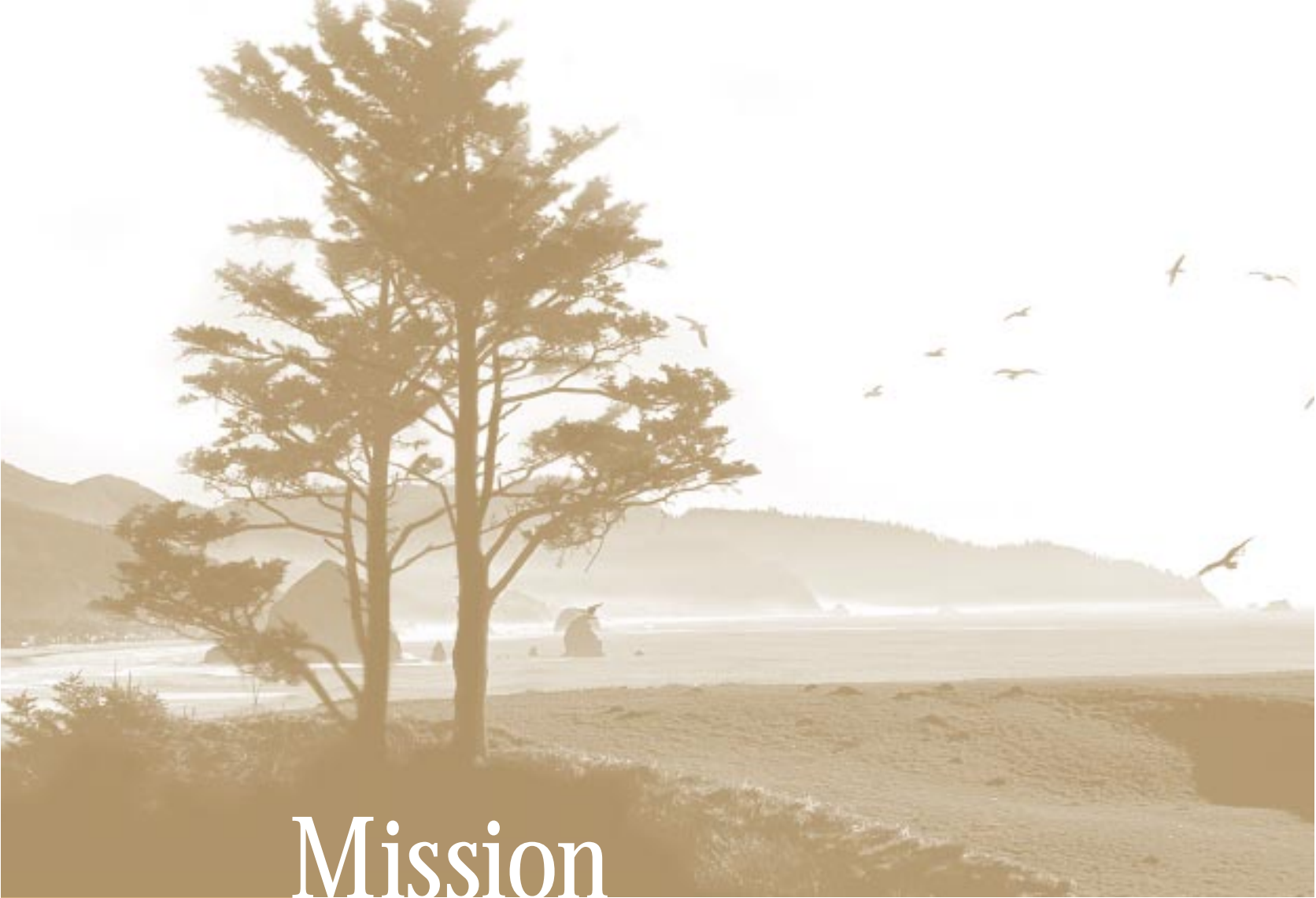




North American
Agenda for Action
1999–2001



*A Three-Year Program Plan for the
Commission for Environmental Cooperation*



Mission

The CEC facilitates cooperation and public participation to foster conservation, protection and enhancement of the North American environment for the benefit of present and future generations, in the context of increasing economic, trade and social links between Canada, Mexico and the United States.

COVER:

Evening Grosbeak (*Coccothraustes vespertinus*). This songbird was originally a western native and gradually over the past century has extended its range eastward. It is an irregular migrant, wandering seasonally between summer habitats in the spruce and pine forests of Canada, western and northwestern United States and Mexico, and wintering in Canada, the southeastern United States and in Mexico.

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Preface

The signing of the North American Free Trade Act (NAFTA) in 1993 created the world's largest trading bloc. At the same time, the NAFTA partners sought to build environmental safeguards into the trade liberalization pact and agreed to sign an accord, the North American Agreement on Environmental Cooperation (NAAEC), to do so. The organization created by the Agreement to carry out its provisions is the North American Commission for Environmental Cooperation (CEC), an international organization composed of the Council—cabinet-level environment officials from the three countries; the Joint Public Advisory Committee (JPAC), a group of five citizens from each country; and a Secretariat staffed with environmental experts.

During its first four years of operation, the CEC has embarked on a path to promote regional environmental cooperation in an era of growing economic and social interactions across the continent. The CEC also has moved to implement the obligations of the agreement, including those relating to enforcement and maintaining high levels of environmental protection. With the experience gained over these past years, the CEC now has the opportunity to refine its focus in a longer-term strategy—the first program plan to describe work to be accomplished over a three-year period.

Prepared under the guidance of the Council-approved *Shared Agenda for Action*, (see Annex) the three-year program plan will enhance the CEC's ability to plan and execute its work program over a longer timeframe and establishes strategic objectives and a disciplined approach to achieving them. It also permits the public and governments to better plan for, and participate in, CEC activities. The three-year program plan will also enable the CEC to provide centers of excellence with the opportunity to enter into partnerships on important areas of mutual interest.

The 1999–2001 Program Plan presents a strategy for working toward the twin goals established in the *Shared Agenda for Action*—pursuing environmental sustainability in open markets and stewardship of the North American environment. Work in these areas is centered around four core program areas: Environment, Economy and Trade, Conservation of Biodiversity, Pollutants and Health, and Law and Policy. Within these areas, a number of programs are set out that will further the goals and objectives of the program area. Individual projects, designed as tools to implement the programs, are presented in each program. The programs and projects will evolve over a three-year cycle in response to the results achieved in a given year.

The 1999–2001 Program Plan is a strategic, rather than prescriptive, document. It is intended to guide the evolution of programs and initiatives in the Work Program of the CEC over the next three years. As a “rolling” plan, it will be revised annually in order to continually improve and refine the overall program. At the same time, the annual reviews of the Program Plan will retain the desired flexibility to respond to emerging regional opportunities and challenges.

Introduction

The development of the three-year program plan acknowledges the need and opportunity to establish a strategic mid-term plan that gives direction and constancy to the work of the CEC, while retaining the flexibility to respond to new challenges and opportunities.

The content of the three-year program plan is derived from Council's *Shared Agenda for Action* and borrows from a number of past consultations and evaluative exercises. In particular, during the past four years, JPAC has convened several public workshops in each of the NAFTA countries to seek input and advice on future directions of the CEC. Following the public consultations, JPAC has formulated specific advice and reports to Council on the strategic direction of the organization.

The 1999–2001 Program Plan also takes up many of the recommendations made by other advisory bodies, including the national and government advisory committees, and the three-member Independent Review Committee convened by Council to conduct a review of the operations and effectiveness of the North American Agreement on Environmental Cooperation. Additionally, the plan incorporates numerous suggestions made by members of the private and public sector currently engaged in CEC-related work, including, for example, consultations undertaken on specific initiatives, such as the Sound Management of Chemicals, the North American Pollutant Release and Transfer Register, Cooperation on North American Air Quality Issues, and other programs and projects.

Approaches

The scale and scope of emerging environmental issues of regional concern call for an unprecedented degree of bi- and trilateral cooperation between and among Canada, Mexico and the United States. The CEC is mandated to help build consensus and a shared understanding of the nature, scope and magnitude of the environmental challenge in North America. This shared understanding provides, in turn, a sound basis for more effective cooperation and more informed decisions and actions on a regional scale.

The CEC promotes sustainable solutions to preserve and protect North America's natural systems by working in partnership with a growing number of private and public actors at the local, regional and global level. Through these partnerships, the CEC can maximize the impact of its actions and avoid duplicating the work of others by clearly defining its role and employing its unique attributes to act as convenor, catalyst, and a center for policy, research and information at the North American level. The three-year program plan presents a combination of actions and strategies employing one or more of these functions depending on the stated objectives of the activity.

Role of the CEC

The CEC can play a number of roles that can vary depending on the issue being addressed. They include:

Convenor

The CEC constitutes a unique regional forum for exploring trends, bringing key players together to develop solutions or simply exchanging views on important issues of environmental protection, conservation and sustainability. Because the CEC involves the three North American governments as well as the public, through its Council, advisory committees, and Joint Public Advisory Committee, the institution is ideally positioned to play the role of the “honest broker”—to convene stakeholders from the public and private sector, and build bridges of understanding that can facilitate environmentally-preferred results.

Acting as convenor, the CEC can also facilitate the coordination of initiatives on a regional scale to enhance the efficient use of scarce human and financial resources. Network building among the scientific, academic and other nongovernmental communities will help to build capacity in North America, and remains an important strategy for public participation in the work of the CEC.

Catalyst

If the timing is opportune, the CEC also can act as catalyst in North America to spur on worthwhile existing initiatives, undertaken largely by others. In this capacity, the CEC serves as an engine to accelerate the regional implementation of global initiatives or accords. Through partnering and collaboration, the CEC also boosts promising initiatives requiring modest technical or financial support, greater regional profile, or improved coordination. The unique government-public constitution of the CEC again provides exceptional opportunities for catalyzing incipient actions to produce meaningful results.

Research and Policy Analyst

With its trilateral staff of professionals, the expertise of governments and the growing network of scientific and academic communities involved in the work of the institution, the CEC brings high quality research and policy analysis to bear on important environmental matters of regional concern. As a regional center of research on policy and the scientific aspects of regional environmental issues, the CEC continues to provide objective, science-based information and guidance to policymakers and the public-at-large.

Information Hub

In a short period of time, the CEC has established itself as an important repository of regional data and information on the North American environment. CEC reports, factual records, and databases empower citizens and governments by providing important regional information on our shared environment and the policies we employ to protect it.

Projects

The CEC will attain the objectives set forth in the three-year program plan and its annual program of work by undertaking specific projects. Projects are implemented through a variety of tools and instruments depending on the goals and objectives sought by the CEC.

While many of the projects in the 1999–2001 Program Plan were launched in previous years, there are several new projects. Such new projects typically begin with a “scoping” phase, designed to evaluate the most promising avenues for future work in an area of interest and to ensure that any activities will add value and not duplicate the efforts of others. Following scoping, project implementation may involve a variety of actions or strategies. Often pilot phases are used to test or deploy a model or strategy in a particular locale or region. The results of such pilots often provide models for others to replicate, and permit designers to refine and improve strategies before expending greater resources and energy on larger-scale efforts. Projects may also employ teams of experts, working groups, multi-stakeholder committees or others to meet the objectives of the program area.

The three-year program plan includes a variety of projects spanning the spectrum from initial scoping through the later phases of project implementation. In some cases, projects are designed to end within a specified period or are intended to be continued by other institutions.

Project Design Criteria

Like any institution, the CEC has limited resources and must determine which projects will most effectively achieve the goals of its programs. Accordingly, projects are designed taking the following criteria into account:

1. Within the Scope of the NAAEC

Projects must fall within the formal competence of the NAAEC and draw their authority from the Agreement and its interpretation by Council.

2. Regional Environmental Importance

Projects should concentrate in areas of especial environmental importance to North America and should contribute to attaining the purposes and objectives of the NAAEC.

3. Value Added

Projects should avoid duplication of efforts and add value. Often, value added will depend on one or more of the following characteristics:

- The project promotes regional environmental action.
- The project accelerates or contributes to the implementation of multilateral or global initiatives or accords.
- The project develops or applies a model or process that may be replicated or adapted elsewhere in the region and the CEC or its partners are well positioned to broadly disseminate the benefits of the approach.
- The project empowers the public by making available important information.
- The project entails a high degree of stakeholder involvement and/or capacity building.
- The project fosters environmental cooperation between and among governments, industries, environmental non-governmental organizations (ENGOS), academia, or other communities in North America.
- The project links to trade concerns or opportunities.

4. Balance

Projects should achieve a balance among program themes, giving due consideration to special priorities selected by Council.

5. Concrete Results

Projects should clearly specify meaningful results in the near to middle term.

Public Participation and Capacity Building

Public participation and capacity building in North America are central to the realization of many of the goals and objectives of sustainable development outlined in the program plan. The three-year program plan attempts to integrate capacity building and public participation activities directly into the project descriptions, adopting a holistic, crosscutting approach to program development and planning.

Many of the actions initiated by the CEC in pursuit of its mission and mandate are designed to maximize opportunities for public participation and capacity building. The NAAEC expresses the commitment and belief that environmental protection and conservation efforts are enhanced and multiplied through strong mechanisms for public participation. To the greatest extent possible, the CEC incorporates effective and timely means of participating in CEC activities directly into specific programs and projects.

Similarly, the parties recognize that lasting environmental protection and conservation strategies can only be sustained by building our national capacities to design, implement and maintain the policies and measures that are adopted in the region. Accordingly, the CEC also builds capacity building mechanisms, such as training, scientific and technical exchange and education, directly into the annual program of work. As well, the North American Fund for Environmental Cooperation (NAFEC) constitutes an important mechanism for increasing the involvement of community groups in the work of the CEC and to enhance their capacity to address environmental concerns.

Results

The three-year program plan sets forth an ambitious agenda for cooperation. By clearly stating the goals and objectives of each program, we hope to provide a yardstick against which progress can be measured and evaluated. For the institution as a whole, the CEC also has set ambitious goals. By the completion of the first three-year program plan in 2001, the CEC aspires to:

- solidify its role as an information hub and policy analysis center for key North American environmental issues;
- demonstrate North American leadership in accelerating the implementation of regional and global initiatives;
- establish a North American network of professionals, academics, NGOs and businesses on selected issues of regional environmental importance;
- prove its value as a forum for avoiding environmentally-related trade disputes;
- contribute significantly to the reduction and elimination of pollutants in North America; and
- enhance the protection of North American ecosystems and biodiversity.

As a final note, all dollar amounts in the report are given in United States dollars

Environment, Economy and Trade

The North American Commission for Environmental Cooperation (CEC) is the only regional environmental organization that has its roots in expanded economic integration brought about by a trade liberalization agreement. Thus, the CEC is in a natural and privileged position to advance the understanding of the relationship between the environment, the economy and trade, and to encourage cooperation between the Parties in developing mechanisms to promote an integrative, positive approach to the protection of the environment and to economic development. This program area will seek to advance those priorities as its two principal goals.

The Environment, Economy and Trade program area supports the goals of NAAEC to:

- foster the protection and improvement of the environment in the territories of the Parties for the well-being of present and future generations,
- promote sustainable development based on cooperation and mutually supportive environmental and economic policies,
- support the environmental goals and objectives of NAFTA,
- avoid creating trade distortions or new trade barriers, and
- promote economically efficient and effective environmental measures.

An enhanced understanding of the relationship between environment, economy and trade will assist governments to identify opportunities for environmental protection created by trade liberalization and economic growth, develop mechanisms to facilitate environmental protection in a competitive environment, and help avoid environment and trade conflicts. This program area will encourage projects that include the sharing of information on innovative mechanisms to promote synergies between the environment and the economy. The CEC can also play a catalytic role in promoting these opportunities through increased cooperation and dialogue with stakeholders throughout North America. NAAEC and the CEC also provide the framework and a vehicle for encouraging the Parties to share information and experiences and to develop environmental and economic solutions to regional and global issues.

Comprising the Environment, Economy and Trade program area are two program initiatives that allow for the full implementation of the trade and economy-related provisions in the NAAEC, thereby promoting sustainable development in North America. These are:

- Understanding Linkages between Environment, Economy and Trade
- Green Goods and Services

Understanding Linkages between Environment, Economy and Trade

An enhanced understanding of the linkages between environment, economy and trade will promote increased cooperation and dialogue, and strengthen environmental protection in the region. It is important to understand the relationships between environment, economy and trade to highlight positive relationships and mitigate any negative ones. Such increases in knowledge and analytical capabilities will allow governments and others to better identify, understand and address these linkages.

NAAEC provides a unique institutional framework for regional dialogue between governments and stakeholders, allowing regional approaches to issues that link environment, economy and trade, and NAFTA provides a critical context for this analysis. By examining these relationships, the CEC will help promote environmentally sustainable trade among the NAFTA Parties.

The projects of this program will highlight opportunities for increased cooperation and dialogue to strengthen environmental protection in the region. This will allow the Council to promote environmentally sustainable economic development and support the environmental goals and objectives of NAFTA without the creation of trade distortions or new trade barriers. Work in this program will be undertaken through two projects:

- *Emerging Trends in North America*
- *NAFTA Environmental Effects*

As the CEC gains more experience, other projects may be developed in the future.

Emerging Trends in North America

Project Summary

The purpose of this project is to identify emerging or probable trends in environmental quality at the North American level, as well as to identify underlying causes of environmental trends. The project will be based on anticipatory environmental assessment and diagnostic analysis. It will provide the public and decision-makers with an early warning of environmental degradation, helping to forecast probable trends in environmental quality and identify anticipatory and other policy options. In undertaking this work, the project will also refer to national, state/provincial and municipal goals, as appropriate.

Objectives

This project is designed to improve diagnostic analysis of the links between the state of the environment and its possible pressures by providing an early warning mechanism and forecasting tools capable of showing probable environmental effects. Specifically the objectives include:

- identifying emerging trends in environmental quality;
- identifying causal links between environmental trends and underlying factors;
- improving the use of relevant environmental indicators to be used in trends work;
- referring to national, state/provincial, municipal and other goals, as appropriate, in affecting future environmental outcomes;

- ensuring that environmental trends and forecasting work is understood by all stakeholders by communicating complex diagnostic, methodological and other issues in a way that is easily comprehensible to the public; and
- helping prepare governments, NGOs, industry and other stakeholders to anticipate and/or adapt to probable environment scenarios, including identifying appropriate environmental and other policies that mitigate or adapt to trends.

In addition, the results of the Emerging Trends project, coupled with other trends analyses and related diagnostic work undertaken by the CEC, will constitute important input to the CEC State of the Environment report, which is prepared periodically pursuant to Article 12 of the NAAEC.

Rationale

Since well before the 1987 Brundtland Commission report, *Our Common Future*, it has been recognized that, whenever possible, it is preferable to anticipate and prevent, rather than react to environmental problems. At the same time, experience suggests all future problems cannot be predicted in advance, nor can anticipated outcomes be entirely avoided. Nevertheless, the early detection of trends is essential to developing timely, effective and cost-efficient anticipatory and/or adaptive responses. Moreover, environmental policies are more effective when they address not only the symptoms of ecological stress, such as accelerated biodiversity loss or various pollution emissions, but also the underlying causes of environmental degradation. Often economic factors, including changes in resource allocation, trade intensities, scale effects, resource pricing and other factors, combine to exert important direct and indirect effects on environmental quality.

Past environmental policy-making has tended to react to existing environmental problems once they have emerged. One objective of this project is to identify, quantify and communicate potential changes in the economy-environment nexus that are due to present and future actions and initiatives, focusing on prevention rather than reaction. A reliable forecasting tool, such as an “issue scan,” would provide the Parties with the information necessary to make decisions on preventative policies, priorities and feasible activities, and will result in positive environment/economy outcomes.

Progress to Date

This project will build upon the 1998 work of the Commission, specifically drawing upon the recommendations of the intergovernmental experts group, regarding the feasibility and future work of the CEC in the area of emerging trends. A background paper, prepared by the Secretariat for the December 1998 meeting of the emerging trends intergovernmental experts group, provided a selected overview of ongoing work on trends, as well as options regarding methodological approaches and indicator selection. Among other things, the experts attending the meeting concluded that (a) work on emerging trends is feasible and should be an important part of the Commission’s agenda and (b) in the first half of 1999 the three governments will outline the best focus for future work in the area of trends.

This project will also draw upon relevant work from the preparation of the State of the North American Environment report. The Secretariat began to conduct research and prepare a methodology for the report in January 1996. Five groups of authors, drawn equally from the three countries, were commissioned to prepare sections related to geography, environmental statistics, economic trends, social well-being, and environmental institutions. Following peer review of the chapters, a meeting of the contributors was held in October 1996 at the CEC to discuss the integration of the major trends identified by each of the working groups. A second major meeting, in June 1997, brought together experts in the fields of human-environmental relations and environmental reporting to provide the Secretariat with feedback on a first draft. Two additional chapters, one in the field of human health and the environment and another on natural disasters, were subsequently prepared. Introductory and concluding chapters were prepared by the Secretariat in the fall of 1998. A pressure-state-response/effects framework is used as a means of illustrating the many connections and interactions between humans and their environment.

Finally, the project will draw upon ongoing work within the Secretariat in other areas, such as trends-related work in the area of urban air quality, projects involving environmental monitoring, diagnosis and assessment, including the ecosystem monitoring activities within the biodiversity and conservation project, etc.

Actions

The experts group is currently drawing up a detailed plan of work, which is likely to include but not be limited to the following elements:

1) Identify Possible Trends

Existing analyses and scenarios of critical trends, applicable to North America, will be reviewed for their capacity to project environmental quality into the future. This work will build upon and provide a framework or umbrella for the diagnostic and assessment work underway in different areas of the Commission's work, including the State of the Environment report, ecosystem monitoring in the area of biodiversity, trends in urban air quality, conclusions drawn from the *Taking Stock* reports, the "NAFTA Effects" project, and other areas. In addition to drawing upon the work of different project areas, work on Emerging Trends will provide ongoing feedback to those areas.

2) Explore Causal Linkages between Stresses and Environmental Trends

Identify relationships between environmental trends and economic, trade and other factors. This will include analysis of direct and indirect causality. Such work can take different approaches, including (a) identifying environmental stresses in particular regions or environmental resources in the three countries, and linking such stresses with direct or indirect economic and other factors; and (b) linking relevant economic analyses with probable changes in environmental quality. The project will combine these two general approaches. In looking at causality, it will refer national, state, provincial, municipal and other goals, as appropriate, to current methodologies related to environ-

mental trends work (e.g., the G8 environment ministers summit, the OECD, the Brookings Institution, and the World Resources Institute on “scenarios” and “backcasting”; UNEP’s Global Environmental Outlook (GEO II); and work by the World Trade Organization). Where necessary, the project will also develop new methods to identify economy-environment correlation, drawing upon work linking general equilibrium (CGE) models with environmental indicators, economy-pollution intensity econometric analysis, material flow indices, input-output models, etc. In identifying economy-environment links that may influence environmental trends, the project will draw upon economic forecasting, including economy-wide, sectoral, international trade, monetary and other economic forecasting, as well as identify other factors that may influence the environment. These factors can include changes in domestic resource allocation between sectors, changes in technologies, changes in economic or compositional structures, growing reliance on environmentally-sound technologies, increased partnerships with the private sector, changes in domestic regulations, and developments at the international level, particularly within the context of multilateral environmental agreements. This work will also draw upon OECD’s *Environmental Performance Reviews*.

3) Relevant Environmental Indicators

Identify relevant aggregated environmental indicators as well as indicators of change in selected environmental attributes that most usefully reflect overall changes in different types of environmental quality. In addition to proposed work on environmental indicators undertaken within the scope of the “NAFTA Effects” project, the issue of environmental indicators likewise represents an integral part of this project. The CEC will coordinate work within different projects on different indicator sets (e.g., the *Taking Stock* reports), as well as draw upon work on indicators underway in OECD, UN Commission for Sustainable Development, WRI, the Scientific Committee on Problems of the Environment (SCOPE), UNEP, and other organizations.

4) Communication and Policy Relevance

Communicate different scenarios of environmental change in an accurate, coherent and understandable way, involving as many stakeholders as possible. The results of the project should be user-friendly to governments, industry, NGOs and communities to help them make informed decisions. Options may include drawing upon geographic information system (GIS) work.

