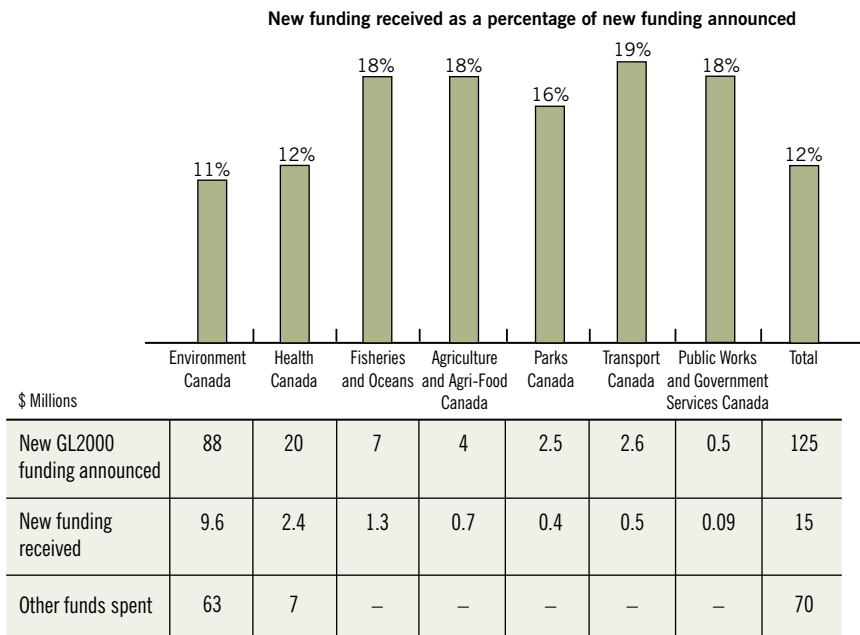
The Department of Fisheries and Oceans will continue to send people to remedial action plans and lakewide management plans, but our real value has always been our ability to bring data to the table and to use these data to understand and predict how the Great Lakes are responding to change.

Source: General Impact of Resource Reductions on Canada–Ontario Agreement and GL 2000 Deliverables for Department of Fisheries and Oceans
Letter from Fisheries and oceans to Environment Canada, 11 May 1995

7.3.13 Federal participation affected by Program Review. As the lead department for Great Lakes 2000, Environment Canada was responsible for co-ordinating information and reporting on the progress of the seven federal partners in the program. However, the involvement of the other departments was curtailed significantly by Program Review. Since federal departments weren't bringing much to the table, there wasn't much to co-ordinate.

7.3.14 Federal officials also had to work with their provincial counterparts toward the common goals of the Canada–Ontario Agreement. This partnership was also compromised as a result of the federal Program Review, and later by provincial budget cuts.

7.3.15 Since federal expenditures were not tracked under Great Lakes 2000, we had to piece together the information. Exhibit 7.8 compares planned with actual spending by each department.

Exhibit 7.8 Federal spending under Great Lakes 2000

Source: Based on unaudited information provided by federal departments

7.3.16 Lack of transparency. In the 1994 Canada–Ontario Agreement, both governments agreed that “neither government [would] modify financial support to agreed-upon commitments, programs and activities without consultation.” However, although the federal government informed the Province in broad terms about Program Review, it did not detail for the Province beforehand the implications for the Agreement.

7.3.17 Further, when it did indicate the effects of budget reductions on Great Lakes 2000 targets and schedules, it tried to convey a positive message—that the federal government had protected the Great Lakes program as a priority and the major consequence of Program Review reductions would be to stretch the program to seven years from six. It did not make it clear to the International Joint Commission or to the public and Parliament how Program Review—and subsequent provincial cuts—would affect its ability to meet Canada’s commitments under the Canada–Ontario Agreement and the Great Lakes Water Quality Agreement with the U.S.

7.3.18 Accountability obscured under Canada–Ontario Agreement. When the 1994 Canada–Ontario Agreement was signed, managers of Great Lakes 2000 agreed to report progress using the same framework as the Agreement—targets, planned results, and progress reports. This was intended to simplify management and reporting.