5) Identify Policy Options

Help identify anticipatory and adaptive policy response options. An important emphasis of the project will be on probable changes in environmental quality, based on different scenarios (e.g., business-as-usual, more stringent domestic standards, and increased regional cooperation). In moving from the descriptive or diagnostic phase to the policy options stage, the project will feed into the specific projects being developed by the Commission.

Actions in the five basic activities described above will be interlinked, with initial emphasis in the 1999 project component as described below:

<i>1999</i>	
<ul style="list-style-type: none"> • Report of the first intergovernmental experts meeting on emerging trends to be prepared by the Secretariat and discussed by the experts in a telephone conference in January 1999. The report will include a provisional general plan of the project, a description of the options for methods, underlying assumptions, possible criteria for selecting areas of focus, and possible products and outputs, based on discussions during the December 1998 experts meeting. • Preparation of a synthesis report of relevant work under way by different organizations, research centers, the private sector, governments and others on emerging trends and related work. Report to be completed by March 1999. • Second meeting of the experts group, to be held in April 1999. Outputs of the meeting to include agreement by experts on the identification of best methods, relevant cross-cutting issues and factors, and other technical and policy areas related to trends. The second meeting will also identify the possible creation of sub-working groups to assess specific technical, generic, and other issues. Finally, the second meeting will decide on a schedule of ongoing outputs as well as a schedule for the remainder of the three-year project. This schedule will include the possible hosting of a public round table and other meetings with interested stakeholders (e.g., industry experts, the public) on continued work in 1999, including interim outputs, and steps to be taken toward the release of the first trends report in 2000. • Submission of issue-specific reports, consistent with the detailed plan of work agreed to at the second meeting of the intergovernmental experts group, noted above. • Meetings, reports and public consultations, including with JPAC, according to the detailed plan developed (above). 	
Total Resources Required	\$75,000

<i>2000</i>	
<ul style="list-style-type: none"> • Release of first report on emerging trends. 	
Total Resources Required	\$150,000

<i>2001</i>	
<ul style="list-style-type: none"> • To be determined. 	
Total Resources Required	\$150,000

Public Participation

Consultations will be held with selected stakeholders in order to consider the best way of continuing work on emerging trends. This will include a meeting to include the experts group and selected stakeholders, to be held in late 1999.

Capacity Building

This project is a research project intended to raise awareness among a wide range of stakeholders about possible trends in the environment. A major focus will be to identify ways to improve information available to policy makers, the private sector, research organizations, NGOs, and other stakeholders in the three countries about ways of looking at emerging trends.

Expected Results

By the end of 1999, a final analytical approach will be identified, and work will begin in late 1999 in preparing the first of a series of reports on emerging trends for release in 2000. Specifically, in 1999 the optimal method or methods—including CGE, sectoral or other approaches—will be identified, and different environmental indicators will be selected for the first reports on trends.

NAFTA Environmental Effects

Project Summary

This project seeks to guide the Council in fulfilling its obligations to consider on an ongoing basis the environmental effects of NAFTA (pursuant to NAAEC Article 10(6)(d)). Its goal is to develop an analytical approach to assess whether liberalization under NAFTA affects the North American environment.

Objectives

The objectives of the project are:

- to identify the linkages between NAFTA and the environment, economy and trade;
- to develop a credible analytical approach that will allow, to the greatest extent possible, for the identification of positive and negative effects of a comprehensive liberalization agreement such as NAFTA on the environment in North America.

Rationale

Article 10(6)(d) of the NAAEC provides that “[t]he Council shall cooperate with the NAFTA Free Trade Commission to achieve the environmental goals and objectives of the NAFTA by...considering on an ongoing basis the environmental effects of the NAFTA.” The NAFTA Effects project is an initial research initiative undertaken by the CEC to help contribute to understanding environment-trade relationships. A better understanding of these relationships will assist in designing strategies to promote positive synergies, and mitigate negative impacts.

Progress to Date

In the summer of 1995, the CEC initiated the exploratory phase (Phase I) of the project. This focused on the main elements of NAFTA, considered dimensions of ecological quality and identified major processes that can link environmental development in Canada, Mexico and the United States to NAFTA-induced changes.

In Phase II, specific issue studies were undertaken that, taken together, addressed key elements of the general framework in order to enrich areas where empirical data are not available or to clarify linkages between environmental issues and trade and economic activity. These studies were subjected to expert evaluation in later 1997 and then, following their completion, a second draft of *An Analytic Framework for Assessing Environmental Effects of the North American Free Trade Agreement (NAFTA): Phase II* (“the Framework”) was developed. This was received by Council in 1998 and peer reviewed.

Actions

1999

Revise Framework

The Framework will be revised in light of the results of the peer review that was carried out in 1998. This exercise will consider overarching issues, such as how to elaborate the six overall hypotheses presented in the Framework, the contribution of modeling methodologies to it, its ability to consider overall, economy-wide effects, and the advisability and feasibility of dividing the existing Framework into two separate documents. It would also consider the role in the Framework of specific issues such as investment, technology transfer, best practices, and other areas that were highlighted in the reviews for additional treatment. Where possible, additional work will be undertaken in selected areas as directed by the peer reviews. In addition, this will include an examination of the current status of indicators for use in the analytic framework and information on the availability of data being developed by the CEC and in existence in the three NAFTA countries.

The NAFTA Effects Advisory Group will meet as part of the process of revising the Framework. Government officials will also meet to review progress as the Framework is revised. A final Framework will be developed following public consultations on the draft document.

Call for Papers

At the Council meeting in June 1999, a draft of the revised framework will be released to the public. At the same meeting, the Council will issue a call for papers to experts and stakeholders in the research community, ENGOs, industry, academics, governments and other relevant organizations and individuals working on issues related to environment and trade. This call for papers will encourage the use of the analytic framework and the development of other research related to NAFTA and the environment. Selected papers will be presented at a conference in 2000 to encourage further discussion and highlight outstanding issues for the CEC in this area.

2000

First North American Conference on Research related to NAFTA and the Environment

The CEC will organize a conference that is based on the response to the Council's 1999 call for papers. The conference will include selected presenters and will be open to other interested parties. A report will be issued in 2001 that highlights outstanding items raised by the research and discussion.

1999	
<ul style="list-style-type: none"> • Revise the Framework, considering the suggestions made in the peer reviews. • Meeting of NAFTA Effects Advisory Group. • Meeting of government officials to consider revised framework. • Release draft of <i>A Final Analytic Framework for Assessing the Effects of NAFTA on the Environment</i>, call for papers and announcement of prospective First North American Conference on Research related to NAFTA and the Environment. • Public consultation to provide input into the draft of <i>A Final Analytic Framework for Assessing the Effects of NAFTA on the Environment</i>. • Complete <i>A Final Analytic Framework for Assessing the Effects of NAFTA on the Environment</i>. 	
Total Resources Required	\$140,000

2000	
<ul style="list-style-type: none"> • Release <i>A Final Analytic Framework for Assessing the Effects of NAFTA on the Environment</i>. This will be published by the CEC as No. 7 in its Environment and Trade Series and will incorporate the results of the stakeholders meeting. • The CEC will organize the First North American Conference on Research related to NAFTA and the Environment. This conference will be based on selected papers received in response to the June 1999 call for papers issued by the Council. 	
Total Resources Required	\$100,000

2001	
<ul style="list-style-type: none"> • Release Proceedings of the First North American Conference on Research related to NAFTA and the Environment. This will be published by the CEC as No. 8 in its Environment and Trade Series. 	
Total Resources Required	TBD

Public Participation

It is expected that meetings with stakeholders, including governments, environmental nongovernmental organizations, industry, academics, and other relevant organizations and individuals will be organized to consider the final draft of the Analytic Framework.

Capacity Building

This project is a research project that is directed toward creating a mechanism for improving the information available in the three countries regarding the relationships between environment, economy and trade.

Expected Results

A final analytical approach for assessing the effects of NAFTA on the environment and key issues for the CEC in this area.

Green Goods and Services

An enhanced understanding of the relationship between environment, economy and trade will facilitate the development of mechanisms to harness increased economic integration and growth to promote environmental improvement within trade liberalization regimes. It is of critical importance in developing the capacity of the Parties to define, and subsequently encourage, practices and trade in goods and services that enhance environmental performance and protection, and encourage the sustainable use of natural resources. The CEC can play a catalytic role in identifying and developing these opportunities.

This program supports the overall objectives of the Environment, Economy and Trade program area by promoting both sustainable development—based on cooperation and mutually supportive environmental and economic policies—and economically efficient and effective environmental measures. It allows the Council to consider and develop recommendations on such issues as environmental matters as they relate to economic development, the environmental implications of goods throughout their lifecycle, eco-labeling, the use of economic instruments for the pursuit of domestic and internationally agreed environmental objectives, ecologically sensitive national accounts and other matters as they may decide.

The following projects will be carried out to achieve the objectives and facilitate trade that enhances sustainable development:

- *Sustainable Use of Primary Natural Resources: Agriculture*
- *Facilitating Conservation of Biodiversity as it relates to Trade in Wildlife Species*
- *Sustainable Tourism in Natural Areas*

Sustainable Use of Primary Natural Resources: Agriculture

Project Summary

The purpose of this project is to identify criteria for sustainably produced agricultural products, and promote increased production, consumption and trade in them. The initial focus of the project, from which relevant lessons may be drawn for future work in other agricultural products, will be on developing a case study on shade coffee that has been grown in a manner favorable to the environment.

Objectives

The overall objective of this project is to promote sustainably grown agricultural products. Given the scale and environmental effects of the agricultural sector, promoting environmentally sound agricultural products and methods of production represents an important “win-win” environmental and economic scenario. An important objective of this project is to focus on concrete areas related to criteria setting, gaps in policy implementation, marketing promotion, the identification of policy, and institutional and other options necessary to make progress in this area. Accordingly, the first phase of this project will focus on shade-grown coffee. Shade-grown coffee has the potential to promote the conservation of birdlife.

The objectives of this project will include increasing public awareness of consumer choices related to environmentally sound shade-grown coffee, providing practical assistance to producers about best practices in shade-grown coffee, supplying marketing information and data on consumer trends related to environmentally sound products in this category, facilitating the exchange of information among farmers and marketers on the trade potential of shade-grown coffee, and increasing awareness among distributors about the range of choices available in this green product category.

Rationale

In recent years, consumer interest in and demand for sustainably produced or “green” agricultural products has increased significantly. Studies suggest that consumers are willing to pay more for agricultural products produced in a sustainable manner, although consumer confidence that product claims retain integrity remains an important issue. Given the extent of agricultural trade in North America, promoting sustainably produced agricultural products represents an important element to promoting sustainable development more generally within the three countries. The CEC is well positioned to facilitate work among the three governments and relevant stakeholders in identifying and clarifying mechanisms need to promote increased production, trade and consumption of green agricultural products.

Given the inherent complexity of the agricultural sector, this project focuses on one specific product—shade coffee—as the basis of a pilot project to understand trends and opportunities in the agricultural sector more generally. Shade-grown coffee has been selected for several reasons: coffee production has a strong environmental component (although criteria continue to be clarified regarding what constitutes shade-grown coffee); recent consumer trends in specialty coffees, coupled with more general consumer concern about the environmental attributes of their products, suggest that shade coffee has important market potential, perhaps even the potential to become economically important for Mexico and develop into a product that might contribute to the alleviation of poverty.

Progress to Date

This project will build upon the work already undertaken by the CEC in 1998 in the area of shade coffee. In 1998, the CEC undertook a two-part project dealing with both production and consumption. On the production side, work has concentrated on identifying criteria for shade-grown coffee so as to promote birdlife conservation, habitat protection and other sustainable development objectives, and on the consumption side, work has concentrated on identifying the market potential for shade coffee in selected markets in Canada, Mexico, the United States as well as world-markets.

The 1998 project was carried out both under rubric of the migratory bird conservation strategy since shade-grown coffee provides an important habitat for endemic and migratory birds, and the trade and environment work-area, since trade in shade-grown coffee offers the potential for increased and sustainable trade.

Actions

1999

In 1999, results of the criteria and market analysis work undertaken in 1998 will be combined and a report prepared on lessons learned from this work. This report will be utilized at a workshop hosted by the CEC in 1999 involving government experts, coffee producers, coffee distributors, marketing experts, consumer groups, conservation NGOs and other interested parties. The objective of the meeting will be to assess concrete lessons learned from the 1998 work and identify future work needed to advance the objectives of this project.

- Report: Synthesis report summarizing the 1998 market analysis and criteria study.
- Workshop: A discussion among stakeholders and governments of the options for work by the CEC in the area outlined by the issue report. A work plan will be developed.
- Identify clear criteria for defining sustainably produced agricultural products, beginning in 1999 with shade coffee.
- Identify options stemming from the CEC's market analysis work on shade coffee.
- Identify work needed in the area of mutual recognition as a means to promote trade in shade coffee, while ensuring conservation objectives are met.
- Identify and promote institutional cooperation needed to further work in this area (e.g., International Coffee Organization, other organizations, companies, consumer groups, etc.).
- Assess and make recommendations on economic instruments, including incentives and disincentives, which affect the goal of increased production, trade and consumption of shade coffee. Disseminate information on production methods for shade-grown coffee (e.g., alternatives to pesticides).
- Further work in promoting sustainably produced shade-grown coffee, including further market analysis, consumer promotion, and other areas. Work may also include identifying possible options needed in trade policy to promote trade in shade coffee.

Total Resources Required

\$105,000

Public Participation

Consultations with selected stakeholders, including government experts, coffee producers, coffee distributors, marketing experts, consumer groups, conservation NGOs and other interested parties, will be organized in order to consider the results of the work as it becomes available in draft report form.

Capacity Building

An important element of this project is capacity building. Specifically, shade coffee is often grown on small and medium-sized farms and by indigenous peoples. The CEC can help promote "best practices" in shade-grown coffee farms through information exchange and the promotion of criteria and indicators. The CEC can also help consumer groups, distributors and others in defining potential consumer market niches and potential price premiums in this area.

Expected Results

It is hoped that this project will result in deepened understanding of the practical requirements needed to build "win-win" relationships between market development and conservation and environmental protection. The project should help confirm or refute the actual potential for so-called "green" goods, including the export and demand potential for those goods, as well as identify underlying issues needed to support such products. These issues include the financing that may be necessary, relevant export and marketing information, operational knowledge among growers of the criteria for ensuring green production methods, and issues related to public awareness among consumers.

Facilitating Conservation of Biodiversity as it relates to Trade in Wildlife Species

Project Summary

This project is being undertaken to help the Parties ensure that all trade in North American wildlife and wildlife products is legal, is biologically sustainable, creates development opportunities when applicable, benefits local communities, and encourages *in situ* conservation. In so doing, this project will address questions dealing with the nature and volume of legal trade in wildlife and wildlife products, and the trends associated with that trade and its biological sustainability. The project will also explore development opportunities associated with that trade, along with conservation benefits and impacts on local communities.

Objectives

The objectives of this project are:

- to describe and collect data on domestic and international trade in wildlife and wildlife products in North America;
- to undertake a trend analysis of trade in and markets for wildlife and wildlife products in North America;
- to develop criteria to evaluate biologically sustainable use of wildlife with a focus on North American ecosystems;
- to identify and undertake case studies and develop approaches for the consumptive and non-consumptive use of wildlife and wildlife products that maximize benefits to local communities, including the effective communication to producers and communities of the importance of biodiversity for their economic well-being;
- to identify and undertake case studies and develop approaches to highlight successful sustainable development opportunities related to wildlife and wildlife products, including labeling and certification schemes, funding mechanisms and other incentives; and
- to identify and undertake case studies and develop approaches for the non-consumptive and consumptive use of wildlife and wildlife products that would provide benefits to *in situ* conservation.

Rationale

The North American Agreement for Environmental Cooperation (NAAEC) mandates the CEC to pursue initiatives directed to the conservation and protection of the North American environment. The NAAEC also contains important references to trade and sustainable development. This project is designed to promote the conservation and sustainable use of wildlife species in North America in the context of trade and facilitate the development of regional approaches to sustainable use and biodiversity.

Information on the extent, variety and significance of use of wildlife and wildlife products in North America, and the ecological, social and economic benefits that they can potentially provide, is not readily available throughout North America. In addition, there is at present an extensive, often unsustainable, trade in wildlife and wildlife products, not only within and among the countries of North America, but also in others throughout the world. This project will assist the Parties develop a better understanding of the volume and nature of those trade flows and the trends associated with them.

In addition, biodiversity in North America is threatened by a number of practices, including over-exploitation through trade and other activities and habitat destruction through unsustainable land use. This project will assist the Parties in taking action according to their national programs and regulations to stop the loss of biodiversity by demonstrating to local communities that while conservation has a cost, biodiversity and ecosystems have value and sustainable practices and sustainable use can be used to promote conservation for the benefit of all.

A North American effort to explore issues surrounding the sustainable use of resources, and to enhance ecosystem management and conservation, will contribute to such an understanding at the local, national, and regional levels. It will also contribute to global initiatives encouraging sustainable use, such as those underway through the International Union for the Conservation of Nature (IUCN), and further existing obligations within other international instruments. In addition, given the important link between the impact of use on conservation and law enforcement, it is also expected that this project will complement and support work being undertaken through the CEC by the North American Wildlife Enforcement Group (NAWEG) and the enforcement agencies of the three countries.

Progress to Date

In 1999 this project will continue a scoping exercise, begun in 1998 by the CEC, to identify and assemble existing information related to the current trade in North American wildlife and wildlife products. This study will assist the Parties to identify opportunities for further work that facilitates the conservation of biodiversity in the context of trade in wildlife and wildlife products.

Actions

The current scoping exercise will continue with the release of the background study and by holding a workshop to identify opportunities for further work.

<i>1999</i>	
<ul style="list-style-type: none"> • Report: Complete and release background study Exploring Linkages between Trade and Species' Conservation in North America. • Workshop: Convene a meeting of government officials and other stakeholders to identify opportunities for further work consistent with the objectives of the project. • Implementation of actions identified, as appropriate. 	
Total Resources Required	\$90,000

<i>2000 and 2001</i>	
<ul style="list-style-type: none"> • Future actions are contingent on the results of the scoping exercise undertaken in 1998-99. 	
Total Resources Required	TBD

Public Participation

The workshop, to be held in 1999 with government officials and other stakeholders, will consider the background study and identify opportunities for future work consistent with the objectives of the project.

Capacity Building

This project will develop information on sustainable consumptive and non-consumptive uses of biodiversity. It is also expected to promote activities, training and infrastructure in communities (including indigenous communities) that depend on commercial markets for wildlife and wildlife products for their livelihood, in order to provide opportunities for development and encourage conservation.

Expected Results

It is expected that this scoping exercise will result in a cooperative agenda in North America on issues related to the conservation of wildlife and the trade in wildlife and wildlife products.

Project Summary

This project is intended to encourage intergovernmental and private sector cooperation in the development and promotion of sustainable tourism in natural areas in North America. It will explore ways to protect and enhance the environment in North America, while at the same time increasing opportunities for sustainable tourism in natural areas.

Objectives

The objectives of this project are to:

- assess the state of ecotourism in North America,
- share information on success stories and challenges in North America,
- identify opportunities for sustainable tourism in North America, and
- develop a common framework in North America within which to design mechanisms for the promotion of sustainable tourism in North America.

Rationale

Tourism in natural areas may involve ecotourism and other non-consumptive activities such as scenic touring, wildlife viewing and outdoor adventures. It may also involve consumptive activities like plant and rock collecting, sport fishing, and hunting. Nature-based tourism accounts for between 10 and 15 percent of all international travel expenditures. With tourism expected to at least double in the next decade, the opportunities and impacts it creates need to be systematically addressed.

Thus this project can promote sustainable development by encouraging economic policies that conserve, protect, and enhance the natural environment. Properly managed sustainable tourism can generate important financial resources for some of North America's poorest regions. On the other hand, increasing tourism that is not properly managed can contribute to severe environmental stress in ecologically fragile areas.

Canada, Mexico and the United States share many natural features, including the ecosystems straddling their borders, major geological formations like the mountain chain stretching from the Canadian Rockies to the Mexican Sierra Madre, and biota, such as migratory whales, birds, and monarch butterflies. They also share the common challenges of dealing with the negative impact of tourism on popular "hot spots," and development in remote, rural or aboriginal communities that may be "off the beaten track." Regional cooperation in tourism development and promotion can lead to greater benefits for all parties and perhaps establish standards and common operating principles to ensure sustainability.

This project on Sustainable Tourism in Natural Areas is an opportunity for Canada, Mexico, and the United States to develop a common framework for nature-based tourism in North America. Underlying the economic benefits of development is a joint commitment to the protection of the ecosystems that attract tourists to natural areas.

Progress to Date and Actions

The project will be conducted over three phases from 1998 to 2001. Phase I is currently ongoing and will culminate in a report, *Development of Sustainable Tourism in Natural Areas in North America: Background Issues and Opportunities*, which will characterize and assess the current situation. Phase II will identify obstacles to and opportunities for the development of sustainable tourism in natural areas and will culminate in a trilateral conference of experts to identify paths forward. Phase III will be undertaken over two years and will build on the recommendations from the conference to develop and implement practical means of supporting sustainable tourism in natural areas.

1999		
	<ul style="list-style-type: none">• Report: <i>Development of Sustainable Tourism in Natural Areas in North America: Background Issues and Opportunities</i>. This report will include the following issues: quality and quantity of supply, demand and management; training needs; regulatory framework; marketing strategies; accreditation/ certification programs; consistency with policies for conserving biodiversity.• Conference/workshop: Sustainable Tourism in North America. This will serve as a forum for consultation on existing work. Experts, including government officials and other relevant stakeholders, will discuss the issues raised in the report and identify opportunities for CEC cooperation in this area.	
Total Resources Required		\$120,000

2000 and 2001		
	<ul style="list-style-type: none">• The specific nature of the work in 2000–2001 is contingent on the scoping exercise beginning in 1998 and continuing into 1999, including the consultation in October 1999.	
Total Resources Required		TBD

Public Participation

The conference/workshop scheduled for October 1999 will include relevant stakeholders from environmental nongovernmental organizations, industry, government, and other interested organizations. In addition, materials documenting the work under this project and any lessons learned will be widely distributed in the three languages.

Capacity Building

Through the effective dissemination of information and a focus on national policies and opportunities as well as local experiences, this project will provide concrete information to local communities on how to develop successful economic initiatives that rely on sustainable tourism and ecotourism.

Expected Results

It is expected that this project will result in a framework for the promotion of sustainable tourism in natural areas within North America.

Conservation of Biodiversity

The mission of work in the Conservation of Biodiversity program area is to promote cooperation between Canada, Mexico and the United States in fostering conservation, sound management and sustainable use of North American biodiversity.

North America has one of the broadest ranges of marine and land biological diversities on Earth. Mexico alone is blessed with megadiversity in its variety of species, ecosystems and the endemisms present on its territory. Together with six other countries, it hosts approximately 60 percent of all known species. However, the problems confronting the North American region are as vast as its wealth of life forms: threats to biodiversity and to the health of North American ecosystems put both at risk for current and future generations.

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Most problems affecting the North American environment are on the national level; certain others are problems shared by two of the three countries. Nevertheless, the effects and consequences of some of them will eventually affect the entire continent. The CEC will intensify its efforts to add value to regional actions for preserving biodiversity by pursuing the following general objectives:

- Identify and evaluate the most promising ways of conserving, fostering and restoring biodiversity and ecological processes in the region.
- Identify and promote instruments and mechanisms for the conservation of regions, areas and corridors used by transboundary and migratory species.
- Establish an ecosystems monitoring initiative for North American priority regions that will give early warning of environmental contingencies and emergencies, allow for a continuous evaluation of conservation actions in ecological regions through the use of performance indicators, and help identify trends related to conservation and utilization of natural resources.
- Include considerations of biodiversity and sustainable use in sectors of activity which affect the environment through use or lead to its degradation.
- Include the input of various interest groups, especially indigenous communities, in planning.
- Create networks of experts to analyze threats to biodiversity and the causes and results of contingencies and then recommend actions for responding to them.
- Promote sustainable use of the products and services afforded by biodiversity.

- Improve information, understanding and awareness of biodiversity, in order to foster better decision-making and a quantitative and qualitative increase in public participation, leading to actions to maintain, conserve, restore and sustainably use biodiversity.

The CEC will use its status as a management organization, consensus builder and catalyst, in cooperation with the three governments and various lobbying groups, to foster the formulation and application of a strategy intended to identify and prevent any threats posed by free trade for biodiversity in North America.

In order to carry out the objectives above, the CEC has divided this program area into three parts: first, a diagnosis to identify the current state of the conservation of biodiversity in the region; second, the development of strategies based on priorities of ecological regions and conservation actions that have consensus among the countries and diverse interest groups; and third, the implementation of mechanisms, projects and information management systems. These three parts are detailed in the following work plan:

1. North American Biodiversity Strategies

- Strategic Directions for the Conservation of Biodiversity
- Ecosystem Monitoring Initiative

2. Stewardship for Shared Terrestrial and Marine Ecosystems and Transboundary Species

- Cooperation on the Protection of Marine and Coastal Ecosystems
- Mapping Marine and Estuarine Ecosystems of North America
- North American Marine Protected Areas Network
- North American Biodiversity Conservation Mechanisms
- North American Bird Conservation Initiative
- Conservation of Migratory and Transboundary Species

3. Improving Information on North American Biodiversity

- North American Biodiversity Information Network (NABIN)

North American Biodiversity Conservation Strategies

A key goal of this program is to identify opportunities for effective cooperation in biodiversity conservation. This program will concentrate on developing strategies to address key conservation issues and ecoregions identified by the parties as priorities for cooperation. These objectives will be met through two projects:

- *Strategic Directions for the Conservation of Biodiversity*
- *Ecosystem Monitoring Initiative (begins only in 2000)*

Strategic Directions for the Conservation of Biodiversity

Project Summary

In cooperation with governments, conservation experts, and stakeholders, this project intends to develop strategies for North American biodiversity conservation. It will seek consensus on how to approach important conservation issues and ecoregions. The project will take into account previous work done by the CEC in mapping North American ecological regions and assessing the conservation status of North American ecoregions. It will help establish a long-term agenda for cooperation on biodiversity of conservation.

Rationale

The CEC can help respond to the challenge of conserving biodiversity, which continues to be under pressure even though there are many NGOs, government departments and international organizations working to conserve North America's natural heritage. Only through a coordinated, strategic, systematic and ecoregionally oriented effort can the capacity to conserve North American species, ecosystems and natural diversity be strengthened.

The strategy is to be based on the unique features of the CEC: favoring prevention as a principle, promoting cooperation between the three NAFTA countries, producing information to support decision-making, supporting regional capacity building, avoiding duplication and adding value to regional actions, promoting public participation, basing actions on solid scientific principles, promoting networks of integration between regional experts according to theme, and "making things happen."

Progress to Date

This project builds upon previous CEC work, such as the production of the *Ecological Regions of North America*, the objective of which was to provide a common basis for descriptive classification of ecoregions in North America at different levels of detail, and maps of each region. It also draws upon work undertaken in partnership with the World Wildlife Fund on the Assessment of the Conservation Status of North American Ecoregions.

Actions

1999

The focus will be on defining key issues affecting North American conservation, as well as identifying priority ecoregions for North American cooperation. Specifically, the CEC will work with the Parties and experts to:

- Identify priority issues important for conservation and sustainable use of marine and terrestrial biodiversity, and ecological regions that would benefit from concerted action at the North American scale. These priority issues will also take into account the impacts and risks to human and ecosystem health from sources such as persistent, bioaccumulative toxic pollutants. This will be based on the consensus resulting from meetings with wildlife and biodiversity senior-level officials of the three countries—in particular the work of the Trilateral Wildlife Committee—as well as the results of the previously mentioned CEC work on mapping North American ecological regions and assessing the conservation status of North American ecoregions, as well as the analysis of national biodiversity plans (according to the commitments made under the Convention on Biological Diversity) and other national programs, plans and strategies.
- Identify needs and priorities for capacity building in the various sectors involved in North American biodiversity conservation.

1999	
	<ul style="list-style-type: none"> • Consult with the appropriate government agencies from the three countries to better define the scope of the project. • Identify national priorities articulated in national conservation strategies and programs. • Present results of the analysis of national strategies and programs to a meeting with senior-level officials from wildlife and related agencies to identify priorities and define actions for cooperation on the conservation of biodiversity. • Begin to develop strategies in response to the priority issues and ecoregions identified. • Identify capacity building needs for strategies. • Identify major efforts, actors and resources for biodiversity conservation with respect to specific strategies.
Total required resources	\$121,000

2000

In collaboration with the various interest groups, mechanisms will be identified for tracking, evaluating and obtaining feedback on the strategies, and a regional consensus on them will be sought. This will conclude with an operating structure for five-year action plans, when the first such plan is drafted (2001–2005).

- Develop mechanisms to review, evaluate and follow up on the strategy.
- Develop a set of action plans by ecological region (first on the national level, with transboundary potential) to support and implement biodiversity conservation strategies.
- Prepare the first action plan.

2000	
<ul style="list-style-type: none"> • Set up a trinational evaluation committee that will cooperate in the final management of the strategies and their follow up. • Develop monitoring and evaluation strategy: performance indicators, evaluation group, timeframe, budget, corrective measures, and feedback mechanisms for the strategic plan. • Conduct public consultation workshops to present strategies and reach consensus. • Prepare the first action plan. 	
Total required resources	\$110,000

Public Participation

During each phase of this project from its inception to its implementation, citizen participation will be an indispensable component. Work will be performed in coordination with JPAC and the national advisory committees to develop ways of obtaining the feedback and active participation of various interest groups. The identification of opportunities and threats to biodiversity conservation, mechanisms that involve the general public in finding solutions to problems, selecting indicators, and evaluating the strategy's progress will be handled through public participation.

Capacity Building

The strategic plan will recognize the differences between the three countries and seek to use them as an asset. For capacity building, a detailed study of strengths and weaknesses for each of the strategic lines of the plan will be conducted in each country for each interest group. The successful application of the strategic plan will depend not only on the commitment between the Parties, but also on the real ability of the sectors concerned to bring it to fruition. As part of the strategy, the plan will include capacity building to serve as a reference for selecting and evaluating other strategic elements.

Expected Results

- Consensus among key government agencies and conservation experts regarding priority issues and ecoregions to be addressed through North American cooperation.
- Strategies for cooperation on priority conservation issues and ecoregions.
- Action plans supporting the implementation of the strategies.
- Progress review and evaluation process for strategies.

Project Summary

To anticipate and prevent ecosystem damage that will affect biodiversity and ultimately human health, the CEC will use existing capacity to catalyze cooperation between institutions and between countries, harmonizing monitoring systems and integrating groups of experts to create an early warning system in priority ecological regions. This should assist decision-making and help decentralize governmental and public participation as solutions are sought to environmental emergencies. It will also aid the identification, analysis and reporting of ecologically important emerging regional trends.

Rationale

The North American Agreement on Environmental Cooperation includes a commitment for the Parties to report periodically on the state of the environment in the region, besides promoting measures to respond to environmental contingencies and evaluate their environmental effects.

The challenge of achieving biodiversity conservation is a worldwide one; however, actions for environmental protection, mitigation and recovery must be regional and local. Thus, a new process is needed for decision-making and responding to environmental contingencies—a process, open to citizen participation, that is decentralized, based on recent scientific findings, and able to achieve quick and efficient consensus for action.

To respond to these commitments, the CEC can play a key role as a catalyst in capacity building and encouraging regional cooperation for the ecosystems monitoring initiative. By making use of available capacity, infrastructure and scientific information, this initiative could become an early warning tool to predict ecologically important emerging regional trends.

This project will be developed based on the results of the strategic planning process for the conservation of biodiversity, and will use information from the State of the Environment Report and Emerging Trends project. As a result, activities will not start until the exploratory phase of the strategic plan is complete.

Actions

2000

A model region will be selected by consensus, based on the decision of a trilateral evaluation committee composed of experts and representatives of government agencies in the three countries. Afterwards, a study will be made of the capacities, participants and the variables at different scales in the selected region. The steps to be taken are:

- An ad hoc expert group will be formed based on the various ecoregional and conservation priorities that will define a priority ecological region or regions for this initiative and will achieve trilateral consensus.

- The capacities and gaps in the target ecoregion will be identified, as well as the various participants (drawn from among the three levels of government, academia and research institutes, international, national and local NGOs, private sector and other interest groups).
- Consensus will be achieved with the various regional players on the need for and potential of this early warning and prediction tool.
- The political, technical and economic feasibility of this initiative will be evaluated.
- A strategic alliance of the major participants will be formed.

2000	
	<ul style="list-style-type: none"> • Study, create hierarchies and define the model region(s) to establish the system. • Identify institutional capacity in the model region. • Draft a system project plan, including political, technical and economic feasibility studies. • Present planned project to various interest groups. • Regional alliance for the establishment of the monitoring system.
Total required resources	\$80,000

2001

The monitoring system, together with its objective and scope, will be defined, as will the performance indicators, variables to be measured, measurement instruments, the inter-institutional coordination mechanism, and the information system and mechanisms for decision making, information and public participation. Infrastructure, training, human resource and financial needs are also to be identified, along with possible donors and financial participants in the initiative. The actions to be taken are:

- Identify and apply performance indicators on the state of conservation on an ecoregional scale.
- Broaden and diversify the capacity of NABIN, transforming it into the information technology basis of the system.
- Identify partners to finance the initiative and catalyze resource mobilization.
- Develop capacity and strengthen the infrastructure to implement the pilot project.
- Provide complementary information on the state of conservation in the target ecoregion to the report of the State of the North American Environment.

2001	
	<ul style="list-style-type: none"> • Consensus on performance indicators, variables to be measured and scales to be used. • Adapt NABIN as the information technology and cooperation base for the system's specific needs. • Define short-, medium- and long-term capacity building needs. • Approach financing institutions to present the scope, benefits and long-term financial needs of the system.
Total required resources	TBD

Public Participation

Public participation is an indispensable tool to prevent environmental contingencies and emergencies and to aid efficient action when they do arise. This project requires broad participation of interest groups, from design to regional application. Mechanisms for alerting and informing the public, as well as for evaluating and following up this initiative, will be developed in association with various interest groups.

Capacity Building

The starting point of this project is the identification of regional capacities and thematic, infrastructure and human resource gaps. During the second year of the project, continuous capacity building will take place, first for major participants (those generating information) and thereafter with communicators, decision-makers and users.

Expected Results

- Consensus on the identification of the model region.
- Establishment of an ecoregional interdisciplinary expert network.
- Strategy to address capacity-building needs.
- Adaptation of NABIN to the needs of the ecosystem monitoring initiative.
- Financial plan to implement that initiative.
- Consensual action plan to implement the initiative.
- Consensus on performance indicators, variables to be measured and scales to be used.

Stewardship for Shared Terrestrial and Marine Ecosystems and Transboundary Species

This program is focused on identifying new mechanisms, building capacity and promoting cooperation for the conservation of priority terrestrial and marine ecoregions that contribute to species protection in North America. The marine and coastal conservation project has the objective of protecting marine ecosystems from the effects of land-based human activity. Complementing this are two other marine projects: one that initiates the mapping of North American marine and estuarine ecosystems, using GIS techniques that have been employed by the CEC for terrestrial ecological regions in North America, and another that lays the groundwork for establishing a network of protected marine areas vital for the conservation of important ecosystems and marine life forms. The biodiversity conservation mechanisms project serves as a framework for three different initiatives: implementation of the regional strategy for the conservation of birds, the identification of the conservation or threatened status of migratory or transboundary species, and the launching of innovative mechanisms to protect priority ecological areas and corridors. Work in this program is being conducted through the projects:

- *Cooperation on the Protection of Marine and Coastal Ecosystems*
- *Mapping Marine and Estuarine Ecosystems of North America*
- *North American Marine Protected Areas Network*
- *North American Biodiversity Conservation Mechanisms*

Cooperation on the Protection of Marine and Coastal Ecosystems

Project Summary

Since 1996, in an effort to explore ways to protect the marine environment, the CEC has been facilitating regional implementation of the Global Programme of Action (GPA) for the Protection of the Marine Environment from Land-Based Activities in North America. The CEC is the only international organization assisting with the implementation of the GPA in North America. It has been working with agencies, private industry and citizen groups to develop binational pilot projects to protect marine and coastal ecosystems consistent with the GPA in the Bight of the Californias and the Gulf of Maine—two different coastal areas that are shared on a binational basis.

Objectives

The goal of the project is to protect the marine environment by facilitating regional implementation of the GPA. Specifically the project seeks to:

- establish an organizational infrastructure, independent of the CEC, for multisectoral binational cooperation to implement the GPA in the Bight of the Californias and the Gulf of Maine;
- assist the development and implementation of regional action plans for the protection of the marine environment in each of these areas;
- facilitate the exchange of information, enhance understanding of the GPA, and broaden involvement and participation in each region;
- consolidate long-term commitment for GPA implementation in both regions; and
- summarize regional experiences as a model of GPA implementation to share with other regions in North America and worldwide.

Rationale

An issue of concern to Mexico, Canada and the United States is ensuring the quality of the marine environment, as expressed in the “Workshop on Priorities for North American Cooperation for 1999–2001” (25 June 1998). The importance of the marine environment has also been recognized in the Council’s *Shared Agenda for Action* which states that: “North Americans are trustees of an amazing range of terrain, climate and *marine* and terrestrial ecosystems” (emphasis added).

Coastal and marine areas support a variety of important economic activities, including fisheries and aquaculture, tourism, recreation, industry, and transportation. Marine and coastal areas are experiencing greatly increased pressures as a result of rapid population growth and accompanying development, including that stimulated by increased trade as trade barriers are lifted.

Nearly all of the threats to habitat and marine environmental quality are human-induced pressures—from physical alterations of the environment to pollution impacts from human activities conducted either directly in/on marine waters or within the watershed. Nutrient and bacteria pollution from urban and agricultural runoff, changes in hydrology and salinity to naturally balanced systems, shore erosion, and over-development all currently stress the coastal and marine environment. Land-based activities impact marine environmental quality, which in turn influences other land and water activities and human health.

There is growing international recognition of the need to protect the marine environment from land-based activities, particularly during 1998, the United Nations-declared International Year of the Ocean. In 1995, Canada, Mexico, and the United States participated in the negotiation of and signing of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities. It calls for regional and subregional cooperation in identifying problems, priorities, and measures for the protection of marine habitats for sustainable management of marine and coastal environments.

Progress to Date

So far, both regional projects have established binational, multi-stakeholder coalitions of individuals, which represent federal, state and local agencies, nonprofit organizations, the academic and private sectors, and indigenous groups, with shared vision and goals. They are also in the process of developing regional action plans for GPA implementation in 1999, through the application of the GPA methodology, and a preliminary identification of partnerships and potential funding sources for 1999 implementation activities.

While substantial progress has been made, these bilateral efforts take time to evolve and consolidate. CEC support in the following years (1999–2000) is necessary to assist regional stakeholders in the transition from the GPA’s strategic planning process to implementation. These projects are at a critical threshold stage. The institutional framework and financial resources necessary for sustained, long-term GPA implementation are not yet established.

Gulf of Maine

During 1998, the Gulf of Maine Ad Hoc Committee, known as the Global Programme of Action Coalition for the Gulf of Maine (GPAC), has been successful in implementing a five-stage process to develop specific action plans, consistent with the GPA, to protect marine and coastal ecosystems in the Gulf of Maine. After identifying priority lists on pollutants and habitats in the Gulf of Maine,

a workshop is being organized to assess the adequacy of current activities related to these priorities. The results of this workshop include concrete action plans to address gaps, or to improve on existing measures. The workshop also produced a preliminary identification of partnerships and potential funding sources for 1999 implementation activities.

Bight of the Californias

On the Bight of the Californias, substantial progress has been made in defining the Ad Hoc Committee's structure. An Executive Committee, selected during the last Ad Hoc Committee meeting, has been active in developing a 1999 Operational Plan, a step-by-step process to identify priorities and develop specific action plans consistent with the GPA. This Operational Plan will be presented for approval at the next Ad Hoc Committee meeting at the end of 1998.

A group of Mexican scientists has also participated in 1998 in the first Bight-wide marine-monitoring survey, organized by the Southern California Coastal Water Research Project Authority (SCCWRP), which will produce an invaluable cross-border assessment of the state of the Bight. Supported by the CEC, the Mexican scientists participated in the intercalibration process from September 1997 through July 1998, leading to the first sampling exercise on August 1998. This sampling exercise encompassed measurement, among other indicators, of benthic infauna assemblages, microbiology, sediment toxicity, and water quality throughout the Bight of the Californias.

Actions

Gulf of Maine Region

1999

Work will continue in 1999 in the Gulf of Maine to support the Global Programme of Action Coalition for the Gulf of Maine (GPAC) in its transition from planning to action. The CEC will be facilitating the execution of the implementation plans developed in the Portland workshop. The CEC will be providing seed funds for these initiatives and a funding strategy will be developed in order to augment these initial resources.

In order to consolidate efforts to ensure sustained cooperation in implementing the GPA over the long term in the Gulf of Maine, the CEC will assist GPAC in developing a transition strategy to ensure long-term viability of the GPA implementation. This will include transference to regional institutions of the communication tools (Web site and electronic mailing list) that were developed and are being managed by the CEC.

1999	
	<ul style="list-style-type: none"> • Initiate implementation of concrete actions identified in the Portland workshop to restore/manage habitats and reduce pollutants of regional importance by catalyzing seed funds. • Organize a workshop to assess implementation progress and produce a workshop report. • Hold a Global Programme of Action Coalition for the Gulf of Maine (GPAC) meeting to outline a transition strategy. • Establish a transition strategy that will address long-term viability of the GPA implementation, including institutional arrangements, funding mechanisms, transfer of home page and electronic mailing list, etc.
Total Resources Required	\$95,000

2000

As a closing activity, a workshop to evaluate overall implementation success in the GPA will be organized in the year 2000, where the report summarizing the Gulf of Maine experience and developed in the previous year will be released.

2000	
	<ul style="list-style-type: none">• Workshop to evaluate overall implementation success and identify lessons learned.
Total Resources Required	\$25,000

Bight of the Californias region

1999

By the end of 1998, the Bight of the Californias Ad Hoc Committee will be in a position to start implementing its 1998–99 Operational Plan. This Operational Plan was presented for approval at the Ad Hoc Committee meeting in November 1998. The Plan is a step-by-step process that will lead to the definition, through a participatory process, of concrete actions and specific action plans to protect the marine environment in the Bight of the Californias.

Strengthening the developing institutional arrangement for GPA implementation in the Bight of the Californias is another task that will be undertaken during 1999. The San Diego Association of Governments (Sandag) has offered to support the Bight of the Californias Ad Hoc Committee, acting as its secretariat. San Diego State University is now hosting the Bight of the Californias Web site. There is a need to coordinate these efforts in order to consolidate long-term commitment for GPA implementation in the region.

As for the Bight-wide monitoring survey, reporting and analysis of the samples collected during 1998 will be completed in 1999. The CEC will continue the support of the participation of Mexican scientists in the data analysis and reporting stages of this initiative.

1999	
	<ul style="list-style-type: none">• Strengthen institutional arrangements for implementation of the GPA in the Bight of the Californias.• Hold Ad Hoc Committee meetings to support implementation of 1999 Bight of the Californias Operational Plan.• Refine priority issues in the Bight of the Californias.• Develop concrete action plans for the priorities identified by the Ad Hoc Committee.• Initiate implementation of concrete actions identified by providing catalytic seed funds.• Continue support of Mexican scientists in the analysis of data from 1998 monitoring survey.
Total Resources Required	\$95,000

2000

Work will continue in 2000 in the Bight of the Californias to support the Ad Hoc Committee in its transition from planning to action. The CEC will be facilitating the execution of the implementation plans developed during 1999, as well as providing seed funds for these initiatives. A funding strategy will be developed in order to augment these initial resources.

<i>2000</i>	
<ul style="list-style-type: none"> • Organize a workshop to assess implementation progress, including lessons learned, and produce a workshop report. • Establish a transition strategy that will address long-term viability of the GPA implementation, including institutional arrangements, funding mechanisms, transfer of electronic mailing list, etc. 	
Total Resources Required	TBD

2001

As a closing activity, a workshop will be organized to evaluate overall implementation success of the GPA in the year 2000, and present the report summarizing the Bight of the Californias experience.

<i>2001</i>	
<ul style="list-style-type: none"> • Workshop to evaluate overall implementation success. 	
Total Resources Required	TBD

“Lessons Learned” Report

2000

There is great potential to share the lessons learned through this process in other regions in North America, and even outside the continent. In order to do this, the CEC will produce a report in hard copy and on CD-ROM, summarizing the experience of GPA implementation in North America.

<i>2000</i>	
<ul style="list-style-type: none"> • Produce report/develop CD-ROM analyzing and summarizing experience of both pilot projects to share with other regions. 	
Total Resources Required	\$15,000

Public Participation

Public participation has been fundamental for the implementation of the GPA in both regions. The ad hoc committees that assist in the implementation of the GPA in each region broadly represent environmental, economic and social interests, and provide a first opportunity for meaningful public participation for the protection of the marine environment. The organization of workshops extends this opportunity to a broader audience. Efforts to further involve the public at large include the production of outreach materials and the development of communication tools, such as bulletins and Web sites.

Capacity Building

Increasing capacity has been central to this project. Actions in each region have included the establishment of multisectoral ad hoc committees and the development of communication tools to facilitate the exchange of information and networking among committee members and to enhance the understanding of the GPA throughout the region.

In the case of the Bight of the Californias region, the CEC has been supporting the participation of Mexican scientists in the first Bight-wide marine-monitoring survey. This initiative has not only led Mexican scientists to develop comparable methods for marine monitoring with their US counterparts, it has also opened a forum for cross-border information exchange on the quality of the marine environment.

Expected Results

Upon the completion of these activities to implement the GPA in North America, the CEC will have established a framework for regional cooperation for the protection of the marine environment in the Bight of the Californias and the Gulf of Maine. In implementing the GPA, CEC will have developed a regional model for cooperation. There is a great opportunity to share the lessons learned with other regions in North America, and to gain recognition internationally by disseminating the results of this experience.

In particular, this project will yield the following results:

- An organizational infrastructure will be established for the implementation of the GPA in the Bight of the Californias and the Gulf of Maine, independent of the CEC.
- Regional implementation plans will be finalized, priorities for action and timelines established, and implementation steps launched.
- Commitment to implementing the GPA from local groups, agencies and members of the public-at-large will be shown by their active involvement and participation in regional activities.
- The exchange of information and an enhanced understanding of the GPA will be achieved through home pages, conferences and bulletins in each region.
- Financial and institutional support will be secured for project activities.
- A report will be produced summarizing regional experiences to share as model for GPA implementation.

Mapping Marine and Estuarine Ecosystems of North America

Project Summary

The proposed activity will identify and coordinate the development of comparable marine and estuarine habitat classification systems to be incorporated by the Parties into a North American geographic information system (GIS). This will provide the critical first step needed in the identification of key biodiversity areas for conservation, restoration, or sustainable use, which in turn will lead to the development of a representative system of marine and coastal protected areas for North America. This proposal is closely coordinated with the proposed activity to link North American marine protected areas.

Objectives

The goal of the project is to provide a geographic framework for conservation and sustainable use in the protection of the marine environment. Specifically the project will:

- identify and compile ongoing approaches to marine and estuarine habitat classification and mapping;
- assist the development and implementation of consistent and comparable approaches, especially in shared ecosystems; and
- facilitate the development by the Parties of a GIS-based map of major meso-scale marine ecological regions in North America with overlays of existing marine protected areas. The final report will outline habitat classification systems and show how habitats are nested within the ecological regions.

Rationale

The need for information on the living resources of North America's marine areas has never been greater. As development of the coastal zone and exploitation of offshore resources increase, more and more marine organisms, including the fish, marine mammals, and sea turtles, and whole ecosystems (e.g., coastal wetlands and coral reefs) are facing increasing threats. The loss of marine biodiversity—of the variety of marine organisms and the ecological complexes of which they are a part—is a major concern of natural resource management agencies in Canada, Mexico, and the United States, and is an indicator of habitat destruction and degradation of resources that are vital for economic growth and stability. Currently, though, there is a lack of tools to identify critical areas for conservation and to provide objective measurements of changes in aquatic biological resources or of the success of management policies and restoration efforts.

In earlier work, the Commission for Environmental Cooperation (CEC) has supported the development of GIS maps and descriptions of the terrestrial ecological regions of North America. This was done to enhance the capability of both NGOs and governmental organizations to assess the nature, condition, and trends of the major ecosystems in North America. The proposed marine and estuarine ecosystem mapping project would expand these approaches to the nearshore marine environment. It would also provide a geographic biodiversity context for finer-scale activities, such as the CEC Pilot Projects implementing the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities.