7.3.19 By design, the 1994 Canada–Ontario Agreement goals were almost identical to those of Great Lakes 2000: restore degraded areas, prevent and control pollution, and conserve and protect human and ecosystem health.

The Agreement established an agenda shared between the federal and provincial governments, with 18 elements and 47 specific results planned. That agenda incorporated most of the program and science elements planned for Great Lakes 2000.

7.3.20 The program’s managers had identified very clearly what they saw as the federal responsibility for each of the targets that would be shared with the province under the Canada–Ontario Agreement. In the Agreement itself, however, the two governments did not specify the respective roles and responsibilities of the federal departments and the provincial ministries.

7.3.21 Limited opportunity for regular public input. In the Canada–Ontario Agreement, the governments agreed to “provide stakeholders with an annual opportunity to comment on progress to date and future plans.” Eventually, managers abandoned plans to consult stakeholders about the Agreement as a whole, but continued to consult them on an ad hoc basis about separate issues. Ministers made a commitment in 1994 to create an advisory group that would review the overall application of the Agreement, but the commitment was never met.

Weaknesses in reporting

7.3.22 No public reporting on spending. Each department was responsible for tracking and reporting its own activities under Great Lakes 2000. In 1995, Environment Canada developed an internal information tracking and reporting system to track the spending and the progress of the federal partners in Great Lakes 2000. Environment Canada and a few federal departments used the system at first; it was not used at all after 1996.

7.3.23 Although the program required progress reports, we were unable to find any published report that summarized federal spending on the Great Lakes program. Environment Canada’s Ontario regional office confirmed that no such report exists. The only reports to Parliament and the public are the progress reports issued every two years on the Canada–Ontario Agreement, and they give no information on spending by federal departments.

7.3.24 Joint reporting on progress but not on final results. Three biennial reports since the Agreement was signed in 1994 have summarized the progress made by federal and provincial agencies toward the Agreement’s targets and objectives (Exhibit 7.9). These reports are also how the federal government informs the International Joint Commission of its progress under the Great Lakes Water Quality Agreement. However, the last report published covered 1997 to 1999. A number of the planned results had specific targets for the year 2000 but the report did not comment on the progress made toward some of them. No report is planned to inform Parliament and the public on achievements in 2000, the last year of the Agreement and the program.

Exhibit 7.9 Key results, Canada–Ontario Agreement (1994–1999)*

Objective	Targets for 2000	Results achieved
Restore degraded areas		
Remedial action plans	Restore 60% of impaired beneficial uses across all 17 areas of concern (AOC), leading to the delisting of nine AOCs by the year 2000.	About 13% of beneficial uses impaired by local sources have been fully restored. More than 60% of actions necessary to restore AOCs have been implemented. One AOC (Collingwood Harbour) has been fully restored and delisted.
Species and habitat rehabilitation	Rehabilitate and protect 6,000 hectares of wetland habitat and 600 kilometres of riparian habitats.	The rehabilitation of more than 2,500 hectares of wetlands has been completed, with a further 1,340 in progress. Nearly 540 kilometres of riparian habitat have been rehabilitated, and projects involving an additional 175 kilometres are in progress. As well, 700 kilometres have been protected.
Contaminated sites	Remediate contamination at 10 priority federal sites and 5 orphan sites.	Canada has taken action to remediate 10 federal sites in the Great Lakes basin. These sites have been remediated to a state that meets federal and provincial criteria for environmental remediation. Cleanup at one orphan site has taken place. The property has now been fully decommissioned. Site remediation work continues at four other orphan sites.
Prevent and control pollutant impacts		
Priority toxic substances	Canada and Ontario agree to seek a 90% reduction in the use, generation, or release of seven substances by the year 2000. Work with industry to obtain commitments to achieve targets through formal arrangements, such as memoranda of understanding, and informal arrangements. Promote and encourage implementation by 1998 of pollution prevention programs at targeted industrial facilities discharging to the Great Lakes, through a variety of instruments, including the national ARET initiative.	There has been a 71% reduction in the use, generation, or release of the seven substances. Memoranda of understanding with five industrial sectors have resulted in toxic and hazardous waste reductions of 390,000 tonnes per year. ARET initiatives have resulted in toxic reductions of 24,090 tonnes nationally per year.