This activity is the first step in the development of a marine gap-analysis program. Gap analysis is a science-based program for identifying the degree to which native animal species and natural communities are represented in our present-day mix of conservation areas. Those species and communities not adequately represented in the existing network of conservation areas constitute conservation “gaps.” Gap-analysis approaches are currently being applied to provide broad geographic information on the status of species and their terrestrial habitats in Canada, Mexico, and the United States. These programs provide managers, planners, scientists, and policy makers with the information they need to make better-informed decisions. Highly successful in the terrestrial environment, this approach can be augmented by including an Aquatic Gap.

This project builds on existing efforts in the three countries:

1. Canada: Canada has developed marine habitat classification systems for British Columbia. A system of marine ecosystem health indicators is being developed by the departments of the Environment and Fisheries & Oceans.
2. Mexico: Mexico is collaborating on the terrestrial Gap Analysis Program with the United States. In addition, both Conabio and Semarnap are engaged in priority-setting activities for marine protected areas.
3. United States: The United States has developed an Aquatic Gap Partnership led by the US Geological Survey and the National Oceanic and Atmospheric Administration. Its goal is to characterize and map freshwater, estuarine, and marine species, communities, and their habitats on a landscape scale. With this information, decision-makers and resource managers at local, state, regional, and national levels can evaluate aquatic resources and make more informed decisions about land and water resources.

Actions

1999

This project will begin by identifying experts to participate in an identification of ongoing approaches to marine and estuarine habitat classification. Databases will be compiled in the three countries. This compilation of information is the first step for any coordinated gap-analysis approach. The compilation, performed by an appropriate contractor, will result in a report for peer review. This report will then serve as the basis for a follow-up workshop for the following year.

<i>1999</i>	
<ul style="list-style-type: none"> • Report: This will be a document that compiles current approaches to marine and estuarine habitat classification and explores and summarizes key issues and current activities in North America. 	
Total Resources Required	\$30,000

2000

Based on the results of this compilation, a workshop will be held to exchange information and encourage consistent and comparable approaches to habitat and biodiversity classification and mapping, especially in shared ecosystems. The workshop will involve approximately 30 to 40 experts from the three countries, chosen based on their expertise and experience in marine habitat classification and mapping. Experts will include appropriate representatives from governments, academia, and NGOs.

<i>2000</i>	
<ul style="list-style-type: none"> • Workshop: This experts workshop will identify major marine ecological regions and habitat and biodiversity classification approaches for major marine and estuarine habitat types. 	
Total Resources Required	\$35,000

2001

During the second year, an appropriate organization or contractor will be identified by the Parties to incorporate the available information gathered in the first year into a GIS map format. The key outcome of this activity will be the production of a GIS-based map of major meso-scale marine ecological regions in North America with overlays of existing marine protected areas. The final report will outline habitat classification systems and show how habitats are nested within the ecological regions. The final product will also include the delineation of current marine protected areas in the three countries (note: this has already been accomplished for the United States). In this manner, the project will provide a first approximation that can identify habitat and ecosystem types that may not be adequately incorporated in current protected area systems.

<i>2001</i>	
<ul style="list-style-type: none"> • Development of an ArcView- (or ARC/INFO-) based map of major meso-scale marine ecological regions. • Publication of final report. 	
Total Resources Required	\$90,000

Public Participation

Although the development of North American regional marine habitat classification systems and GIS maps will rely upon academic, government and NGO technical experts from the three countries, the results will provide an invaluable tool for a much wider and more effective public dialogue on conservation priorities in the three countries. Currently, decisions on the location and benefits of protected areas are made in a primarily local context, with little information on how protection in one area will influence overall biodiversity conservation goals. The identification and mapping of major marine and coastal ecosystems and habitats will facilitate the identification of distant stakeholder groups that may be affected by management actions (for example, regional fisheries whose resources depend upon certain habitats during critical life history stages). The Terrestrial Gap-Analysis Program has been characterized by extensive participation by NGOs, universities, and local, state and federal governments. The project will further involve the public-at-large through the production of outreach materials and maps, and these materials will be made widely available through existing Web sites.

Capacity Building

This project will increase capacity in all three countries to identify, characterize and map habitats and biodiversity in marine environments. Each country in the region has individual experience in aspects of this approach that will benefit the combined effort. This project will identify needs as well as potential partners for the implementation of transboundary marine conservation activities.

Expected Results

This project will bring together existing approaches for habitat characterization and mapping in Canada, Mexico, and the United States. It will provide a tool explicitly intended for assisting networking and setting priorities for marine protected areas in North America—building on the companion Marine Protected Area Project. It will provide:

- identification and compilation of ongoing approaches, experts and databases in the three countries—this information compilation is the first step for any coordinated approach to gap analysis and will be in the form of a report that, once reviewed, will form the basis of the follow-up workshop;
- development of consistent and comparable approaches to marine and estuarine habitat classification, especially in shared ecosystems;
- production of a GIS-based map of major meso-scale marine ecological regions in North America with overlays of existing marine protected areas to outline the habitat classification systems and their nesting within the ecological regions as well as current marine protected areas in the three countries; and
- improved capacity of managers, planners, scientists, policy makers and other stakeholders to assess the nature, conditions and trends of the major marine ecosystems of North America.

Project Summary

This project will enhance the conservation of marine biodiversity in critical marine habitats throughout North America by creating functional linkages and information exchange among existing marine protected areas (MPAs). The work involves two distinct phases: (a) the establishment and coordination of a permanent network of North American MPAs linked electronically via the World-Wide Web (WWW); and (b) the development and implementation of cross-cutting conservation initiatives involving MPA sites with shared ecological links (e.g., critical migratory habitat) across Canada, Mexico, and the United States. As a result of this network, all North American MPAs will benefit from increased conservation efforts, network-wide sharing of lessons learned, and increased access to timely information on emerging threats, novel management strategies and funding or outreach opportunities.

Objectives

The goal of this project is to enhance and strengthen the protection of marine biodiversity in North America by linking the existing MPAs in all three countries. Specifically the project seeks to:

- identify ecological linkages and commonalities among existing North American MPAs;
- develop cross-cutting conservation initiatives that build upon these linkages;
- demonstrate how a coordinated network of MPAs adds value to conservation;
- build local, national and international capacity to conserve critical coastal habitats by sharing lessons learned, new technologies and management strategies; and
- facilitate the future design and establishment of a globally representative system of MPAs throughout North America and the world, as called for by the International Union for the Conservation of Nature (IUCN).

Rationale

Marine protected areas are widely believed to be effective tools to safeguard and conserve critical coastal habitats throughout the varied biogeographic zones of North America. However, although many MPA sites and programs already exist worldwide, they are largely operating independently, with relatively little exchange of information, strategies, or lessons learned. Over 270 MPAs are currently employed under a variety of authorities throughout North America to conserve and sustainably utilize marine biodiversity in CEC countries.

While individually, these sites provide valuable local protection for marine biodiversity, a greater benefit could be obtained (both locally and globally) if the various sites in North America could collaborate and forge meaningful linkages as they relate to specific species and uses. For example, a number of geographically distant MPAs might be linked ecologically based on their importance in migratory patterns (e.g., gray whales) or in supporting different stages in the life history of important species (e.g., spawning, larvae, juvenile and adult).

Progress to Date

Initial research on the feasibility of this proposal indicates a marked gap in the coordination of existing MPAs. Preliminary discussions among several international and nongovernmental conservation organizations suggest strong support for the MPA network concept. Building on the greater awareness of ocean issues and marine protected areas, this proposal meets many of the needs of the individual countries' ocean agendas.

Actions

In order to capitalize on the timing, a workshop is planned to bring together the many players from the three countries. This workshop will lay the organizational foundation for the resulting North America marine protected area network and develop collaborative projects that will benefit from this network.

1999	
	<ul style="list-style-type: none">• Convene an international workshop of North American MPA programs to: (a) identify common goals and issues and (b) establish the structure and objectives of the WWW-based North American-MPA network.• Develop and operate the WWW-based MPA network. Actions include: network and web page design, information acquisition, communications protocols, etc.
Total Resources Required	\$60,000

2000	
	<ul style="list-style-type: none">• Activities will be determined by the 1999 results, which may include cooperative activities among MPA sites that: (a) contribute to strengthening national systems (e.g., evaluate existing monitoring and assessment protocols to develop core parameters, develop transboundary educational programs for use by coastal communities and other stakeholders, etc.) and (b) create opportunities and mechanisms to improve site-specific management and conserve biodiversity through cooperative efforts.
Total Resources Required	\$120,000

Public Participation

The public will be involved in most aspects of this endeavor, from global network design to local implementation at specific MPA sites. Various sectors of the public will be asked to participate in the workshop. We will look to the academic community and nongovernmental organizations involved in marine protected areas for input into establishing the linkages. As the process evolves, general outreach materials will be developed for explaining to a broad audience the benefits that will accrue to marine biodiversity from linking the sites.

Capacity Building

The fundamental purpose of creating an integrated and interactive network of North American MPAs is to build global capacity, sharing information on lessons learned about effective conservation strategies, emerging threats to protected areas, and funding or outreach opportunities. It is anticipated that all members of the network will benefit equally from this exchange.

Expected Results

The North American MPA network will produce two distinct but related results. First, it will result in a number of specific cross-cutting conservation initiatives that will enhance the protection of biodiversity among participating sites. Second, and perhaps more importantly, it will create a permanent alliance of MPAs throughout North America that continue to share critical information to improve the efficacy of marine biodiversity conservation efforts at the national, regional and international level.

North American Biodiversity Conservation Mechanisms

Project Summary

The protection of wildlife species is a priority North American issue. Whether it addresses species that migrate across national borders, species that are threatened or endangered, or species that play a critical role in the functioning of ecosystems, joint action between the three countries will be necessary to ensure their survival.

The goal of this project is to establish mechanisms that will enable the three countries to identify biological priorities within a North American ecoregional framework and establish collaborative actions to protect North American bird populations and support the conservation of migratory and transboundary species and their habitats. Since conservation requires coordination at different levels of society, this project will promote mechanisms stimulating nongovernmental and private participation, as well as that of local, state/provincial, and federal governments, in protected natural areas and in areas that lack formal governmental status or regulations for their protection.

The project consists of two parts: the North American Bird Conservation Initiative (NABCI) and the Conservation of Migratory and Transboundary Species in North America. In addition, this project will contribute to setting priorities for the “Strategic Directions for Biodiversity Conservation” project by focusing on the biological components of North American ecoregions.

Several governmental agencies and organizations interested in bird conservation—of terrestrial species in particular—are working with the CEC on a strategy to coordinate and increase efforts to conserve bird populations and their North American habitats. The project is to complete its strategy and action plan and identify steps needed for their implementation in 1999. If additional efforts are needed from the CEC for the years 2000 and 2001 to facilitate strategy implementation, they are to be identified and submitted to the Council for consideration.

The second initiative under this project will focus on facilitating cooperation on endangered migratory and transboundary species. A report will be drafted drawing upon the national inventories (Conabio in Mexico, USFWS in the United States, and the CWS in Canada, among others) as well as additional information provided by conservation organizations and scientific experts on endangered and threatened species. The report will help establish priorities for joint action in the recovery of threatened or endangered populations in North America. It will also be used as a tool for identifying priority ecoregions as well as conservation performance indicators.

Objectives

The goal of this project is to establish mechanisms that will enable the three countries to identify biological priorities within a North American ecoregional framework and establish collaborative actions to protect North American bird populations and support the conservation of migratory and transboundary species and their habitats.

North American Bird Conservation Initiative

- Complete and launch the “Initiative and Action Plan for the Conservation of North American Birds.” The Action Plan will encompass a clear set of objectives and actions to achieve the stated goals in the Initiative.
- The CEC will work with partner organizations on the final details and implementation of the Initiative, including setting up a long-term mechanism for its implementation, as well as the monitoring and reporting mechanisms for tracking progress.

Conservation of Migratory and Transboundary Species

- Determine the conservation status and the associated recovery plans of transboundary and migratory species, with special emphasis in species of concern in each country.
- Provide a forum for the three countries to reach consensus and build partnerships on projects that would address priority species of concern.
- Contribute to the priority setting of the “Strategic Directions for Biodiversity Conservation” project by focusing on the biological components of North American ecoregions.

Rationale

This project is part of the CEC response to the Council’s proposal to enhance the collaborative efforts toward the “conservation of North American biodiversity.” NAAEC calls for action to encourage conservation of wildlife and its habitat, and specifically the protection of species in danger of extinction [Articles 1(c), 10(2)(i) and (j)].

North American Bird Conservation Initiative

In 1996, the Council called for the formulation of an initiative and action plan for cooperative efforts to conserve North American birds based on common goals, objectives and perspectives. The North American Waterfowl Management Plan (NAWAMP) has been successful in conserving aquatic birds. A similar effort is needed to coordinate the conservation of terrestrial bird species. NABCI was launched in response to this need.

NABCI is critical for establishing consensus that is scientifically based on the priority-setting criteria for conservation action. It is well established that bird populations are key indicators for the overall health of biodiversity because they respond so quickly to changes and stresses in ecosystems. Bird conservation priorities will be key to setting the biological and urgency criteria as the “Strategic Directions for Biodiversity Conservation” project focuses on prioritizing ecoregions.

The following agencies and organizations have played an important leadership role in building this initiative: the American Bird Conservancy, the *Comisión Nacional para el Conocimiento y Uso de la Biodiversidad* (Conabio), the US Environmental Protection Agency, *Dirección General de Vida Silvestre* for the *Instituto Nacional de Ecología*, the Long Point Bird Observatory, the Tennessee Wildlife Resources Agency, the National Audubon Society, the US Fish and Wildlife Service, the Canadian Nature Federation, the Canadian Wildlife Service, and the *Universidad de San Nicolás de Hidalgo Michoacán*. In addition, there are many other key organizations in the three countries making important contributions to this endeavor. Partners for this project include agencies, NGOs, local organized communities, as well as universities and scientific research centers.

Conservation of Migratory and Transboundary Species

The three countries share species that are migratory and transboundary and the successful conservation of these species will depend on joint actions. In addition, having a clear understanding of the conservation status of those populations will help determine conservation performance indicators for ecoregions and biological corridors.

Progress to Date

The Identification of Important Bird Areas (IBAs), was the first step in defining a North American bird conservation initiative. This project brought together those agencies in each country working to identify important bird areas and resulted in the identification of more than 150 such areas throughout North America.

For the last two years, a working group composed of governmental officials and NGO experts drafted a document laying out the goals and approaches to an initiative and action plan for the conservation of North American birds. This was reviewed in November 1998 at meeting in Puebla, Mexico, by more than 125 experts from the three countries. Based on the feedback they provided in the areas of mapping, conservation objectives, monitoring, implementation, and support, the initiative and action plan will be completed for Council approval in June 1999.

Initial attention will be focused on reviewing existing information to identify and protect species and natural phenomena in North America, classifying them according to the ecoregions identified in the CEC report, *Ecological Regions of North America*.

Actions

North American Bird Conservation Initiative

1999	
<ul style="list-style-type: none"> • Preparation of the “Initiative and Action Plan for the Conservation of North American Birds,” presentation to the Trilateral Wildlife Committee, and incorporation of the Committee’s feedback. • Presentation of the Initiative and Action Plan to the Council of the CEC in support of a Council resolution. • Establishment of a trinational steering group to promote the implementation of the initiative. • Support working groups on implementation, mapping, conservation and monitoring and support. • Support the capacity building necessary for a dedicated national coordination of NABCI. • Definition and management of pilot initiatives to begin the first phase of implementation of NABCI. 	
Total required resources	\$200,000

2000	
<ul style="list-style-type: none"> • Round table of bilateral and multilateral financial organizations to support NABCI. • Support second stage of pilot projects, capacity building, networking, and public participation. • Follow up on the Secretariat’s Article 13 report. 	
Total required resources	TBD

Conservation of Migratory and Transboundary Species

1999	
<ul style="list-style-type: none"> • Workshop of experts and wildlife authorities which will define scope, criteria and priorities for the framework in the report, <i>Conservation Status of Migratory and Transboundary Species</i>. • Draft <i>Conservation Status of Migratory and Transboundary Species</i> report, placing special consideration on species that are endangered or facing extinction. 	
Total required resources	\$40,000

<i>2000</i>	
<ul style="list-style-type: none"> • Publish <i>Conservation Status of Migratory and Transboundary Species</i>. • Promote collaborative actions for the conservation of migratory and transboundary species and their habitats. 	
Total required resources	TBD

<i>2001</i>	
<ul style="list-style-type: none"> • Promote the application of instruments and mechanisms from the “Strategic Directions for Biodiversity Conservation” project. • Develop a trinational strategy to improve information, understanding and awareness of biodiversity, encouraging better decision-making and a qualitative and quantitative improvement in public participation in activities to maintain, conserve, restore and sustainably use biodiversity. 	
Total required resources	TBD

Public Participation

There is widespread recognition that the biodiversity and its aquatic or terrestrial habitats will be protected according to their perceived value. A considerable proportion of priority ecological areas in the region is in private hands. Participation of the owners of those lands or waters will thus be crucial for the conservation for posterity of North American species, their habitats, and other natural phenomena. This project will identify priority species and areas, as well as mechanisms for nongovernmental participation in their protection, both in protected natural areas and in sites not protected by government decrees or regulations.

Capacity Building

The use of the previously described instruments and mechanisms, locally and regionally, will depend on the volition and the capacity of these landowners, and on that of the NGOs and local groups working with them, to seek ecologically and economically viable alternatives. This project will identify needs as well as potential partners for a capacity building strategy that will be included in the Strategy for the Conservation of Biodiversity.

Expected Results

The project will yield the following results:

- an organizational infrastructure for implementing NABCI will be established;
- a NABCI website will be developed in order to provide a collaborative tool for the constituencies; and
- a strategic document that reflects the consensus of the three countries on how to conserve North American bird populations will be presented at the Council meeting.

Improving Information on North American Biodiversity

The objective of this program is to create a North American network of biodiversity information through the interconnection of previously independent systems of biodiversity data. Through this, solutions can be found to problems associated with data incompatibility and accessibility. The problem of data incompatibility can be solved by the creation of an Internet-based system to retrieve, integrate and present data residing in different computer systems and organized under different taxonomies. Problems concerning accessibility can be addressed by providing free and unrestricted public access to biodiversity information. This program will be implemented initially through one project:

- *The North American Biodiversity Information Network*

North American Biodiversity Information Network

Project Summary

The primary goal of the project is to assist institutions and agencies that collect, manage or use biodiversity data to collaborate on providing broader access-to-information across North America. The project will also link the North American Biodiversity Information Network (NABIN) with other national and international initiatives, such as the Canadian Biodiversity Information Infrastructure (CanBII), the Inter-American Biodiversity Information Network (IABIN) and the Convention on Biological Diversity Clearinghouse Mechanism (CHM) in the creation of a worldwide biodiversity information network that is publicly accessible and free.

The project also addresses issues related to the development of NABIN, such as the development of data standards and protocols for the exchange of information. The CEC will convene and facilitate discussions among key institutions that collect, manage and use biodiversity data. The utility and effectiveness of the project will be demonstrated through a pilot study that interconnects taxonomic databases on birds.

The development and implementation of NABIN is a long-term project that will require ongoing development. Continued CEC stewardship through the year 2000 would ensure that the project maintains its trinational perspective and objectives. At the same time, the CEC is developing a transition strategy in the event that it is decided that NABIN should be continued by initiatives such as the Inter-American Biodiversity Information Network.

Objectives

The project focuses on the development of a North American Biodiversity Information Network which will:

- point users to sources for data;
- assist interested agencies to exchange biodiversity data;
- identify gaps in existing data and knowledge;
- provide a forum for developing collaborative approaches to managing and distributing biodiversity information on a North American level; and
- contribute to national and regional biodiversity initiatives (IABIN, CHM, etc.).

Rationale

Accessible and accurate scientific information is necessary for good conservation management. Many environmental systems in North America transcend boundaries, and information about them needs to be shared.

There is no comprehensive understanding at the North American level of what biodiversity data exists, where it is held, how reliable it is, and how it may be accessed. Existing biodiversity data is scattered in various formats and only sometimes documented. Numerous initiatives by federal, state, provincial and nongovernmental agencies are underway to develop national and global environmental databases, including information on species and other natural resources, information management standards and different systems of taxonomic classification. There is no effort to identify the existence of a data set and the means to acquire access to it on the North American level. NABIN seeks to fill this void.

Sharing and accessing biodiversity data at such a broad level can help avoid environmental conflicts and facilitate more cohesive cooperative actions. North America-wide collaboration in making biodiversity data accessible will produce economies of scale and avoid duplication of effort. Finally, a regional initiative will enable North America to provide leadership in global efforts to make biodiversity information better organized and more accessible.

Progress to Date

In the first phase of the project, a pilot study, “The North American Bird Information Network” was initiated. This pilot study has:

- identified the issues associated with linking diverse information through translation to a common set of names;
- reviewed conservation status information used to set inventory priorities and establish conservation goals; and
- reviewed issues associated with meta-data, including documenting sources and establishing the quality of data in the network.

A beta-distributed query system (search engine) to access multiple databases residing on remote and separate servers has been completed. To date, this system can allow concurrent searching of at least twelve major collection databases located throughout North America. The system is also configured with geo-spatial software, allowing users to obtain data on North American species’ distribution, migration, etc. The United States National Science Foundation has provided a grant of \$500,000 that will allow the system to expand its focus and objectives.

Actions

In support of the stated objectives, identification and inclusion of other taxa in the system will point users to existing sources for data, an especially important element in the system given that simultaneous access to different databases was previously impossible. Greater access to data will encourage exchange of information among data custodians and interested parties and give users the tools necessary for more effective capacity building. More public participation in issues directly affecting their communities will also become possible through free and unrestricted access-to-information. The creation of a forum for developing collaborative approaches to managing biodiversity data will result from meetings with those responsible for national and international initiatives similar to NABIN. Through this forum, NABIN and other initiatives can eliminate duplication of efforts, merge objectives and goals and ensure greater sharing of resources and expertise.

<i>1999</i>	
<ul style="list-style-type: none"> • Identification of other taxa for inclusion in the system. • Stress testing of the system. • Inclusion of other taxa in the system. • Meeting with those responsible for national and international initiatives to discuss merging goals. • Testing of system with the public. • Ongoing exchange of information with data custodians. • System made freely available to the public. • Identification of interested parties to administer the project. • Final Steering Committee meeting. • Final report and completion of the project. 	
Total Resources Required	
	\$90,000

<i>2000</i>	
<ul style="list-style-type: none"> • Support other CEC programs where appropriate. • Continue collaboration and participation in IABIN and the CHM. 	
Total Resources Required	
	TBD

Public Participation

Public participation in the objectives of NABIN is ensured through the creation of a distributed database of biodiversity information. Unrestricted and free access to biodiversity information further ensures public participation by offering the North American public the resources needed for research, policy making and community empowerment. Indeed, NABIN, through its emphasis on a holistic approach to data sharing and diffusion, gives the North American public the tools to analyze environmental issues directly affecting their communities and region.

Capacity Building

NABIN fosters linkages among previously independent research and public communities by interconnecting their information resources. This unrestricted and free interconnection of biodiversity information offers North American communities and governments the means to better choose among policy options and modes of implementation. NABIN also offers a feasible model for other environmental data communities to integrate and share information. In summary, by giving interested stakeholders access to more complete information, NABIN ensures: better tools to assist policy makers, enhanced environmental management, the ability of all communities to understand and participate in an environmental issue, increased collaboration and sharing of expertise, and a template for other information projects and initiatives.

Expected Results

The project will offer national, regional and international groups the knowledge to deal with problems such as meta-data, databases holding incomplete information and residing on different platforms, and issues of copyright, public access and collaboration with other projects. In addition, the project will also offer a means to integrate diverse data, thereby giving users an holistic view. And last, because of the collaborative emphasis of the project with other initiatives, it will foster greater sharing of expertise and information.

In the 1999 phase of this ongoing project, efforts will be directed toward incorporating other taxa into the distributed query system. In this manner, the system will offer:

- an holistic perspective of North American species;
- a means to integrate databases containing complementary information or other taxa residing on different servers, platforms and regions;
- a solution to problems associated with taxonomic authority;
- meta-data information and geo-spatial analysis; and
- unrestricted access to North American biodiversity information.

The project will also work with national and international initiatives such as the Canadian Biodiversity Information Infrastructure, the Inter-American Biodiversity Information Network (IABIN) and the Convention on Biological Diversity Clearinghouse Mechanism by:

- identifying how NABIN can assist the development of national and international initiatives;
- offering a viable and functioning system for use by national and international initiatives;
- offering technological know-how and experience to other national and international initiatives;
- collaborating on work so as to avoid duplication of efforts; and
- discussing how national, regional and international projects can be more tightly integrated.

Pollutants and Health

The mission of the program area “Pollutants and Health” is to establish cooperative initiatives to prevent or correct adverse effects, on a North American scale, from pollution to human and ecosystem health. Guidance on methods to accomplish this mission is embodied within the language of Article 10 of the NAAEC. These methods include: encouraging technical cooperation between the Parties; promoting pollution prevention techniques and strategies; recommending appropriate limits for specific pollutants, taking into account differences in ecosystems; recommending approaches for the comparability of techniques and methodologies for data gathering and analysis, data management, and electronic data communications; and promoting public access-to-information concerning the environment that is held by public authorities of each Party.

Four programs within the CEC specifically address the protection of human and ecosystem health:

- Cooperation on North American Air Quality Issues
- The Sound Management of Chemicals
- The North American Pollutant Release and Transfer Register
- The Pollution Prevention Program

Through each of the programs the following objectives are pursued:

- facilitating coordination and cooperation between the three countries on protection of the environment;
- enhancing comparability and compatibility between the three environmental protection systems;
- improving the knowledge base on issues of environmental pollution;
- developing technical and strategic tools to avoid, eliminate, reduce, or manage environmental pollutants; and
- improving the scientific, technical, and strategic capabilities of North American environmental protection agencies.

The activities planned and described in this document are the result of a coordinated effort between the four programs to maximize their combined benefit. These activities have also been designed to coordinate with and enhance the efforts of other North American environmental protection entities.

A major component of protecting human and ecosystem health is ensuring the quality of our air, something that is of equal importance to all three North American countries. It is also an area in which the CEC can play a highly significant role. Although there are a number of binational initiatives addressing air quality issues along the two borders between the North American countries, the CEC and its Air Issues Program have a unique mandate to address air quality issues in a trilateral context. In this regard, the challenge is to address trilateral issues in ways that also coordinate with and enhance ongoing binational activities.

In response to this challenge, the goals established for the CEC air program are, first, to further cooperation and coordination between the air quality management systems of the three North American countries and, second, to provide technical and strategic tools that the three countries may apply in their efforts to combat air pollution and maintain a healthful air quality. Achievement of these goals will result in the ability of the three countries to work cooperatively in a manner that recognizes, respects, and accommodates their sovereignty while ensuring sufficient data comparability and compatibility to facilitate informed discussion and mutual cooperation. This will allow issues of joint concern to be analyzed on the basis of real-world air sheds up to and including North America as a whole. Remedial approaches can then be developed which, while unique to each Party, would work in harmony toward the desired resolution.

These two goals will be achieved through four projects:

- *Facilitating Trilateral Coordination in Air Quality Management*
- *Developing Technical and Strategic Tools for Improved Air Quality in North America*
- *Environmental Cooperation in the NAFTA Transportation Corridors*
- *Regional Cooperation toward Improved Understanding and Eventual Implementation of the Clean Development Mechanism*

Facilitating Trilateral Coordination in Air Quality Management

Project Summary

The goal of this project is to improve the abilities of the air quality management agencies of the three countries to exchange technical information and establish opportunities for engaging in cooperative and coordinated air quality improvement activities. The project focuses on improving communications and interactions among these agencies, establishing improved mechanisms for exchanging technical data, and developing strategies to address air quality issues of common concern. To accomplish these tasks, the project is divided into five activities:

- Report, *The Status of Air Quality Management in North America*
- Follow-up to *The Status of Air Quality Management in North America*
- North American Air Quality Web Site
- Sharing Technical Information
- Exchange Program for Air Quality Scientists

Objectives

This project is designed to improve knowledge of the work of air quality management agencies in North America, in order to identify opportunities for increased cooperation and collaboration. Specifically the objectives include:

- fostering a greater awareness and understanding of the air quality management systems in North America;
- promoting compatibility in approaches to air quality management;
- establishing a regular exchange of technical information and air quality improvement strategies among North American air quality management officials; and
- improving the overall capacity of air quality management.

Rationale

The development of North American strategies to reduce the long-range transport of pollution through the atmosphere can best be accomplished through cooperative partnerships among air quality management agencies. Increased knowledge and understanding of the priorities and programs of the various air agencies in North America is the key for increased cooperation on a North American level. Greater exchange of information will lead to improved air quality management in North America and at the same time, maximize resources and avoid duplication of efforts of other institutions.

Progress to Date

While this in general is a new initiative, the CEC will be building on past experiences. In particular, the CEC worked with air officials from the northeastern states and the eastern Canadian provinces in a project to analyze the transboundary transport of ground-level ozone and its precursors along the eastern portion of the Canada-US border. The report prepared by the Northeast States for Coordinated Air Use Management (NESCAUM) and the Eastern Canadian Transboundary Smog Issue Group (ECTSIG) was used as a basis to follow-up actions for addressing this problem.

Actions

Actions in the five basic activities of this project can be broken down as follows:

Report: The Status of Air Quality Management in North America

In late 1998, efforts were initiated to develop a comprehensive report, *The Status of Air Quality Management in North America*. This report will foster a greater awareness and understanding of the other countries' air quality management systems. The resultant improvement in understanding will broaden the ability of the entities involved in air quality matters within each of the countries to work in cooperation and coordination with their counterparts in the other North American countries. It is envisioned this report will serve as an important reference document for all parties interested in air quality management within North America (public, private, academia, etc.). This activity is included in the three-year plan so the effort that started in 1998 will continue to completion with the publication of the report by the end of the first quarter of 2000. While this activity is scheduled to end at that time, a spin-off activity (the "Follow-up," see below) will then commence to address areas of systemic incompatibility noted in the report.

1999	
	<ul style="list-style-type: none"> • Review of initial draft of completed sections of <i>The Status of Air Quality Management in North America</i>. • Final draft completed and reviewed.
Total Resources Required	\$79,000

2000	
	<ul style="list-style-type: none"> • Presentation of final publication of air quality status report.
Total Resources Required	\$5,000

Follow-up to The Status of Air Quality Management in North America

This activity is designed to address those areas of systemic incompatibility noted in the activity above, and identify approaches for resolution. The advisory panel for *The Status of Air Quality Management in North America* report will be tasked with prioritizing the noted areas of incompatibility. Expert advisory panels, specific to each area of incompatibility, will then be formed to develop approaches for resolution. It is envisioned that two areas of incompatibility will be addressed each year during 2000 and 2001.

2000	
	<ul style="list-style-type: none"> • Formation of expert advisory panel(s). • Submit recommendation for action.
Total Resources Required	\$149,000

2001	
	<ul style="list-style-type: none"> • Formation of expert advisory panel(s). • Submit recommendation for action.
Total Resources Required	\$149,000

North American Air Quality Web Site

This activity is designed to develop a North American Air Quality web site as a central location for information pertaining to air quality issues in North America. The initial building block for the site will be the report, *The Status of Air Quality Management in North America*. Through continual updating, this site will ensure the information contained in the report is contemporaneously correct. It is envisioned that the site will, by itself, provide a solid basic understanding of the system(s) of air quality management employed in North America. Through an organized index of electronic links to other sites and databases, this site will provide the user a single location from which virtually every aspect of air quality management in North America can be investigated. This will create a greater opportunity for decision-makers, scientists, and the public to become better informed, and enable the public, particularly, to participate more meaningfully in the decision-making processes available.

<i>1999</i>	
	<ul style="list-style-type: none"> • Design web site and input available information.
Total Resources Required	\$40,000

<i>2000</i>	
	<ul style="list-style-type: none"> • Site completion and activation. • Site maintenance.
Total Resources Required	\$21,000

<i>2001</i>	
	<ul style="list-style-type: none"> • Maintain site.
Total Resources Required	\$21,000

Sharing Technical Information

The CEC air program will evaluate options and work for the establishment of an annual meeting of North American air officials (NAAO) to provide opportunities for the sharing of technical information and air quality improvement strategies. Such opportunities for professional interaction will also help develop scientific collaboration between the staff of the various agencies.

<i>1999</i>	
	<ul style="list-style-type: none"> • Identify current regular meetings of each Party's air officials. • Discussions with air officials of each Party to identify needs and/or concerns. • Explore holding an NAAO meeting in conjunction with an existing meeting. • Establish initial meeting date and location.
Total Resources Required	\$23,000

<i>2000</i>	
	<ul style="list-style-type: none"> • Provide support for meetings.
Total Resources Required	\$122,000

Exchange Program for Air Quality Professionals

This activity will provide opportunities for technical and planning staff to work for short periods of time with their counterparts from one of the other North American countries. These onsite, one-on-one working opportunities will allow the exchange of knowledge to occur on specific issues of importance to each country. Ambient monitoring, impact and back-trajectory modeling, inventorying of emissions, and smoke management programs are envisioned as examples of such issues of importance. This activity will improve the overall capacity of air quality management within North America through the exchange of technical and strategic knowledge between the staffs of the three countries. It will also improve opportunities for intracontinental coordination as a result of a greater understanding of the techniques employed by each country, and increased familiarity among staff members. CEC will poll each of the Parties to determine a list of areas of need. CEC will then search existing programs at the local/municipal, state/provincial, and federal levels to identify exchange opportunities that will address those needs. In 1999, funds have been budgeted to allow up to 5 individuals to participate in exchange programs for up to a total of 50 days. In 2000 and 2001, the budgeted funds are increased to cover up to 20 individuals for a total of 100 days.

1999	
	<ul style="list-style-type: none">• Complete initial identification of needs and opportunities.• Initial scheduling of exchange programs.
Total Resources Required	\$24,000

2000	
	<ul style="list-style-type: none">• Continued support for exchange program.
Total Resources Required	\$70,000

2001	
	<ul style="list-style-type: none">• Continued support for exchange program (final year).• Meld exchange program with North American Air Officials Association.
Total Resources Required	\$70,000

Public Participation

The focus of this project is to increase partnership among air quality officials and scientists. Nonetheless, there is a focus on enabling the public to become more informed and therefore better able to be involved in public policy issues related to transboundary air pollution through the establishment of a North American air quality web site.

Capacity Building

Greater exchange of information and experience among air quality officials will increase the overall quality, availability and accessibility of air quality data within North America and greatly expand our capacity for cooperative air quality management throughout the North American region.

Expected Results

Upon the completion of these activities, it is expected that the North American air quality management agencies will have a much improved level of knowledge of one another—resulting in improved interagency communications and interactions, better mechanisms to readily exchange technical data among themselves, and greater opportunities to cooperatively develop strategies to address air quality issues of common concern.

Overall Budget: Facilitating Trinational Cooperation in Air Quality Management

<i>Overall Budget</i>			
	1999	2000	2001
Total Resources Required	\$166,000	\$367,000	\$177,000

Developing Technical and Strategic Tools for Improved Air Quality in North America

Project Summary

The goal of this project is to develop technical tools that have trinational applicability to planning and pollution reduction programs in North America. The project concentrates on actions that demonstrate success stories. In addition to the development of innovative tools and programs, this project will provide feedback on pollutant reduction strategies. The project will consist of six activities:

- Reduction of Mercury in Waste Streams
- Continental Modeling of Dioxin Emissions
- Development and Analysis of Mercury Transport Model
- Air Quality Trends of Major Cities in the Border Regions
- Exceptional Stationary Source Permit Programs
- Support to the San Diego-Tijuana Air Basin

Objectives

This project is aimed at stimulating the development of tools needed for achieving and maintaining healthful air quality in North America. Specifically the objectives of this project are to:

- highlight and promote successful voluntary and regulatory programs related to air quality management,
- improve modeling of emissions for dioxins and mercury, and
- provide feedback on efforts to establish more effective reduction strategies, in particular, along the borders of the three countries.

Rationale

Air as a medium generates environmental action across the borders of the three North American nations. Credible and accurate information is crucial to addressing pollution problems within transboundary airsheds. In order to facilitate effective cooperative efforts, reliable information is needed on the characteristics and dynamics of transboundary airsheds, interaction between airsheds, and the movement of pollutants emitted into the environment through the atmosphere. The promoting of effective tools and strategies to address specific pollutants can help jurisdictions in North America advance on improving air quality. In 1996, the Council of the CEC agreed to promote the collection and exchange of appropriate data, and the development and application of suitable models for the range of chemical substances of concern as defined by the CEC (Council resolution 96-05).

Progress to Date

Two meetings were held in Tijuana/Rosarito during 1998. The purpose of the meetings was to establish a binational group of citizens and government officials from the Tijuana/San Diego air shed to bring focus to air quality issues within that binational air shed. An ad hoc steering committee is now working on the establishment of a formal framework including bylaws, membership list, and staff support for what is being termed as the San Diego/Tijuana Air Shed Alliance. The other activities are new for 1999 and, therefore, do not yet have a history to report.

Actions

Reduction of Mercury in Waste Streams

The purpose of this activity is threefold: (1) to develop a report describing public and private programs that have most successfully reduced mercury from their waste stream; (2) to identify regulatory barriers to the collection, storage, and transportation of waste products and devices that contain mercury; and, (3) to present model regulatory program solutions to overcome identified regulatory barriers. Airborne mercury poses a significant threat to human and wildlife health due to its ability to be transported within the troposphere for long distances and to bio-accumulate through the food chain. The Sound Management of Chemicals (SMOC) Mercury Task Force has identified incineration of waste material as a major source category of mercury emissions, and, as such, will be a priority issue in the development of a North American Regional Action Plan (NARAP). The products of this activity will provide both a menu of reduction opportunities and templates for approaches to overcome barriers to the regulatory process. These tools will have tri-national applicability for the reduction of airborne mercury, and the related health risks to humans and wildlife. This activity will be of immediate use to the mercury reduction efforts of the New England Governors and Eastern Premiers, and to the CEC's SMOC Working Group in the implementation of their NARAP for mercury. For that reason, coordination of this activity with both of those groups will be a high priority.

1999	
	<ul style="list-style-type: none">• Complete draft report.• Complete peer review of draft.• Complete final draft.• Publish document and present at public forum.
Total Resources Required	\$39,000

Continental Modeling of Dioxin Emissions

The objective of this health-based, continental modeling activity is to determine the relative impact on selected receptor areas within the North American polar region from dioxin emission sources within North America. Inventories of dioxin emissions from the United States and Canada now exist and an initial inventory of dioxin emissions from Mexico will be completed within the second quarter of 1999. These data create the opportunity to utilize recently developed modeling techniques to assess impacts on the polar food chain of dioxin emitted from North American sources. Knowledge gained from this project will further the ability of each of the Parties to perform this same type of impact analysis on other impacted areas, and for other persistent organic pollutants (POPs). The results will assist in focusing near-term dioxin reduction efforts where they would generate the greatest benefit to the regions selected. It is anticipated the activity for a professional exchange program envisioned under the project, entitled “Facilitating Trinational Coordination in Air Quality Management,” will serve as a vehicle for transferring the technical expertise and tools gained from this activity to the technical staff of the other Parties. The results will be provided to regulatory agencies whose jurisdictional boundaries are determined to encompass one or more of the most significant contributors to polar dioxin concentrations.

1999	
	<ul style="list-style-type: none"> • Develop a protocol for the study. • Review of the project protocol by an external expert panel including representatives from the Sound Management of Chemicals (SMOC) Working Group, NOAA, IJC, NGOs and indigenous peoples. • Complete model operation and analyze results. • Review of draft report by external expert panel.
Total Resources Required	
	\$122,000

2000	
	<ul style="list-style-type: none"> • Final editing, translation and publication of the report. • Presentation of the final report at a public forum.
Total Resources Required	
	\$30,000

Development and Analysis of Mercury Transport Model

This activity is designed to develop a mercury chemistry module for use in the HYSPLIT model, and a subsequent comparative analysis of the HYSPLIT model with other contemporaneous models available for mercury (RELMAP, REMSAD, and possibly others). The HYSPLIT model with the new mercury chemistry module will be run using recent emission inventories of mercury from Canada and the United States and same-year monitored air quality data. While the resultant tool will have trinational applicability, the results of the modeling, which were produced as a part of this analysis, will have immediate utility to the mercury reduction efforts by the New England Governors and Eastern Premiers, the Gulf of Maine pilot project, and the NARAP implementation

efforts of the SMOC Working Group. The SMOC Mercury Task Force has indicated the availability of a credible model for the assessment of long-range transport and deposition of mercury is a priority matter in the design and implementation of a NARAP for mercury. This activity will be coordinated with each of those groups. It is anticipated the activity for a professional exchange program envisioned under the project, entitled “Facilitating Trilateral Coordination in Air Quality Management,” will serve as a vehicle for transferring the technical expertise and tools gained from this activity to the technical staff of the other Parties.

<i>1999</i>	
	<ul style="list-style-type: none"> • Complete formatting data. • Complete modeling, and submit draft report. • Conduct review by expert panel. • Submit final report.
Total Resources Required	\$56,000

<i>2000</i>	
	<ul style="list-style-type: none"> • Publish document and present it at a public forum
Total Resources Required	\$5,000

Air Quality Trends of Major Cities in the Border Regions

This activity is to develop an annual report on air quality trends and, to the extent practicable, associated health indicator trends for major cities located along the border region of the three North American countries. Individually, a number of cities along each border monitor and track their air quality. However, there is no single compilation of air quality data for border cities that allows a “full-scale” view of pollution trends along the length of each border. This full-scale view will provide an early warning mechanism for planners to develop coordinated and more effective reduction strategies. It will also highlight the operation of innovative practices that may be replicated elsewhere in North America. Additionally, over time, it will highlight needs for additional monitoring in areas along the borders. A panel of advisors will be assembled to develop the scope of the work (pollutants and specific locations to be addressed, health indicators to be tracked, type of trend analysis, method of reporting, etc). This activity will be coordinated with the Border XXI Program, the IJC, and other binational entities determined to be involved in related activities and will build upon their efforts. The annual report will be made available to the federal air quality management agencies of the three countries, the local/municipal and state/provincial air agencies along each border, entities involved in binational air quality management, and NGOs. Additionally, the report will be available to the public through the CEC’s North American Air Quality Web Site developed through the first project, above.

<i>2000</i>	
<ul style="list-style-type: none"> • Complete the collection of baseline data for 1990 through 1996. • Complete the initial draft report. • Publish the final report and present it at public forum(s). 	
Total Resources Required	\$107,000

<i>2001</i>	
<ul style="list-style-type: none"> • Complete data collection for most recent year. • Complete draft of updated report. • Publish and present final report at public forum(s). 	
Total Resources Required	\$38,000

Exceptional Stationary Source Permit Programs

This activity will create a report that identifies and describes exceptional stationary source permit programs that have demonstrated significant environmental improvement and acceptability by all stakeholders. By providing descriptive information on those permit programs determined to be the “best of the best,” air pollution control agencies will have a menu of permitting strategies modeled on the continent’s most successful programs. An advisory panel consisting of selected stakeholders will be employed to develop criteria for ranking candidate permit programs.

<i>2000</i>	
<ul style="list-style-type: none"> • Establish criteria for ranking permit programs. 	
Total Resources Required	\$65,000

<i>2001</i>	
<ul style="list-style-type: none"> • Request for nominations of permit programs. • Ranking of nominated programs. • Publication and presentation of report at public forum. 	
Total Resources Required	\$81,000

Support to the San Diego-Tijuana Air Basin

The purpose of this activity is to provide technical and administrative support for the San Diego-Tijuana Basin Alliance through 1999, and to provide funding for the development of a Geographic Information System (GIS) based inventory for Tijuana's emission sources. Previously designated as US-Mexico Pilot Study 2, this activity was initiated to assist in the establishment of a public-private partnership intended to lend focus and support for a binational air management strategy and program for the San Diego-Tijuana/Rosarito Air Basin. Termination of CEC support had been projected for 1998. However, it is felt that support is needed during 1999 to improve the opportunities for success of the alliance. The creation of this alliance is envisioned to facilitate binational cooperation in air quality management. If successful, this alliance could serve as a model for additional public-private, binational partnerships on either North American border. This activity will be pursued in coordination with the Border XXI Program.

1999	
	<ul style="list-style-type: none">• Provide administrative and technical support.
Total Resources Required	\$38,000

Public Participation

Opportunities for the public to participate include holding meetings where representatives of citizen groups and business groups will be invited to review and discuss reports and results produced under this project, as well as including representatives of citizen groups and business groups as members of the advisory panel.

Capacity Building

This project will help develop capacity among air quality managers in improving ways to address transboundary air pollution through the development and promotion of successful tools and strategies. Capacity building opportunities are built into a number of the actions laid out above, and in particular in to the San Diego-Tijuana Basin initiative.

Expected Results

The list of expected results is as follows: Activities "Reduction of Mercury in Waste Streams" and "Exceptional Stationary Source Permit Programs" will provide menus containing descriptions of the best mercury reduction and stationary source permit programs in North America. Air quality officials will then be able to select the program that best meets their needs from this menu. Activities "Continental Modeling of Dioxin Emissions" and "Development & Analysis of Mercury Transport Model" will provide technical tools in the form of modeling techniques for use in assessing the impacts and sources of airborne mercury and dioxins. Activity "Air Quality Trends of Major Cities in the Border Regions" will provide an early warning tool for air quality planning professionals by highlighting trends toward worsening air quality within the North American border regions. If the pilot project proves to be successful, the activity "Support to the San Diego-Tijuana Air Basin" will provide an example of how to address the unique needs of discreet binational air basins.

Overall Budget: Cooperation on North American Air Quality Issues

Overall Budget	1999	2000	2001
Total Resources Required	\$255,000	\$207,000	\$119,000

Environmental Cooperation in the NAFTA Transportation Corridors

Project Summary

This project seeks to develop opportunities for improving environmental quality in the “NAFTA transportation corridors.” The first phase of this project is to work in partnership with agencies concerned with trade, transportation and environment at the federal, state, provincial and local levels to explore the need and possibilities for incorporating environmental opportunities in the NAFTA transportation corridors. This could include the design of “green transportation corridor” pilot projects. The goal of these initiatives would be to demonstrate successes in pursuing the twin objectives of economic prosperity through trade and environmental sustainability in the context of NAFTA. Follow-up work in the years 2000 and 2001 will depend on the outcome of phase 1 undertaken in 1999.

Rationale

Commercial traffic volumes between NAFTA partners have increased more than 50 percent since 1991. Traffic congestion and increased emissions are some of the concerns that the three countries face. The potential for environmental degradation and reduced economic competitiveness is significant. The three countries are working to find ways to overcome some of the technological, infrastructural and procedural challenges, which affect the movement of goods and services under NAFTA. A logical response is to engage in efforts that improve the efficiency in the movement of goods and services and at the same time undertake complementary initiatives to enhance the environmental quality in these transportation corridors. As well, North American cooperation on trade and transportation may offer opportunities to reduce greenhouse gas emissions.

A number of initiatives in North America provide opportunities for new trans-border and regional projects that could demonstrate innovative methods for cooperation in areas of trade, transportation and environment. Some of them include the Transportation Equity Act for the Twenty-first Century (TEA21), the Clean Cities Program, and the North American International Trade Corridor Partnership (NAITCP).

Initiatives that demonstrate “real life” opportunities to pursue the twin objectives of economic prosperity through trade and environmental sustainability can be an important contribution resulting from a new North American partnership of organizations concerned with the environment, trade and transportation.

Actions

1999

The CEC, in collaboration with those agencies engaged in the trade, transportation and environmental aspects of the “NAFTA corridors”, will explore the feasibility of demonstrating the potential for increasing efficiency in the movement of goods and services and improving environmental quality in these corridors. This effort may include identifying the trends and issues that define the interface between trade, transportation and the environment, and then the approaches to address those trends and issues. This effort will also include identifying potential sites, partners, costs, and sources of funding. The CEC will seek to leverage resources from other agencies and departments to carry out this work.