*As reported in the 1997–1999 Canada–Ontario Agreement progress report. The Agreement ended in March 2000 but no end-of-program progress report was produced covering the last year of the Agreement. The 1997–1999 progress report discussed the results achieved for all 47 planned results. We did not audit these results. We are presenting, for illustrative purposes only, 7 key planned results and the actual results achieved.

Exhibit 7.9 (continued)

Objective	Targets for 2000	Results achieved
Conserve and protect human health and ecosystem health		
Lakewide planning	<p>Develop ecosystem-based principles, objectives, and indicators to provide direction for management plans for Lake Ontario (by 1995), Lake Superior (by 1996), Lake Erie (by 1996), and Lake Huron (by 2000).</p> <p>Develop Stage 1 lakewide management plans for critical pollutants for Lake Ontario (by 1995), Lake Superior (by 1995), and Lake Erie (by 1998).</p> <p>Develop Stage 2 lakewide management plans for Lake Ontario (by 1997), Lake Superior (by 1996), and Lake Erie (by 2000).</p>	<p>Ecosystem goals and indicators have been developed for Lake Ontario and Lake Superior.</p> <p>Work continues on developing ecosystem objectives for Lake Erie.</p> <p>A Stage 1 report for Lake Ontario was released (1998) as well as a progress report on work completed on the Lake Erie lakewide management plan.</p> <p>All three targets of the Lake Superior lakewide management plan have been met. At this time, there are no plans to develop a lakewide management plan for Lake Huron.</p>
Habitat conservation and protected areas	Apply the principles of the Federal Policy for the Management of Fish Habitat with a goal of net gain in productive capacity of fish habitat basin-wide.	Fisheries and Oceans has entered delivery agreements with a number of conservation authorities and with Parks Canada to implement provisions of the <i>Fisheries Act</i> .
Human health	<p>Protect and promote human health through education, long-term monitoring, and stewardship.</p> <p>By 2000:</p> <ul style="list-style-type: none"> - 70% of the population will be knowledgeable about five key environmental health issues and how to reduce their risk. - a 30% reduction in human health risks associated with exposure to environmental contaminants will be achieved for the general population. - 80% of the population will have significantly increased their understanding and taken action to protect their health through involvement in environmental stewardship. 	Assessments of the Great Lakes basin population's exposure to 11 substances have been completed. Health-related indicators have been developed for the Great Lakes basin population and reports on health effects, exposure, tissue levels, and disease trends have been produced. Research investigating the relationship between environmental factors and human health has been completed or is ongoing. A number of publications and handbooks have been developed to educate the public and promote informed decision-making on health and environment issues.

Support to local communities

7.3.25 The Great Lakes 2000 program has efforts under way to support community involvement in protecting the basin—indeed, the program has fostered many innovations and blazed new trails.

7.3.26 We deal extensively with our concerns about the status of remediation in areas of concern and aspects of the federal government's governance—or lack of it—of the community-based organizations in place to carry out action

plans (see Subsection 3.3). There are significant gaps in the government's activities and considerable work remains to finish the job.

7.3.27 There is a potential contradiction between the goal of delisting an area of concern—suggesting that nothing more needs to be done—and the federal government's commitment to develop sustainable communities. In moving forward on that commitment, the government faces three challenges. The first is simply one of geographic coverage—there are many communities in Ontario that were not specifically designated as areas of concern but that nevertheless confront significant environmental problems. At present, there are no funded plans for action outside areas of concern.

7.3.28 The second challenge is to clarify the local community activities that the government considers are important. Much of the focus in areas of concern has been directed at problems and priorities identified by the federal government. Experience shows that local communities have their own priorities. Existing practices in areas of concern may call for changes in the nature of technical support and funding provided by governments.

7.3.29 The third challenge will be to develop a sense of the permanence—or sustainability—of local structures set up to act on environmental issues. Communities need support from governments to get started; they also need ongoing support to maintain momentum, motivate volunteers, leverage funding, and carry out actions that are beyond their local resources, expertise, or ability.