1999	
	<ul style="list-style-type: none">• Developing a concept paper for exploring green NAFTA corridors with other agencies.• Scoping meetings with appropriate federal, state/provincial and local agencies to determine need and feasibility of “greening” NAFTA corridors.• Developing a proposal for collaborative initiatives with interested agencies from the federal, state, provincial, local governments and private sector organizations.
Total Resources Required	\$20,000

Public Participation

The opportunities for involving the public in this project are significant. Many local communities are engaged in addressing the transportation and environmental issues along the corridors. Their involvement in these initiatives will be crucial. Part of the scope of this phase of this project will be the identification of community organizations that are active in addressing these concerns.

Capacity Building

There are already efforts in place to improve the capacity in fields related to trade and transportation. For example, transport institutes are being set up at major universities. New efforts could include mechanisms for sharing expertise, research and education on environmental aspects related to trade and transportation such as fuel efficiency, pollution and vehicle emissions abatement, etc.

Regional Cooperation Toward Improved Understanding and Eventual Implementation of the Clean Development Mechanism and Joint Implementation

Project Summary

The purpose of this project is to develop North American opportunities for cooperation in reducing greenhouse gas emissions (GHG), through project-based emissions credit activities such as the Clean Development Mechanism (CDM) and Joint Implementation (JI). In support of this objective, the project will summarize progress underway in clarifying relevant technical and methodological issues supporting implementation of other CDM and JI projects, facilitate the informal exchange of information among representatives of the three countries, encourage innovative partnerships between the private and public sectors in support of CDM and JI, and identify methods and partnerships needed to implement CDM and JI-pilot project(s) in North America.

Objectives

The objectives of this project are to:

- ensure that the goals and opportunities inherent in CDM and JI are as widely understood as possible by public policy makers, the private sector, NGOs and other relevant stakeholders;
- facilitate the distribution of information and capacity building in North America related to CDM and JI, with particular emphasis on enhancing private sector outreach and ensuring transparency;
- encourage and strengthen partnerships among private sector entities and between private and public sectors in support of CDM and JI;
- identify eligible pilot project sectors; and
- implement a pilot project(s) in the North American region in support of the CDM and JI.

Rationale

The Kyoto mechanisms (e.g., CDM, JI and trading) provide opportunities for the CEC member nations to encourage cost-effective GHG emission reductions through private sector and public-sector partnerships. The Kyoto mechanisms will require approaches crafted to ensure that environmental benefits are achieved in a way fully compatible with the objectives of sustainable development. In recognition of the relevance of the Kyoto mechanisms to the work of the Commission, the CEC Council's Joint Communiqué, issued during the Fifth Regular Session of the Council (Mérida, 26 June 1998) noted that, "Within the framework of the Kyoto Protocol, the CEC will work with the three nations and the private sector to develop North American opportunities for the Clean Development Mechanism."

Background

In 1995, Council signed a letter of intent to cooperate on energy efficiency and climate change. Background feasibility and other studies were released in May 1997 regarding opportunities at the regional level related to addressing climate change issues, including issues related to emissions trading schemes. Since the adoption of the CDM under the Kyoto Protocol in December 1997, progress continues to be made in defining areas of potential eligibility under the CDM and JI.

Progress to Date

This project may draw upon work undertaken by the CEC in various areas, including issues related to work on GHG reduction options. Phase I of the CEC's work on GHG options involved preparing information on GHG emissions inventories in the three countries, providing information on national climate change programs, as well as developments in emissions trading in each of the three countries. Phase I also provided a preliminary assessment under four different scenarios regarding the creation of a GHG emissions trading scheme.

Phase II, launched in 1998, examined existing capacities in each of the three countries to support a GHG emissions trading scheme, as well as to assess potential capacities needed in the three countries to participate effectively in an international GHG emissions trading scheme. Phase II included a review of existing government programs, institutions, statistical data, monitoring and verification mechanisms, as well as the identification of potential gaps and needs required to participate in an international emissions trading scheme. The review identified areas where North American cooperation can provide a unique advantage to the three countries as they prepare to participate in the CDM: information gathered during Phase II was presented at a workshop in Mexico City in May 1998.

In drawing links between this CDM project and past work, it should be emphasized that the CDM is distinct from projects related to GHG emissions trading. However, some statistical and other information, including the compilation of national climate programs and inventories of emissions, might be useful in supporting work on the CDM and JI.

Actions and Expected Results

1999–2000–2001

Actions undertaken over the three years of this project will concentrate on outreach and the updating of progress in clarifying methodological and other issues. This will facilitate (a) an informal exchange of information among the three governments, (b) private sector awareness of opportunities arising from project-based CDM and JI activities, and (c) identifying private and public sector partnerships for implementing one or more pilot projects supporting CDM and JI. Outreach activities will include updating and disseminating relevant technical and methodological work from various organizations in support of the Kyoto mechanisms, including the joint subsidiary bodies of the United Nations Framework Convention on Climate Change (UNFCCC), the Working Group III of the Intergovernmental Panel on Climate Change (IPCC), the World Bank Group, the Global Environment Facility, UNEP and UNCTAD. These outreach activities will enhance private sector understanding of methods to calculate baselines.

1999, 2000 and 2001			
<ul style="list-style-type: none"> • Summarize technical and methodological issues, and facilitate an informal exchange of information among the three Parties: Summarize ongoing work by relevant organizations concerning the clarification of methodological and other issues in support of CDM and JI project-based implementation. Among the issues to be tracked will include calculation of baselines, national inventories for GHG emissions, credits for sinks, estimation of marginal abatement costs, carbon sequestration issues, and criteria for project eligibility. In addition to preparing summary reports, one or more workshop(s) will be held among the three governments to facilitate an informal exchange of information. • Enhance private sector awareness: Prepare periodic information updates, as well as a more detailed report, to assist policy makers and the private sector identify opportunities in the North American region to implement CDM and JI project-based activities. • Encourage private-public sector partnerships: Host a workshop for representatives from the three countries to examine opportunities arising from the CDM and JI in such areas as technology transfer, energy policies, infrastructure, and energy efficiency. Identify key sectors for GHG emission reductions. • Identify pilot-project(s) at the North American level: Identify methods, technical issues, project areas and necessary partnerships needed to implement one or more pilot projects in support of the CDM and JI. 	1999	2000	2001
Total Resources Required	\$55,000	\$55,000	\$55,000

Sound Management of Chemicals Program

The Sound Management of Chemicals (SMOC) Program is an ongoing intergovernmental program to reduce the risks of persistent toxic substances to human health and the environment. Actions include the phase out and banning of particular chemicals of concern, encouraging pollution prevention, and achieving emission reductions. The North American Working Group on the Sound Management of Chemicals, hereinafter referred to as the Working Group, its subsidiary bodies, and the Secretariat of the Commission for Environmental Cooperation (CEC) will continue to help implement the decisions and commitments set out in Council Resolution 95-05 on the Sound Management of Chemicals, including the implementation of instructions subsequently received from the Council of the CEC pursuant to this Resolution.

Under the Resolution, the Parties have committed “to regional cooperation for the sound management, throughout their life cycles, of the full range of chemical substances of mutual concern including pollution prevention, source reduction and pollution control.” The Parties further directed that the Working Group, in addressing the decisions and commitments contained in the resolution “recommend, as set out in Chapter 19 of Agenda 21: . . . concerted activities to reduce risks presented by toxic chemicals, taking into account the entire life cycle of chemicals. These activities could encompass both regulatory and non-regulatory measures, such as promotion of the use of cleaner products and technologies; emission limitations; product labeling; use limitations; economic incentives; and phasing out or banning of toxic chemicals that pose an unreasonable and otherwise unmanageable risk to the environment or human health and those that are toxic, persistent and bioaccumulative and whose use cannot be adequately controlled. . . .”

This program is very much an environment/economy initiative and the chemicals being addressed result from anthropogenic industrial/economic activities. Typically the substances considered for regional action are or have been contained in traded goods (examples include PCBs; pesticides such as DDT, chlordane and lindane; and metals such as lead and mercury) or are by-products of industrial activities (examples include dioxins, furans, hexachlorobenzene and mercury).

An overall general objective of the program is to provide a continuing and increasingly effective forum to facilitate cooperation and trilateral agreements and action on managing and reducing chemical pollution in North America. Examples include collaborative and cooperative efforts by the three countries in negotiating future decisions and commitments within international settings, such as the United Nations Environmental Programme (UNEP), the Organization of Economic Development (OECD), the Organization of American States (OAS), or the Intergovernmental Forum on Chemical Safety (IFCS). A recent example is the CEC/SMOC input to the first negotiating session on a globally binding instrument on Persistent Organic Pollutants (POPs), held 29 June to 3 July 1998 in Montreal. Many of the activities under the SMOC program will also involve considerable cooperation with other CEC projects, especially those involving air quality and law and enforcement cooperation.

The CEC SMOC Program has developed active partnerships with other regional and binational initiatives, including those of the International Joint Commission, the Binational Strategy under the Great Lakes Water Quality Agreement, and the New England Governors and the Eastern Canadian Premiers.

A second enabling objective is to develop and maintain a knowledgeable and supportive public and stakeholder constituency in support of this program. The program objectives will be met through a single project:

- *The Sound Management of Chemicals project*

Project Summary

The Sound Management of Chemicals (SMOC) project is an ongoing intergovernmental initiative to reduce the risks of persistent toxic substances to human health and the environment. By focusing on persistent, bioaccumulative and toxic substances, the project provides a forum for: a) identifying priority chemical pollution issues of regional concern, b) developing North American Regional Action Plans (NARAPs) to address these priority issues, c) overseeing the implementation of approved NARAPs, and d) facilitating and encouraging capacity building in support of the overall goals of the SMOC, with emphasis on the implementation of approved NARAPs.

The chemical-by-chemical approach will continue to be a significant proportion of the project. However, other more proactive aspects of the sound management of chemicals expected to be given greater attention include: 1) strengthening capacity to implement the full range of decisions and commitments contained in Resolution 95-05; 2) monitoring, modeling and research assessing exposure to chemicals and risks from them, as well as evaluating progress under the SMOC initiative; 3) the consideration of clusters or groups of chemicals, and specific industrial sectors or industrial complexes; and 4) alternative approaches and innovative technologies.

Objective

The objective of this project is to implement the decisions and commitments contained within or developed pursuant to Council Resolution 95-05 on the Sound Management of Chemicals. An overall general objective of the project is to provide a continuing and increasingly effective forum to facilitate cooperation and trilateral agreements and action on managing and reducing chemical pollution in North America while developing and maintaining a knowledgeable and supportive public and stakeholder constituency in support of this program. Project objectives will be met through an integrated work program under the general direction of the Working Group, that integrates the core elements of the SMOC initiative and its capacity building elements.

Rationale

Chemical substances, especially those that are persistent, bioaccumulate in living organisms and are transported long distances in environmental media and as products of commerce, are a widespread concern in North America. The nature, scope and significance of the issues related to these chemicals call for effective international cooperation and response. Numerous provisions of the North American Agreement on Environmental Cooperation (NAAEC) provide a formal mandate for this project. Article 10(5)(b) specifically calls for the Council “to promote and as appropriate develop recommendations regarding appropriate limits for specific pollutants, taking into account differences in ecosystems” and Article 2(2) states that “each party shall consider implementing in its law any recommendation developed by Council under Article 10(5)(b).” Council Resolution 95-05, agreed to in October 1995, provides an overall framework for the three countries to work together in addressing the sound management of chemicals.

That Resolution specifically called for regional action plans to be developed for PCBs and other persistent and toxic substances and directed that initial attention be given to persistent and toxic substances contained in the list of twelve persistent organic pollutants listed in Decision 18/32 of the Governing Council of UNEP of May 1995, and to certain metals. The Resolution established an intergovernmental working group to work with the CEC in implementing the Resolution.

The increasing emphasis on extension work to develop capacity for implementing existing and potential NARAPs reflects the recognition that, while each of the three countries have capacity building/coordination requirements related to the SMOC, the major costs associated with such implementation will be carried by Mexico. Immediate concerns relate to the NARAPs for DDT, chlordane and mercury. This emphasis also reflects the recognized need to actively support Mexico in implementing these decisions and commitments through capacity building and as well as through the use of CEC funds as seed money to obtain additional funding in support of full implementation for NARAPs and other aspects of Council Resolution 95-05.

Progress to Date

A framework agreement in the form of Council Resolution 95-05 on the Sound Management of Chemicals was developed and adopted to facilitate regional cooperation and action to address persistent and toxic chemicals in North America. NARAPs for three substances on the UNEP list of persistent organic pollutants—PCBs, DDT, and chlordane—have been developed and approved by the Council of the CEC. A fourth NARAP on mercury has been completed and approved by Council as phase 1 of a more comprehensive action plan on mercury to be completed by June 1999. A “Process for identifying candidate substances for regional action under the Sound Management of Chemicals Initiative” was also approved. These documents are posted on the CEC web site and are also available in a consolidated report, entitled *The Sound Management of Chemicals Initiative under the North American Agreement on Environmental Cooperation: Regional Commitments and Action Plans*.

The implementation phase of each approved NARAP is being guided by an Implementation Task Force that has replaced the Task Force that originally developed the NARAP. A Substance Selection Task Force is overseeing the “Process for identifying candidate substances for regional action under the Sound Management of Chemicals Program.” Nomination dossiers for hexachlorobenzene, dioxins and furans, lindane and lead have been prepared by governments, and the Substance Selection Task Force is now evaluating these candidate substances in accordance with the approved process. It is anticipated that NARAPs will eventually be developed for one or more of these substances and that decision documents for at least two of the nominated substances will be available for Council consideration and approval by June 1999.

Capacity building is critical to the implementation of NARAPs. The SMOC, its subordinate bodies and the CEC Secretariat are all expected to be alert to opportunities for partnerships and external resources to promote capacity building in support of the SMOC initiative. In addition, the Working Group has assigned specific responsibilities in this regard. Each Implementation Task Force has a responsibility to plan and recommend appropriate capacity building tasks to facilitate the implementation of specific NARAPs. In addition the Working Group has directed that all future NARAPs include a section on anticipated capacity building needs associated with their implementation.

The Chlordane Implementation Task Force has agreed that implementation of the NARAP on chlordane will be accomplished, in part, through the use of an existing forum, the US-Mexico Pesticide Information Exchange Program. The CEC was a co-sponsor of a recent workshop on alternatives to chlordane, held in McAllen, Texas, in November 1998. Participants included representatives from federal, state and local governments from both the United States and Mexico, as well as academic experts and industry officials. It was agreed that this forum was effective and that follow-up training was required for applicators of alternative termiticides. It was also agreed that training materials needed updating. The Task Force will be communicating this information in a proposal to the Working Group and its newly established Capacity Building Task Force.

The Working Group established, at its 14–15 October 1998 regular meeting, a Capacity Building Task Force to develop a concept paper and strategic plan for review, revision and adoption by the Working Group. This concept paper and strategic plan will, once approved, serve to guide the expenditure of CEC capacity building funds, including the special allocation of 1996 surplus funds. It is also intended to serve as a reference document when seeking partnerships and external funding for capacity building in support of the SMOC initiative. The Working Group recognizes a sense of urgency in this area and instructed the Capacity Building Task Force to provide a draft concept paper in time for consideration at a Working Group conference call in January 1999.

The Working Group also concluded that greater priority needed to be assigned to the development of a NARAP on monitoring and assessment in support of the SMOC initiative. This activity is, in part, a capacity building activity aimed at improving the quality, relevance and comparability of monitoring information collected in the three countries. It has direct relevance to projects aimed at improving the performance of environmental analytical laboratories and will also relate to the Ecosystem Monitoring Initiative under the CEC's Conservation of Biodiversity program. The Working Group established a small task force and instructed it to have a draft concept paper available for discussion by the Working Group in the January 1999 conference call.

Capacity building under this initiative began in a modest way in 1996 with some small projects funded directly out of SMOC funds and others funded by the CEC's capacity building project. The funding from this capacity building project was allocated in accordance with an initial strategy and seven priority areas recommended by a consultant. In 1996, three activities were funded from this project. In 1997, a total of 11 activities were funded and, in 1998, funds have been committed for 12 activities.

This three-year program plan is intended to provide a sense of direction over the period from 1999 to 2001, together with specific actions and activities that build upon current and previous ones. A central feature of this program plan is an annual review and reporting phase so that, each year, the Working Group and assigned CEC Secretariat staff can consider and report on progress, experience gained and new opportunities. It is intended that this progress report would be publicly available. It would be forwarded along with suggested revisions to the three-year program plan for Council consideration and approval.

Actions

The activities carried out under this project are organized around meetings and conference calls of the Working Group and its subsidiary bodies, with the Secretariat providing administrative, coordination and professional support. The Working Group's regular meetings are scheduled in late spring and early winter. The spring meetings provide an opportunity to bring some work activities to completion in advance of regular meetings of Council. The winter meetings provide an opportunity to review progress and agree on input to the three-year program plan and budget. Subsidiary bodies, such as the Implementation Task Forces and the Substance Selection Task Force, meet in accordance with the workload and direction received from Council. The Working Group and its subsidiary bodies also communicate frequently through conference calls.

Working Group priorities and project progress are communicated regularly to the CEC Alternate Representatives through memoranda issued by the chair of the Working Group following regular meetings as well as through formal intergovernmental agreements that have been developed under the guidance of the Working Group. Initially, the work was focused almost exclusively on the development of regional action plans for reducing/phasing out selected persistent and toxic substances and on the development of a selection process for identifying candidate substances for future regional action under this initiative.

The SMOC initiative is entering a new implementation phase involving the integration of capacity building into all aspects of the work. In many instances the primary focus of capacity building activities will be in Mexico and while the Working Group and its subsidiary bodies will have oversight and general guidance roles to play, the primary day-to-day responsibility for implementing most capacity building activities will rest with Mexican members of these entities, working together with the CEC. Increasingly, important emphasis will be on leveraging new and additional funds to assist Mexico in capacity building to support the Sound Management of Chemicals Program. The concept paper on capacity building needs that is being developed under the guidance of the Capacity Building Task Force and the guidelines/criteria contained within it or developed subsequently will help guide and support these capacity building activities and will provide an important basis for leveraging external funds.

The major functions and responsible entities for carrying out the operational aspects of this project are:

- project planning and management with oversight provided by the Working Group with input from its subsidiary bodies and the CEC Secretariat;
- capacity building in general support of the SMOC initiative—the conceptual framework, strategic planning and priorities with respect to 1996 surplus developed, on behalf of the Working Group—by the Task Force on Capacity Building;
- capacity building as it relates to the implementation of specific NARAPs, including specific needs and plans developed by Implementation Task Forces;
- capacity building, including partnerships and the leveraging of external funding as coordinated under the general direction of the Working Group, by the CEC Secretariat;
- current oversight of the Implementation of the NARAP on PCBs provided by the Implementation Task Force on PCBs, taking into account the reduced significance of this NARAP given the Judicial decision in the USA regarding transboundary transport of PCBs;

- implementation of the NARAPs on DDT and chlordane with oversight and reporting by the Implementation Task Forces on DDT and chlordane, which are each led by Mexico;
- implementation of phase 1 of the NARAP on mercury, and development, completion and overseeing the implementation of phase 2 of the NARAP on mercury by the Implementation Task Force on mercury;
- evaluation of hexachlorobenzene, dioxins and furans, lindane, and lead as candidates for regional action under the direction of the Substance Selection Task Force of SMOC; and
- development of NARAPs or other follow-up actions for candidate substances evaluated through the substance selection process under the direction of substance-specific task forces.

Major strategic initiatives in support of the SMOC Program will or are likely to include:

- Measuring, monitoring, modeling and assessing the status and trends of chemicals in the North American Environment in conjunction with the CEC air program. This effort will lead to (a) the preparation of a concept paper on monitoring, modeling and assessment, (b) a workshop involving experts in these fields, and perhaps to the eventual preparation of a NARAP on monitoring.
- Preparation of an initial scoping paper on the nature, extent and significance of marine and freshwater ecosystems in the transport and cycling of persistent, bioaccumulative and toxic (PBT) substances. This initial effort will be primarily a literature search supplemented with expert input, including evaluation of data quality/comparability. It will be closely coordinated with the above activity on measurement, monitoring and assessment, and will build upon other regional efforts and other CEC projects. The scoping paper will include an initial assessment of (a) the significance of riverine transport of these substances to estuaries and marine ecosystems; (b) the fate, accumulation, and concentrations of these substances in marine waters, sediments, biota and food chain interactions; (c) the role of oceanic currents and migratory species in the transport of, and exposure to, these substances; and (d) research and monitoring needs and possible implementation mechanisms. It is anticipated that in 2000 selected research and monitoring needs and implementation mechanisms will be developed in more detail and that these will in turn be used as a basis to build consensus amongst the countries and engender support and cooperative partnerships amongst appropriate research and funding agencies.
- Preparation of a concept paper on capacity building together with a strategic action plan (which may take the form of a NARAP on capacity building).
- Systemic assessment (together with North American Environmental Enforcement and Compliance Cooperation Working Group) of various opportunities (including government regulation, economic incentives, voluntary initiatives, and community and local initiatives) to reduce chemical exposures and risks.
- Assessing the potential to address clusters of chemicals, grouped together because of their similarity in chemical and/or toxicological properties, association with particular sources and sectors, and with particular industrial complexes.
- Collaboration and cooperation, and where agreed, joint initiatives with other international entities such as the Canada/United States International Joint Commission and the NAFTA Technical Working Group on Pesticides.

While the actual functional activities that are selected with respect to capacity building will need to be adjusted in accordance with plans developed by the Capacity Building Task Force under the general direction of the Working Group, it is now expected that the range of capacity building activities encompassed within this project will include the following:

- implementing the NARAP on DDT, including the development of specific capacity-building plans and budgets to guide the expenditure of CEC resources;
- implementing the NARAP on chlordane;
- implementing the NARAP on mercury;
- implementing the NARAP on PCBs;
- improving the capacity to measure and assess the risks of chemicals to humans and the environment;
- improving the capacity of government agencies to plan and implement policies and programs for the SMOC;
- improving the capacity of industry, especially small and medium-size industries, to reduce the release of pollutants to the environment;
- improving training and education in support of the SMOC;
- building a broad-based public, media and political constituency in support of the SMOC; and
- identifying appropriate mechanisms to share CEC experiences under SMOC, in particular those of Mexico, with other key countries in the western hemisphere that have the potential to affect successful NARAP implementation.

Future capacity building activities are also anticipated to build upon the seven specific areas that have guided capacity building activities to date, namely:

1. Continuous updating of databases on toxic, persistent and bioaccumulative substances in Mexico.
2. Development of management procedures to control and restrict production, imports, trade and use of selected substances.
3. Identification and evaluation of substances for toxic, persistent and bioaccumulative substances to be phased out.
4. Disclosure of decisions to interested parties and communication of follow-up actions through printed and electronic documents.
5. Encouragement of research on the health and environmental risks related to the use in Mexico of substances subject to regional action plans.
6. Strengthening of the capacity for environmental sampling and analysis, and exposure and risk assessment related to problematic substances.
7. Strategic design for technology transfer to promote process changes, implementation of control systems, and remediation methods related to selected substances.

Public participation

The Working Group continues to place high priority on providing opportunities for expert, public and stakeholder input to furthering its work under the Sound Management of Chemicals initiative. An Overview and Update of the Sound Management of Chemicals as well as other project publications

are prepared, distributed and placed on the CEC Web site to inform stakeholders and to provide them with material for review and comment. Public comment and stakeholder input have been, and will continue to be, important to the development of NARAPs. The public will, in most instances, be invited to participate in the opening day of regular Working Group meetings and SMOC reports and decisions will be made widely available for information and comment. Also, three specialists (one each from Canada, Mexico, and the United States) from academia, industry and environmental nongovernmental organizations, now participate as observers on the Implementation Task Force on Mercury and on the Substance Selection Task Force. The process for identifying candidate substances for regional action under the Sound Management of Chemicals initiative also includes several opportunities for stakeholder input and public comment.

Expected Partners and/or Participants

This initiative is by its very nature an inclusive, consensus-building project that involves different levels of government, industries and industrial associations, environmental nongovernmental organizations and the academic community. International and binational institutions such as the International Joint Commission, and the New England Governors and Eastern Canadian Premiers are involved as participants or as cosponsors of events. Furthermore, international, binational and national aid and lending agencies are likely to be increasingly involved in the future. It is anticipated that more formal linkages with the NAFTA Technical Working Group on Pesticides will also be developed.

Resources

It is anticipated that the resources available to the SMOC project will continue to be approximately the same as the base level in 1998. Approximately half of this amount will be allocated directly to capacity building activities. The budget in 1998 was considerably greater as a result of one-time allocations of additional resources. An additional US\$100,000 was allocated for capacity building to assist in the implementation of the DDT NARAP and additional US\$268,000 was allocated for capacity building in support of the SMOC initiative to be used, in part, to leverage additional funding.

Expected Results

Major anticipated outputs/products are summarized below.

1999	
	<ul style="list-style-type: none"> • Capacity building concept paper and strategic plan completed & approved. • Concept paper on monitoring and assessment completed and approved. • 1996 surplus funds allocated to capacity building activities in accordance with approved concept paper and strategic plan. • Phase 2 NARAP on mercury completed and approved. • Decision documents on dioxins and furans, hexachlorobenzene, lindane and lead completed and approved. • Task Forces established to begin development of two new NARAPs.
Total Resources Required	\$655,000

<i>2000</i>	
<ul style="list-style-type: none"> • Two new NARAPs completed and approved. • NARAP on monitoring and assessment with respect to SMOC completed and approved. • Two nomination dossiers received from governments and under review by Substance Selection Task Force. • Capacity building concept paper and strategic plan widely distributed and successfully marketed to potential partners and external funders. • Initiation of one or more major capacity building initiatives involving the leveraging of external funds. 	
Total Resources Required	\$655,000

<i>2001</i>	
<ul style="list-style-type: none"> • Key elements of NARAP on monitoring implemented, for example, designation of reference or index sites to form the core of monitoring network. Initial trinational QA/QC program in conjunction with monitoring program established. • Decisions on substances nominated in 2000 by governments completed and approved. • Task Forces established to begin development of one or two new NARAPs. • One or more major SMOC events cosponsored with other interests. • One or more SMOC capacity building events (for example, related to technology transfer; alternative technologies for destruction of organic chemicals) or professional exchanges. • Other items as directed by Working Group and its subsidiary bodies. 	
Total Resources Required	\$655,000

North American Pollutant Release and Transfer Register Program

Information about chemical substances released to the environment or transferred on- or off-site by industrial facilities is available from the facilities themselves in the form of data they report to the national pollutant release and transfer (PRTR) programs of Canada and the United States. Government policy makers, members of the public, and the facilities themselves can employ these data for a wide variety of uses. The goals of the CEC in this program are to promote the effectiveness and use of national PRTR program information by the public and industry through highlighting the efforts and outputs of the national programs; to facilitate a North America-wide approach to data presentation and use, in line with the CEC's trinational mandate; and to provide an information base for cooperative actions to reduce pollutants in the North American environment. It was to this end that the CEC's North American Pollutant Release and Transfer Register program was initiated in 1995.

At the Fourth Annual Regular Session of the CEC in Pittsburgh, Pennsylvania (June 1997), the Ministers adopted Council Resolution 97-04, "Promoting Comparability of Pollutant Release and Transfer Registers (PRTRs)." This resolution commits the three governments to produce annually a report on North American pollutant releases and transfers, to work toward adopting more comparable PRTRs and developing an implementation plan to do so, to collaborate on the development of an Internet site to present a matched subset of data from the three North American PRTRs, and to promote regional cooperation to enhance North American PRTRs and improve the usefulness of the information by allowing better comparison and use of the data. Since the activities within this program are very closely interrelated, the program consists of one project, which encompasses all of the activities.

North American Pollutant Release and Transfer Register

Project Summary

The PRTR project focuses on information outreach and coordination through the publication of various reports (*Putting the Pieces Together*, the *Taking Stock* annual series); development of a North American PRTR Internet site; working with PRTR community groups; and coordinating CEC efforts with those of other international organizations. The project also promotes comparability and content of PRTR data through enhancing the comparability of the national PRTR programs and working toward summarizing North American non-point source emissions. The goal of the CEC in this project is to promote the use and effectiveness of the national PRTR programs by the public and industry, highlighting the efforts and outputs of those programs and emphasizing a North America-wide approach to data presentation and use.

Objectives

The objectives of this project are to:

- provide an overview of North American pollutant releases and transfers that can assist in a better understanding of sources and handling of industrial pollution, allowing national, state, and provincial governments as well as industry and citizens to set priorities for pollution reduction; invite reductions in North American pollutant releases and transfers through information comparison;
- assist citizens in integrating and understanding the ramifications of North American PRTR data;

- work toward providing a summary of non-point source emissions in North America, in order to provide context for understanding sources of industrial pollution;
- encourage enhanced comparability of North American PRTR systems; and
- coordinate North American PRTR activities with similar international activities.

Rationale

PRTRs, like the Canadian National Pollutant Release Inventory (NPRI), the US Toxics Release Inventory (TRI), and the proposed Mexican *Registro de Emisiones y Transferencia de Contaminantes* (RETC), provide data on the types, locations, and amounts of substances of concern released on-site and transferred off-site by industrial facilities. Many corporations also use the data to report to the public on their environmental performance. Tracking environmental substances of concern through PRTRs is essential to enhance environmental quality; increase public and industry understanding of the types and quantities of substances of concern released into the environment and transferred off-site as waste; encourage industry to prevent pollution, reduce waste generation, decrease releases and transfers, and assume responsibility for chemical use; track environmental progress; and assist government in identifying priorities.

Concerns may arise about chemicals in any environmental medium. In addition, releases to one environmental medium may be transported to others. Volatile chemicals in water releases, for example, may vaporize into the air. Therefore, the reporting of chemical releases and transfers to all environmental media is important.

Many of the benefits of a PRTR stem from the public disclosure of its contents. Active dissemination is important as it encourages public participation.

The utility of PRTRs has been recognized by other international organizations. Chapter 19 of Agenda 21 states that governments and relevant international organizations with the cooperation of industry should “improve databases and information systems on toxic chemicals” and that “the broadest possible awareness of chemical risks is a prerequisite for achieving chemical safety.” In 1996 the Council of the Organization for Economic Cooperation and Development (OECD) recommended that “[m]ember countries should consider sharing periodically the results of the implementation of such systems among themselves and with non-member countries with particular emphasis upon sharing of data from border areas among relevant neighboring countries,” and that member countries in establishing PRTR systems should take into account the set of principles contained in the Annex to the OECD Recommendation, including that “PRTR systems should allow as far as possible comparison and cooperation with other national PRTR systems and possible harmonization with similar international databases.”

Progress to Date

In November 1996, the CEC published a report, entitled *Putting the Pieces Together*, which provided an overview of the status and compatibility of the pollutant release and transfer registry programs in Canada, the United States, and Mexico. In July 1997, the CEC produced the first annual report on pollutant releases and transfers, entitled *Taking Stock: North American Pollutant Releases and Transfers—1994*. This report analyzes the 1994 publicly-available PRTR data reported to Canada and the United States, and profiles the pilot project in Mexico. It will assist in leading

the way for other countries to share and compare their data. This report was the first time that subsets of the full national databases were compared and analyzed. It spotlighted the national PRTRs. It highlighted some of the important differences between the NPRI and the TRI—differences that were of interest to the national governments.

The second such report, *Taking Stock: North American Pollutant Releases and Transfers—1995*, was published in October 1998. In developing these reports, the CEC used an extensive consultative review process, including public meetings and the preparation of Response to Comments documents. The CEC will publish annually a report analyzing the publicly available data reported to the North American governments, as mandated by the Council.

In 1998, the CEC will sponsor the initial development of a trilingual Internet site to present the matched subset of data from each of the three national PRTRs and provide information on the degree of comparability of the North American PRTRs, and other information as agreed upon. The public availability of the site is expected to be completed in June 1999, presenting 1996 PRTR data.

The CEC will begin a multi-year activity to define and estimate other sources of North American pollutant releases, as PRTRs reveal only part of the picture of chemical substances released to the natural environment as a result of human activity. Contaminant sources that do not report to some or all PRTRs include:

- mobile sources (transportation),
- small sources (such as auto service stations and dry cleaners), and
- area sources (agricultural sources, mining, parking lots).

In this activity, the CEC and the PRTR national program offices will select discrete types of non-point sources, and determine the existence of available estimation techniques and how these apply within North America, and estimate the non-point sources for North America for a calendar year.

This activity will occur in two phases. In 1998 and early 1999, we will scope what information exists, identification of methodologies available, viability of systems and applicability of GIS. Upon acceptance of the final report from phase 1, the CEC, in conjunction with the national PRTR representatives, will decide the timing of the initiation of phase 2—the estimation of the contribution of specific non-point source sectors to the pollution loading in North America.

(This activity is complemented by an activity under the project on North American Air Quality, a compilation of studies on emission-source categories that seeks to better understand and identify opportunities for minimizing the magnitude and impact of transboundary pollution and facilitate the increased exchange of information on these matters. Also, the Article 13 report on *Continental Pollutants Pathways* recognized the importance of non-point sources of pollution by concluding:

“Major sources of continental pollutants include electric power plants, the transportation sector, industrial combustion of fossil fuels, municipal and medical waste incinerators, and chemical use in agriculture.” The two projects are collaborating in the first phase of this activity.)

In 1998, the possibility to initiate several multinational pilot projects to demonstrate how PRTR information can be accessed and used at the community level was scoped in a workshop held 2-3 December 1998. Representatives from NGOs and industry were invited to participate. This activity will provide a basis for the national PRTR programs to initiate other community-based actions. Further granting possibilities in coming for the community groups will be explored.

The CEC was a co-sponsor (along with INE, UNITAR, OECD, and UNEP) of the PRTR Workshop of the Americas held in Querétaro, Mexico, at the end of July 1997. Most of the countries of the Americas participated in this workshop. The CEC and the national PRTR programs have been coordinating with the OECD and hemispheric efforts to avoid duplication of effort and assist in information dissemination.

Actions

1999

Report on NA PRTR information—1996–1998 data

The objective of this activity is to develop the annual North American pollutant release and transfer reports (the *Taking Stock* reports), based upon existing public inventory information for each year. The report on the 1996 data will be published in May 1999, the report on 1997 data will be published in December 1999 and the report on 1998 data will be planned. Trend information from previous years' reports will be included. Mexican data will be incorporated as they become available. These activities include updating the methodology for increasing data comparability. The development of the report includes a prior consultative review and a quality control review by a small group of consultants prior to finalization.

Operation and updating of North American PRTR Internet site

The trilingual Internet site, initiated in 1998 to present the matched subset of data from each of the three national PRTRs and provide information on the degree of comparability of the North American PRTRs and other information as agreed upon, will be continuously updated with the latest PRTR data. The site should also develop search capabilities that reflect the current needs in North America.

Development of an implementation plan to enhance the comparability of North American PRTRs

The national PRTR programs will discuss specific program elements that may be appropriate to coordinate with the other programs to increase the degree of inter-program comparability. It is recognized that a greater effort should be placed in this area once Mexico has revised and finalized its PRTR regulations (not expected until at least mid- to late-1999), but some areas can be addressed immediately. The implementation plan will need to be updated annually.

The implementation plan will include short- and long-term goals, a mechanism to assess progress, recommendations for increasing comparability, and recommendation(s) for special focus report(s). All potential issues will be considered in the draft implementation plan.

Defining and estimating other sources of North American pollutant releases

Since PRTRs reveal only part of the picture of chemical substances released to the natural environment as a result of human activity, other complementary information is useful to place pollutant releases in perspective. This multi-year activity, begun in 1998 with an assessment of existing information, may continue in 1999 with a sector-by-sector estimation of North American emissions for inclusion in future *Taking Stock* reports.

The North American PRTR programs and the CEC have agreed that emphasis and focus in North America should be placed on development of multi-media point source data. After the completion of phase 1 in June 1999, the CEC and the national PRTR program representatives will discuss the timing of the beginning of phase 2 (whether it should begin in 1999 or later). There is some concern that if the CEC focuses on non-point sources prior to the publication of the final Mexican PRTR standard there will be less focus on point sources—which may not conform with the stated objective of increasing the comparability of the North American PRTR systems.

Support for the development/implementation/outreach of the Mexican RETC

The CEC has placed significant effort and focus on the development of the Mexican RETC program. Specific activities have not yet been determined for 1999–2001, but it is anticipated that any such activities will be planned to complement the needs of the developing Mexican program. Regardless of when the publication of the RETC regulation actually occurs, the CEC is prepared to assist the Mexican RETC program with outreach and training activities as appropriate.

PRTR community access-to-information

In a December 1998 workshop for community groups involved in PRTR issues, the CEC demonstrated tools for accessing and utilizing PRTR information and held a discussion of potential projects in which North American community groups could collaborate in 1999 and beyond. It is anticipated that this workshop will define specific community activities that the CEC will support in coming years.

Voluntary program of industrial reporting

The CEC, in conjunction with appropriate partner(s), will explore the development of a program to encourage voluntary PRTR reporting by facilities and incorporate results, as appropriate, in the *Taking Stock* reports. This will provide an opportunity to showcase industry efforts to achieve clean operations throughout North America.

Coordination with OECD, hemispheric PRTR activities and general outreach

The CEC and the national PRTR programs have been coordinating with the OECD and hemispheric efforts to avoid duplication of effort and assist in information dissemination. Also, the CEC receives numerous requests to participate in PRTR-related conferences throughout the year, and considers ongoing participation in these outreach activities essential to the program.

1999	
<ul style="list-style-type: none">• Publication of <i>Taking Stock</i>—1996 data report.• Publication of <i>Taking Stock</i>—1997 data report.• Consultant selection and initial work on <i>Taking Stock</i>—1998.• Operation and updating of North American PRTR Internet site.• Development of implementation plan to enhance the comparability of North American PRTRs.• Defining and estimating other sources of North American pollutant releases—phase 1.• Support for the development/implementation/outreach of the Mexican RETC.• PRTR community access-to-information.• Voluntary program of industrial reporting.• Coordination with OECD, hemispheric PRTR activities and general outreach.	
Total Resources Required	\$285,000

2000

Report on NA PRTR information—1998–1999 data

The objective of these activities is to develop the annual North American pollutant release and transfer reports based upon existing public inventory information. A separate report will be developed for each year's data. The report on 1998 data will enter development and be published, and the report on 1999 data will be planned. Trend information from previous years' reports will be included. Mexican data will be incorporated as they become available. These activities include updating the methodology for making the data comparable. The development of the report includes a prior consultative review and a quality control review by a small group prior to finalization.

Operation and updating of North American PRTR Internet site

The trilingual Internet site, initiated in 1998 to present the matched subset of data from each of the three national PRTRs and provide information on the degree of comparability of the North American PRTRs and other information as agreed upon, will need to be continuously updated with the latest PRTR information. The site should continue to be modified to reflect current interests in North America.

Development of an implementation plan to enhance the comparability of North American PRTRs

The national PRTR programs will discuss specific elements of their programs that may be appropriate to coordinate with the other programs to increase the degree of comparability of their programs. It is recognized that a greater effort should be placed in this area once Mexico has revised and finalized its PRTR regulations (not expected until mid- to late-1999 at the earliest), some areas can be immediately addressed. The implementation plan will need to be updated annually.

The implementation plan will include short- and long-term goals, a mechanism to assess progress, recommendations for increasing comparability, and recommendation(s) for special focus report(s). All potential issues will be considered in the draft implementation plan.

Defining and estimating other sources of North American pollutant releases

Depending on the status of development of trinational multi-media point-source data and the decision of the national PRTR representatives in conjunction with the CEC, the CEC may initiate or continue efforts to estimate North American emissions from non-point sources with the goal of including the information in future *Taking Stock* reports.

Support for the development/implementation/outreach of the Mexican RETC

The CEC has placed significant effort and focus on the development of the Mexican RETC program. Although specific activities have not yet been determined for 1999–2001, it is anticipated that any such activities will be planned to complement the needs of the developing Mexican program. Regardless of when the publication of the RETC regulation actually occurs, the CEC is prepared to assist the Mexican RETC program with outreach and training activities as appropriate.

PRTR community access-to-information

In a December 1998 workshop for community groups involved in PRTR issues, the CEC demonstrated tools for accessing and utilizing PRTR information and held a discussion of potential projects in which North American community groups could collaborate in 1999 and beyond. It is anticipated that this workshop will define specific community activities that the CEC will support in coming years.

Voluntary program of industrial reporting

The objective of this activity is to provide an opportunity program to encourage voluntary PRTR reporting by facilities to showcase industry efforts to achieve clean operations throughout North America.

Coordination with OECD, hemispheric PRTR activities and general outreach

The CEC and the national PRTR programs have been coordinating with the OECD and hemispheric efforts to avoid duplication of effort and assist in information dissemination. Also, the CEC receives numerous requests to participate in PRTR-related conferences throughout the year, and considers ongoing participation in these outreach activities essential to the program.

2000	
<ul style="list-style-type: none">• Publication of <i>Taking Stock—1998</i> data report.• Consultant selection and initial work on <i>Taking Stock—1999</i>.• Operation and updating of North American PRTR Internet site.• Development of implementation plan to enhance the comparability of North American PRTRs.• Support for the development/implementation/outreach of the Mexican RETC.• PRTR community access-to-information.• Voluntary program of industrial reporting.• Coordination with OECD, hemispheric PRTR activities and general outreach.	
Total Resources Required	\$258,000

2001

Report on NA PRTR information—1999–2000 data

The objective of these activities is to develop the annual North American pollutant release and transfer reports based upon existing public inventory information. A separate report will be developed for each year's data. The report on 1999 data will enter development and the report on 2000 data will be planned. Trend information from previous years' reports will be included. Mexican data will be incorporated as they become available. These activities include updating the methodology for making the data comparable. The development of the report includes a prior consultative review and a quality control review by a small group prior to finalization.

Operation and updating of North American PRTR Internet site

The trilingual Internet site, initiated in 1998 to present the matched subset of data from each of the three national PRTRs and provide information on the degree of comparability of the North American PRTRs and other information as agreed upon, will need to be continuously updated with the latest PRTR information. The site should continue to be modified to reflect current interests in North America.

Development of an implementation plan to enhance the comparability of North American PRTRs

The national PRTR programs will discuss specific elements of their programs that may be appropriate to coordinate with the other programs to increase the degree of comparability of their programs. It is recognized that a greater effort should be placed in this area once Mexico has revised and finalized its PRTR regulations (not expected until mid- to late-1999 at the earliest); some areas can be addressed immediately. The implementation plan will be updated annually.

The implementation plan will include short- and long-term goals, a mechanism to assess progress, recommendations for increasing comparability, and recommendation(s) for special focus report(s). All potential issues will be considered in the draft implementation plan.

Defining and estimating other sources of North American pollutant releases

Depending on the status of Mexican multi-media point source data and the decision of the national PRTR representatives in conjunction with the CEC, the CEC may initiate or continue efforts to estimate North American emissions from non-point sources with the goal of including the information in future *Taking Stock* reports.

Support for the development/implementation/outreach of the Mexican RETC

The CEC has placed significant effort and focus on the development of the Mexican RETC program. Specific activities have not yet been determined for 1999–2001, but it is anticipated that any such activities will be planned to complement the needs of the developing Mexican program. Regardless of when the publication of the RETC regulation actually occurs, the CEC is prepared to assist the Mexican RETC program with outreach and training activities as appropriate.

PRTR community access-to-information

In a December 1998 workshop for community groups involved in PRTR issues, the CEC demonstrated tools for accessing and utilizing PRTR information and held a discussion of potential projects in which North American community groups could collaborate in 1999 and beyond. It is anticipated that this workshop will define specific community activities that the CEC will support in coming years.

Voluntary program of industrial reporting

This program will encourage voluntary PRTR reporting by facilities. The objective of this activity is to provide an opportunity to showcase industry efforts to achieve clean operations throughout North America.

Coordination with OECD, hemispheric PRTR activities and general outreach

The CEC and the national PRTR programs have been coordinating with the OECD and hemispheric efforts to avoid duplication of effort and assist in information dissemination. Also, the CEC receives numerous requests to participate in PRTR-related conferences throughout the year, and considers ongoing participation in these outreach activities essential to the program.

- Publication of *Taking Stock—1999*.
- Consultant selection and initial work on *Taking Stock—2000* data report.
- Operation and updating of North American PRTR Internet site.
- Development of implementation plan to enhance the comparability of North American PRTRs.
- Defining and estimating other sources of North American pollutant releases—phase 2.
- Support for the development/implementation/outreach of the Mexican RETC.
- PRTR community access-to-information.
- Voluntary Program of industrial reporting.
- Coordination with OECD, hemispheric PRTR activities and general outreach.

Total Resources Required

\$305,000

Public Participation

Resolution 97–04 specifically directs the CEC Secretariat to encourage and provide for “meaningful public and governmental participation, including participation by nongovernmental organizations, business and industry, provincial, state, and municipal governments, academia, and technical and policy experts in developing its recommendations for enhanced comparability.”

One of the principal products of the CEC PRTR program is the development of the annual *Taking Stock* reports, which compare and analyze publicly available information in the national PRTR databases and provide insight on a North American basis. From the beginning, public feedback has been an essential component of the report development process. Although comments on the project are welcome at any time, the formal public consultation process includes:

- *Identifying persons* who may be interested in participating in the consultation phase. The CEC consults with the national PRTR representatives to determine if the list is an accurate reflection of interest seen in their countries.
- *Consultation* with the list of persons named on the consultative review list. For the *Taking Stock* report published in October 1998, the CEC requested input on the structure of the report, even prior to beginning the work. This was an effective method that allowed the CEC to take comments into account early in the process and will be utilized for subsequent *Taking Stock* reports. Therefore, the consultation phase, which consists of a public meeting followed by receipt of written comments, is concluded early in the process.
- *Response to comments*—a document detailing the written and verbal comments received, and how CEC intends to incorporate those comments into the report is prepared at the conclusion of the formal public consultation.

Significant changes were made to the first two *Taking Stock* reports in response to comments received.

Capacity Building

Efforts to support the development and implementation of the Mexican PRTR system have been, and continue to be, a priority for the North American PRTR program as part of the objective of enhancing comparability of North American PRTRs. Actions completed include:

- support of Mexican NGOs—assistance with capacity building, included a variety of community-based actions to facilitate the national RETC implementation (*Comité Cívico de Divulgación Ecológica, A.C., Ecologista Jalisco, A.C.*);
- workshop for INE personnel at Environment Canada (two INE persons were sponsored to spend three days at the offices of Environment Canada to learn from their information management experiences);
- sponsorship of a technical person within INE offices (contracts were signed between the CEC and Dr. Sonia Valdivia to provide direct technical support to INE);
- purchase of reference materials for use in determining substances to be included on RETC;
- travel for a government official (Alejandro Espriu) to participate in OECD PRTR meeting in The Hague;
- facilitation of information exchange among members of the GNC;
- communications support for the RETC Pilot Trial in Querétaro;
- support of NGO group to attend OECD PRTR meeting in Tokyo; and
- extensive information technology support (UNIX workstation and accessories, including a Sun Sparc 5 station, color printer; network connections; Arc/View system; computer hardware and software systems, including 5 PCs, 1 notebook computer, 1 laser printer; and computer hardware update).

Other actions, including outreach and training of Mexican industry and NGO groups, are underway. These training courses will be sponsored by the CEC and coordinated by INE to provide information and outreach on the RETC system.

Expected Results

The objectives are reiterated below, matched with the corresponding activities.

- Provide an overview of North American pollutant releases and transfers that can assist in a better understanding of sources and handling of industrial pollution allowing national, state, provincial governments as well as industry and citizens to set priorities for pollution reduction. Invite reductions in North American pollutant releases and transfers through information comparison.
 - Publication of *Taking Stock—1996* (May 1999)
 - Publication of *Taking Stock—1997* (December 1999)
 - Publication of *Taking Stock—1998* (December 2000)

- Assist citizens in integrating and understanding the ramifications of North American PRTR data.
 - Operation and updating of North American PRTR Internet site (June 1999)
 - PRTR community access-to-information report/twinning of NGOs (workshop 2–3 Dec 1998 defined program for 1999)
 - Voluntary program of industrial reporting in place (December 1999)
- Work toward providing a summary of non-point source emissions in North America, in order to provide context for understanding sources of industrial pollution.
 - Defining and estimating other sources of North American pollutant releases—phase 1 background study (June 1999)
 - Defining and estimating other sources of North American pollutant releases—phase 2 estimations (dependent on review of phase 1 results by CEC and national PRTR program representatives, to be conducted in July 1999)
- Encourage enhanced comparability of North American PRTR systems.
 - Support for the development/implementation/outreach of the Mexican RETC (as needed and appropriate)
 - Development of Implementation Plan to enhance the comparability of North American PRTRs (mid-1999, then updated annually)
- Coordinate North American PRTR activities with similar international activities.
 - Ongoing CEC outreach efforts with OECD, UNITAR and other organizations.