Management practices: a mixed record

7.3.30 Measuring the state of the environment in the Great Lakes: moving forward. The State of the Lakes Ecosystem Conferences (SOLEC) have been the main tool of the Canadian and U.S. governments to develop and share indicators of the state of the environment in the Great Lakes. Over the past few years, conference participants agreed on several environmental, social, and economic indicators, which are being used now to measure progress. This makes it possible to sketch the state of the lakes. However, this information on the state of the environment is not being used in the progress report of the Canada–Ontario Agreement to show how the results achieved under the Agreement have helped improve the environment of the Great Lakes.

7.3.31 Interim and end-of-program reviews, but no systematic action on recommendations. Great Lakes 2000 has been subject to internal reviews; recommendations in the biennial reports of the International Joint Commission are also relevant to the program. We found that there was no systematic follow-up to ensure that recommended improvements were made.

7.3.32 A 1998 interim review of Great Lakes 2000 illustrates this. Prepared by Environment Canada, it made 32 recommendations to ensure that progress continued toward major planned results. The end-of-program review by Environment Canada's internal audit branch concluded that several weaknesses cited in the interim report—including the lack of follow-up on recommendations and management decisions—had continued to the end of the program.

7.3.33 Similarly, the federal government gave only limited consideration to recommendations in the biennial reports of the International Joint Commission.

7.3.34 Uneven follow-through. We found that in activities to prevent and control the presence of toxic substances, priorities were translated into plans that defined expected results. Managers met annually to report progress; they also identified obstacles to progress and steps to overcome them. The planning and reporting regime provided the information needed for continual improvement.

7.3.35 However, in other areas—cleaning up areas of concern and protecting human and ecosystem health—project managers did not meet periodically. They prepared five-year work plans at the beginning of the program but did not produce annual progress reports.

7.3.36 Limited linkages with St. Lawrence Vision 2000. We found limited sharing of information and lessons learned with the other ecosystem program in the basin, St. Lawrence Vision 2000. We also noted only limited co-ordination between the two programs in identifying and selecting indicators of the state of the environment (see Subsection 7.1).

Planning for renewal of the Great Lakes Program

7.3.37 Environmental, social, and economic aspects were considered. As the expiry of Great Lakes 2000 approached, Environment Canada began planning for the renewal of the program, which eventually became Great Lakes 2020. In February 1999, program managers met in a series of workshops with 350 people representing First Nations, interest groups, private citizens, youth, academe, labour, and all levels of government. The purpose was to get their input for the renewal of the Great Lakes program. These workshops were supported by various issue scans and papers prepared for Environment Canada. Federal departments did not establish their priorities at the outset of this planning process.

7.3.38 The stakeholder groups identified a need to review and revise incentives and subsidies to ensure that they promote desired results; enhance co-ordination among federal departments; and clarify the federal role in providing ecosystem science for decision making. Except for the key economic issue—the need to review and revise incentives and subsidies—Great Lakes 2020 incorporated the stakeholders' concerns.

7.3.39 We also found evidence that information on the state of the environment, notably from SOLEC, had influenced the renewal of the Great Lakes program. The invasion of exotic species, for example, was identified as a growing threat to the basin's sustainability that the program should address.

7.3.40 It is not clear whether the federal government will be able to meet its commitments. In Great Lakes 2020, resources and activities are structured in three broad streams: healthy environment, healthy citizens, and sustainable communities. As they had with Great Lakes 2000, managers

designed the program to counter threats to sustainability in the basin, supported by the targeting of science activities and monitoring.

7.3.41 After examining the options presented to them, however, ministers approved additional funding for only the federal activities in areas of concern. Completion of federal actions in the areas of concern will not ensure that the environmental problems will be resolved and the uses of the areas restored. That will take action by others, such as the province, municipalities, and the private sector. We believe the federal government has an obligation to ensure that such actions are taken.

7.3.42 Further, it is not clear how the federal government will meet the obligations set out in all of the annexes to the Great Lakes Water Quality Agreement. Participating federal departments are to use existing federal programs and resources for actions in the Great Lakes that are outside areas of concern. Other priorities could cause some departments in the Great Lakes 2020 program to curtail their level of involvement. There is no strategy for filling the gaps that could result.

Conclusion

7.3.43 Great Lakes 2000 was designed initially with clear roles and responsibilities and well-defined expected results. However, major budget cuts after Program Review compromised the federal participation and had an impact on departments' capacities to meet their commitments under the Canada–Ontario Agreement and the Great Lakes Water Quality Agreement. The federal government was not transparent about the consequences of budget cuts and did not produce any public report on actual federal spending under Great Lakes 2000.

7.3.44 Management practices were uneven and in many cases lacked follow-through. The renewal process leading to Great Lakes 2020 incorporated stakeholders' concerns and integrated environmental, social, and economic elements. However, since funding was approved for only federal activities in areas of concern, it is not clear that the federal government can meet its commitments under the Great Lakes Water Quality Agreement.

Our audit objectives and main findings

Holding the federal government to account		
1 Has the government fulfilled its commitments?	Commitments	Results
	<p>In 1994, the Minister of the Environment committed to spend \$150 million on Great Lakes 2000 (GL2000), including \$125 million in new funds.</p> <p>In the 1987 Protocol to the Great Lakes Water Quality Agreement, the federal government made commitments under 17 annexes.</p>	<p>Only \$14.9 million of the promised new funds were actually distributed to departments. Departments had to meet their commitments under GL2000 from their existing budgets.</p> <p>GL2020 funded activities only in areas of concern. It is unclear how the federal government will meet its obligations in all the annexes of the Agreement.</p>

Our audit objectives and main findings

Assessing the government's performance		
<p>2 Has the government applied good management practices?</p>	<p>Strengths</p> <p>Progress toward Canada–Ontario Agreement targets was reported every two years.</p> <p>Indicators of the state of the environment in the Great Lakes have been identified and measurement has begun, making it possible to sketch the state of the lakes.</p> <p>Stakeholder concerns were incorporated into GL2020.</p> <p>Environmental, social, and economic aspects were considered.</p> <p>Interim and end-of-program reviews were conducted.</p>	<p>Weaknesses</p> <p>Follow-through in tracking progress under GL2000 was uneven.</p> <p>There is no systematic process to take account of recommendations from internal reviews or by the International Joint Commission.</p> <p>Sharing of information and lessons learned with St. Lawrence Vision 2000 was limited.</p> <p>Co-ordination on state-of-the-environment indicators was limited.</p>
<p>3 Has the government established good governance structures?</p>	<p>Partners in the program included the seven federal departments whose involvement was essential to manage the issues addressed by GL2000.</p> <p>GL2000's initial design had clear roles and responsibilities for each federal department and well-defined expected results.</p> <p>Local implementation structures were established in a number of areas of concern.</p> <p>These structures are well equipped to involve citizens and community stakeholders in carrying out low-cost solutions.</p>	<p>The involvement of federal departments other than Environment Canada was significantly reduced following Program Review.</p> <p>The informal partnership with provincial departments was also compromised following provincial budget cuts.</p> <p>Respective roles and responsibilities of the federal and provincial departments were not clearly identified in the Canada–Ontario Agreement.</p> <p>Federal leadership is needed to ensure that the actions beyond the expertise and resources of local communities are completed.</p>

Our audit objectives and main findings

Assessing the government's performance		
③ Has the government established good governance structures?	Strengths	Weaknesses
	<p>The Canada–Ontario Agreement progress reports summarize progress by federal and provincial agencies toward the targets in the Agreement.</p>	<p>The federal government informed the Province in broad terms about Program Review. But it did not detail the implications for the Agreement beforehand.</p> <p>Similarly, it did not clearly communicate to the International Joint Commission or to the public and Parliament the impact of federal and provincial budget cuts on the Great Lakes Water Quality Agreement.</p> <p>There was no public report on spending under GL2000. No progress report was published to inform Parliament and the public about results in the last year of the Agreement and program (1999-2000).</p> <p>Managers did not involve stakeholders in a consultative process on the Canada–Ontario Agreement as a whole.</p> <p>Canada–Ontario Agreement progress reports do not show the impact of federal and provincial efforts on the Great Lakes environment.</p>