Pollution Prevention

This program aims to optimize use of resources and energy, and minimize waste and its associated impacts. One way of accomplishing this optimization is to create a synergistic exchange between industries or industry sectors in which a waste product from one industry can serve as a potential raw material for another.

Another strategy that will be promoted by this program is to illustrate the economic and environmental advantages associated with reducing waste and developing financial mechanisms to encourage pollution prevention.

The following two projects will seek to achieve the goals of this program:

- *Shared Approaches to By-Product Synergy*
- *Capacity Building for Pollution Prevention*

Shared Approaches to By-Product Synergy

Project Summary

This project encourages industries to exchange, recycle or minimize the creation of materials that are now discharged as waste. The objective of by-product synergy is to promote the joint commercial development of one economic sector with a related one, so that one industry's waste product becomes another's raw material. This project involves identifying by-product waste and resource streams from one sector and locating binational and national opportunities for by-product synergies. The CEC will assess new and existing synergy initiatives with a view to proposing policy options to promote widespread adoption of successful synergies.

Objectives

The objectives of this project are to:

- undertake pilot projects to develop by-product synergies in Mexico and Canada;
- identify regulatory opportunities and challenges for successful by-product synergy;
- use the results of successful synergies applied against commitments under the Kyoto Protocol on Climate Change; and
- develop and disseminate information on the benefits of and mechanisms to undertake successful by-product synergy in the private sector.

Rationale

The development of successful by-product synergies has the potential both to enhance trade among the NAFTA countries, and to benefit the environment. Instead of disposing of wastes, using them in other industries as raw materials saves energy, reduces environmental impacts, and offers the potential for new profit centers and trade opportunities. By-product synergies may also reduce greenhouse gas emissions, consumption of raw materials, and energy and landfill requirements. They address the important trade and environment issues of process and product methods by considering the

environmental implications of a good throughout its lifecycle, and the cross-border technology transfer that can result. By-product synergy also offers solutions beneficial to industry and agreeable to the environmental community.

Progress to Date

This project commenced in 1998 with the creation of a North American intergovernmental task force to work with the Business Council for Sustainable Development—Gulf of Mexico. The Council identified five synergies in Tampico, Mexico, and the process for identifying synergies in Calgary, Canada, was begun.

Actions

The near-term continuation of the project will involve meetings in Calgary with company executives wishing to participate in a materials-balance study of inputs, products, and waste. There will also be an evaluation of the potential for carbon credits under climate change scenarios. In addition, the CEC will evaluate its role in this process.

An independent third-party evaluation will be conducted to consider the achievements of the by-product synergy activities with a view toward determining future directions. Evaluation criteria will include project dissemination, cross-boundary learning and adoption of synergy strategies, materials-balance results, cost-effectiveness, and project impact.

<i>1999</i>	
<ul style="list-style-type: none"> • Meetings in Calgary: To organize and educate company leaders who wish to participate in carrying out a materials-balance process involving the mapping of inputs, products and wastes. • Report: Concerns three to five synergy pilot projects in Calgary. • Third-party evaluation of the results and achievements of by-product synergy activities, with a view to determining future directions. 	
Total Resources Required	\$70,000

<i>2000</i>	
<ul style="list-style-type: none"> • Future activities will depend upon the results of the independent third-party evaluation of completed work and the nature of the CEC's role in this process. 	
Total Resources Required	TBD

Public Participation

The work of the intergovernmental task force will be undertaken in consultation with the private sector and interested nongovernmental organizations, as appropriate.

Capacity Building

Following the third-party evaluation, the intergovernmental task force will prepare a report for the Council indicating how, if at all, the CEC can most usefully continue work in this area beyond the broad dissemination of educational materials and information on the process of by-product synergy.

Capacity Building for Pollution Prevention

Project Summary

This project is intended to support consolidation of the *Fondo de Prevención de la Contaminación* (Fiprev), seeking to ensure its long-term sustainability and encouraging North American industrial associations, such as Canadian and American business councils and Mexico's Concamin (*Confederación de Cámaras Industriales*), to participate in Fiprev's Technical Committee. The objective of the Fund is to promote the adoption of pollution prevention methods by small and medium-size manufacturing companies in Mexico.

This initiative was conceived specifically to meet the financial and technical needs of these companies. Created by the CEC, Funtec (*Fundación Mexicana para la Innovación y Transferencia de Tecnología en la Pequeña y Mediana Empresa*) and Concamin, Fiprev will carry out the mandate contained in Council Resolution 96-12. One member of JPAC from each country will sit on Fiprev's Technical Committee.

Objectives

The objectives of this project are to:

- promote the use of pollution prevention methods and technology by small and medium-size manufacturers in Mexico, and help them develop their environmental management capacity;
- make Fiprev financially self-supporting so that it may continue providing loans to minimize the generation of pollutants by Mexico's small and medium-size manufacturers; and
- incorporate a group of donors as soon as possible in order to increase the financial resources of the fund and, in the medium-term, to link the fund to the activities of the "round table on pollution prevention in the Americas," which is currently being created.

Rationale

Article 10(2)(b) of NAAEC empowers the Council to study and develop recommendations on pollution prevention techniques and strategies. Preventing pollution in the first place is an excellent strategy for environmental protection. Yet the percentage of North American companies that have established pollution prevention programs is small.

Progress to Date

Under Council Resolution 96-12, the CEC created a pilot fund in September 1996 to support pollution prevention projects by small and medium-size companies in Mexico. The CEC provides technical support for the fund, which is administered by Funtec. These two institutions each contributed US\$100,000 as initial capital for Fiprev in 1996. In 1997, each made a second contribution of the same amount. Additional capital will come from other organizations through donations approved by Fiprev's Technical Committee. The Technical Committee of the *Fideicomiso de los Laboratorios de Fomento Industrial*, governed by Secofi and Concamín, has approved giving a donation of US\$150,000 in 1999 to the pollution prevention fund to augment the Funtec contribution. In addition, Funtec has a list of 15 large industries in Mexico that will be approached for the Donors Committee.

The CEC has initiated five pilot projects aimed at demonstrating the economic and environmental benefits of pollution prevention techniques and technology, including two tannery projects and one each in the glassmaking, dyeing and metal finishing industries. Initial steps have been taken in coordination with the Environmental Defense Fund to link this project to activities in industrial parks along the US-Mexican border, especially those of the maquiladoras.

Financing is currently being provided for many small tanneries that should obtain significant savings in water and chemicals through the use of recycling baths and other process modifications. According to preliminary technical studies, it is expected that these changes will enable the tanneries to reduce their water consumption by 60-80 percent, with a similar drop in their use of chemicals. As a result, their wastewater discharge and associated environmental effects will likewise be greatly reduced.

In order for Fiprev to begin its lending operations and to ensure its eligibility for tax-exempt status, it was necessary to obtain the corresponding authorization from the Ministry of Finance and the Bank of Mexico.

It is estimated that a total of 20 loans will be extended in 1998. Of these, 14 will go to companies in the tanning industry, with the other six distributed among the chemical, casting, food and electroplating industries. The total amount disbursed is expected to be around 3.4 million pesos.

To date it has been difficult to attract contributions from other donors owing to the fund's recent inception and the need to demonstrate concrete results that will permit the establishment of a Donors Committee. The activities carried out in 1998 will leave the fund without sufficient resources to continue operations in 1999 inasmuch as funds for new loans are to come from savings generated by the pollution prevention projects over a period of one to three years. A financial assessment made by Funtec revealed the need for an additional US\$300,000, which will ensure its operation as a revolving fund in the medium term.

Finally, it is worth noting that pollution prevention activities are being expanded throughout the Americas under an interesting approach called the "round table on pollution prevention," which has been used successfully in Canada and the United States.

Actions

- Make Fiprev completely self-sufficient in funding and operations, which will require increasing the fund's financial resources. The estimates drawn up by Funtec indicate the need for additional contributions of US\$75,000 each from the CEC and Funtec in 1999, and again in 2000.
- As well, efforts to attract financing for pollution prevention projects among small and medium-size industries will be continued and intensified.
- Emphasis will be placed on creating a Donors Committee, the objective of which will be to obtain resources for increasing the capital base of the fund.
- Appropriate action will be taken to promote implementation of pollution prevention projects in related industrial facilities.
- Finally, the measures necessary will be adopted to link Fiprev with regional efforts to establish a round table on pollution prevention within the Western Hemisphere.

1999	
<ul style="list-style-type: none"> • Activities to promote Fiprev among small and medium-size companies (carried out through Funtec and Concamín). • Two meetings of Fiprev's Technical Committee to analyze and approve the financial support for pollution prevention projects presented by the Executive Committee. • Three meetings of Fiprev's Executive Committee to evaluate projects and prepare the corresponding advice to the Technical Committee. • Establish the Donors Committee for the fund, composed of donors that have been approved by the Technical Committee. • Activities in progress aimed at obtaining contributions to the fund from large corporations and foundations. • Establish contacts and devise means for cooperating with the hemispheric round table on pollution prevention, which is currently being established. 	
Total resources required	\$85,000

2000	
<ul style="list-style-type: none"> • Activities in progress aimed at promoting Fiprev among small and medium-size companies (carried out through Funtec and Concamin). • Two meetings of Fiprev's Technical Committee to analyze and approve financial support for the pollution prevention projects presented by the Executive Committee. • Three meetings of Fiprev's Executive Committee to evaluate projects and prepare the corresponding advise to the Technical Committee. • Two meetings of the Donors Committee to evaluate the operations of Fiprev and identify potential donors to propose to the Technical Committee. • Activities aimed at obtaining contributions to the fund from large corporations and foundations. • Establish mechanisms for transferring the CEC's activities on pollution prevention to the hemispheric round table on pollution prevention. 	
Total resources required	\$85,000

2001	
<ul style="list-style-type: none"> • Activities to promote Fiprev among small and medium-size companies (carried out through Funtec and Concamin). • Two meetings of Fiprev's Technical Committee to analyze and approve the financial support for pollution prevention projects presented by the Executive Committee. • Three meetings of Fiprev's Executive Committee to evaluate projects and prepare the corresponding advise to the Technical Committee. • Transferring CEC pollution prevention activities to the hemispheric round table on pollution prevention. 	
Total resources required	\$10,000

Public Participation

Public participation has been given ample consideration in the project, in part at the recommendation of a trinational group of experts in a discussion paper on pollution prevention strategies. Fiprev's governing body, its Technical Committee, is made up of financiers, academics, manufacturers, government experts, and three members of the JPAC (one from each country). In addition, representatives from various sectors take part in the decision-making process on Fiprev's Executive Committee.

Capacity Building

The project is totally oriented toward capacity building, both in supporting the use of pollution prevention measures by small and medium-size companies, and in promoting the creation of financial mechanisms to provide support for pollution prevention activities.

Expected Results

The benefits provided by the project are expected to include:

- 25 new companies in 1999,
- 30 more in 2000, and
- 40 more in 2001.

The following environmental benefits are expected to stem from the above:

1. Reduction in water consumption of:

- 45,000 cubic meters in 1999,
- 56,000 cubic meters in 2000, and
- 70,000 cubic meters in 2001.

2. Reduction in the amount of waste generated:

- 2,100 tonnes in 1999,
- 2,600 tonnes in 2000, and
- 3,200 tonnes in 2001.

Law and Policy

The Law and Policy program area addresses regional priorities regarding obligations and commitments in NAAEC related to environmental standards and their implementation. Program initiatives monitor and report on regional trends in implementing and enforcing environmental standards, including innovations in regulation, economic instruments and voluntary initiatives. They also address NAAEC commitments to public participation in processes for establishing and enforcing environmental standards.

The work of the program area is divided into two programs. The first, Environmental Standards and Performance, focuses on NAAEC objectives of strengthening regional cooperation in the development and improvement of environmental laws and regulations, as well as making private standards more compatible. It provides a regional forum for the exchange of alternative domestic strategies for implementing improved environmental standards, mechanisms for public participation in standard setting processes and exchange of methodologies. The program also supports the implementation of processes directed at greater regional compatibility of environmental technical regulations, standards and conformity assessment procedures consistent with NAFTA, as well as promoting the compatibility of voluntary standards in the private sector.

The second program, Enforcement Cooperation, responds directly to the Parties' obligations for the effective enforcement of their respective environmental laws and regulations. In response to the Council mandate to ensure regional cooperation in enforcement, the program supports a regional forum of senior enforcement officials. It also addresses alternative approaches to effective enforcement and private access to remedies.

Environmental Standards and Performance

The objectives of NAAEC include strengthening cooperation in the development and improvement of environmental laws and regulations, as well as compatibility of technical standards, including those of the private sector. Article 3 recognizes the right of each of the Parties to establish their own levels of domestic environmental protection and environmental development policies and priorities, and to adopt or modify accordingly their respective environmental laws and regulations. Each Party is also obligated to ensure that its laws and regulations provide for high levels of environmental protection and that they strive to continue to improve those laws and regulations. Article 4 obligates the Parties to implement processes to enable public notice and comments on any proposed laws, regulations, procedures and administrative rulings related to matters under the agreement. Finally, the Council is obligated under Article 10(3) to strengthen cooperation on the development and continued improvement of environmental laws and regulations by promoting the exchange of information on criteria and methodologies used in establishing domestic environmental standards, and, without reducing levels of environmental protection, by establishing a process for developing greater compatibility of environmental technical regulations, standards and conformity assessment procedures in a manner consistent with NAFTA.

The Environmental Standards and Performance Program is intended to provide a regional forum for the joint review of environmental standards and their implementation in law or policy. It is also directed at regional review of performance, including review of alternative approaches to meeting and exceeding environmental standards or objectives, including the evaluation or piloting of alternative regulatory or voluntary approaches. Finally, it examines opportunities for public participation standard setting.

Initial focus of the program will be placed on the comparability and compatibility of private sector standards. To this end, the program will seek to promote the mutual recognition of operating standards for the environmental laboratories of North America and the mutual recognition of their accreditation systems. For this it is necessary to address the capabilities of laboratories in Mexico through cooperation with facilities in Canada and the United States. The long-term goal of this program is to promote environmental testing services in the region. The project, "Cooperation between Environmental Laboratories," will address this goal, but will not commence until the year 2000.

Cooperation between Environmental Laboratories

Project Summary

There is an acknowledged need for mutual recognition of operating standards among environmental laboratories in North America in order to ensure the reliability of the information they produce. Moreover, public and private laboratories in the region have expressed an interest in establishing means for comparing their findings and allowing mutual recognition of environmental measurements.

In Mexico, the institution responsible for accrediting environmental laboratories, the *Sistema Nacional de Laboratorios Analíticos de Pruebas*, plans to hand over its mandate to the private sector, with the creation (currently in progress) of the *Unidad Nacional Acreditadora*. During this transitional stage, private laboratories have been marking time and, as a result, the accreditation process is not functioning at optimal efficiency. In addition, many of the entities that use environmental laboratory services conduct their own laboratory assessments and maintain individual lists of those they certify, becoming de facto "certifiers."

It is necessary to facilitate the development of recommended standards for these laboratories and procedures for their certification, and to promote cooperation in building capacity among environmental laboratories. There is a need as well for common agreement among the three countries on the benefits and challenges of mutual recognition of operating standards.

Objectives

The objectives of this project are:

- to promote development and mutual recognition of accreditation programs for the environmental laboratories of North America;
- to increase the capacity of Mexico's environmental laboratories; and
- as a long-term goal, to facilitate trade in environmental laboratory services in the region through mutual recognition of operating standards.

Rationale

Article 1210 of the North American Free Trade Agreement contains criteria for licensing and certification, the development of standards, and mutual recognition. These criteria must be based on objective and transparent rules on matters such as competence and the capacity for rendering a given service, must be no more complicated than necessary to guarantee good service, and must not constitute disguised barriers to the cross-border flow of services. NAFTA also states that the governments shall urge their respective professional organizations to prepare voluntary criteria for the mutual recognition and certification of professional services.

To provide timely, reliable environmental information, it will be necessary to develop the test capacity of public and private environmental laboratories and promote certification of their operating practices within each country. The ultimate aim of this effort is the mutual recognition of laboratory certification throughout North America, ensuring that services of this kind do not become a potential barrier to trade.

Progress to Date

The Canadian Association for Environmental Analytical Laboratories has been working on a number of initiatives for environmental testing and accreditation. And the International Association for Environmental Testing Laboratories is likewise promoting mutual recognition in the certification of laboratory practices.

In Mexico, the accreditation of environmental laboratories has up to now been the responsibility of the Standards Directorate through the National Testing Laboratory Accreditation System (*Dirección General de Normas—DGN; Sistema Nacional de Acreditación de Laboratorios de Prueba—Sinalap*). Under amendments to the Federal Law on Metrology and Standards (*Ley Federal sobre Metrología y Normalización*—published in the *Diario Oficial de la Federación* on 20 May 1997, and effective 1 August 1997), private sector accreditation agencies are now permitted in Mexico. Until such time as formal authorization for these private accreditation bodies is published in the *Diario Oficial*, the Standards Directorate under Mexico's Ministry of Trade and Industrial Development (*Secretaría de Comercio y Fomento Industrial—Secofi*) remains as the sole accreditation entity recognized for this purpose, both nationally and internationally.

Actions

The following scoping activities are identified for 2000.

<i>2000</i>	
<ul style="list-style-type: none">• Preparation of a report on the status of environmental laboratory accreditation programs in North America, including an analysis of compatibility systems. The report must include recommendations on the steps to be taken for mutual recognition of accreditation procedures.• Meeting of experts to analyze the report and identify high priority actions to be included in the work program.• Meeting to identify needs for developing the capacity of environmental laboratories in Mexico.	
Total resources required	\$50,000

2001

Activities to be developed based on the 2000 scoping efforts.

Public Participation

This project has evolved through a process of public consultation, with meetings of experts and working groups that will be responsible for drawing up a plan of action governing its activities.

Capacity Building

The project is directly involved in building up the capacity of environmental laboratories in Mexico, and provides for programs to train laboratory technicians using the existing capacity of North American environmental laboratories.

Expected Results

The project will produce a clearer understanding of the laboratory accreditation programs in each country, and define the steps that must be taken to establish compatibility among systems and to develop potential reciprocity in accreditation and mutual recognition of environmental laboratory practices.

During this period, the needs and opportunities for cooperation will be identified in order to increase the capacity of environmental laboratories.

Enforcement Cooperation

The Enforcement Cooperation Program, established by the CEC in 1995, is directed at facilitating enhanced North American cooperation in environmental enforcement and compliance. The overriding objectives of the Enforcement Cooperation Program are to:

- *provide a forum for North American cooperation in environmental enforcement and compliance;*
- *support initiatives for sharing enforcement-related strategies, expertise and technical knowledge;*
- *support capacity building in effective enforcement and enhanced compliance;*
- *facilitate the development and implementation of trilateral enforcement cooperation programs and initiatives;*
- *examine alternative approaches to enforcement and compliance; and*
- *support the Parties in the preparation of annual enforcement reports and the examination of improved indicators or measures of effective enforcement and compliance.*

The Enforcement Cooperation Program responds directly to obligations and opportunities arising under the NAAEC, including Articles 5, 6, 7, 10(4), and 12(2)(c), which collectively impose obligations on the Parties to enforce their respective environmental laws effectively, in accordance with an agreed-upon framework; to pursue avenues of cooperation to this end; to implement the Article 6 obligation to provide private access to remedies; and to provide an annual public report on the enforcement of environmental laws.

The Program is developed and delivered in consultation with the North American Working Group on Environmental Enforcement and Compliance Cooperation, which was officially constituted by the Council in August 1996 and mandated to support cooperation and joint initiatives for environmental enforcement and compliance; the exchange of information, expertise, and joint training; and charged with preparing the annual report on environmental enforcement. In October 1996, the Enforcement Working Group established a subgroup to facilitate cooperation in wildlife enforcement, the North American Wildlife Enforcement Group (NAWEG).

The Enforcement Cooperation Program attempts to address issues and concerns about environmental enforcement and compliance brought to the attention of the CEC by government agencies, industry, NGOs, academics, and experts in the area. Efforts are made to monitor current issues or innovations in the field of enforcement and compliance and to facilitate the exchange of information on, discussion about, and review of these common matters. The Enforcement Cooperation Program will be achieved through the following three projects:

- *The North American Regional Enforcement Forum*
- *Enforcement and Compliance Capacity Building*
- *Indicators of Effective Environmental Enforcement*

Project Summary

Consistent with the Council's direction, the project will provide continued support to the North American Working Group on Enforcement and Compliance Cooperation (EWG) and the North American Wildlife Enforcement Group (NAWEG) in the delivery of their mandates. This will ensure a continuing forum for regional exchange of information, expertise and strategies for effective enforcement and enhanced compliance. It also includes support to cooperative efforts for the preparation of the Parties' annual reports on enforcement-related obligations. In the next three years, efforts will be made to expand the network to include other environmental sectors, such as fisheries, parks and forestry in federal, state, provincial and tribal or first nation governments.

Objectives

The objectives of this project for the next three years include the following:

- provide support to the EWG and NAWEG in furtherance of their respective mandates, including preparation of the annual reports on enforcement obligations;
- support efforts to expand the membership of the working groups to include other related sectors and agencies;
- outreach to other related networks and organizations; and
- facilitate improved communication with the public, including involvement in the selection of priority areas for cooperation.

Rationale

This project responds directly to the Parties' Article 5 obligation for effective enforcement and the Council's Article 10(4) obligation to foster technical cooperation to this end. The initiative also responds directly to Council Resolution 96-06 establishing the North American Working Group on Environmental Enforcement and Compliance Cooperation (EWG). The EWG, composed of senior-level environmental enforcement officials appointed by the Parties, is mandated by the Council Resolution to:

- take action to strengthen cooperation among the Parties in environmental enforcement and compliance;
- enhance cooperation among the environmental enforcement agencies in recognition of shared enforcement and compliance challenges;
- facilitate and support cooperative enforcement and compliance initiatives;
- exchange information and experiences with alternative approaches to enforcement and compliance;
- facilitate training opportunities among the three Parties;
- prepare on behalf of the Parties the report on environmental enforcement obligations and activities for the CEC annual report;

- recommend to the CEC program priorities relating to environmental enforcement and compliance; and
- establish or recognize any subgroups, task forces, or expert groups necessary to implement this mandate, consistent with the annual program and budget, as approved by the Council.

The EWG also includes in its membership the North American Wildlife Enforcement Group (NAWEG), a regional network of wildlife enforcement officials. The project further responds to the *Shared Agenda for Action* recommendation that the CEC Enforcement Cooperation Program concentrate on compliance assistance and information sharing as well as promoting improved governmental expertise in alternative ways to encourage better environmental performance.

Progress to Date

The EWG was constituted in 1995, with members officially appointed by the Parties since June 1996. The NAWEG was made an affiliate in the fall of 1996 to ensure regional linkage on wildlife enforcement matters. Their additional participation as a subgroup of the Trilateral Committee for Wildlife Ecosystem Conservation and Management helps facilitate additional regional dialogue on both enforcement and broader policy matters.

Since 1995, the CEC has provided support for meetings and communications among the members of the EWG, NAWEG and related task groups. Meetings of the EWG and NAWEG have been coordinated to also enable their effective participation in the development and delivery of the Enforcement Cooperation Program. The networks have spawned a series of additional task groups initiating cooperative work on issues of priority regional concern, including transboundary hazardous waste, environmental management systems (EMS) and other voluntary approaches to compliance, and enforcement of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Continued support to the EWG will ensure continuity of these cooperative regional enforcement efforts. Both the EWG and NAWEG are becoming widely recognized as model regional enforcement networks. They also provide a ready point of contact for enforcement agencies and entities worldwide, including Interpol, the World Customs Organization, the International Network on Environmental Compliance and Enforcement (INECE) and other regional enforcement networks.

The EWG and NAWEG coordinated the preparation of the 1995, 1996 and 1997 annual reports by the Parties on their enforcement-related obligations. The 1995 report provided an overview of the policy, programs and strategies of the three countries to serve as a baseline for future reports.

Actions

<i>1999, 2000 and 2001</i>			
<ul style="list-style-type: none"> • Meetings of and communication between the EWG, NAWEG and task groups. Exploration of Internet forum for EWG and NAWEG. • Preparation of the annual enforcement report. • Annual publication of CEC program bulletins. • Meeting: To discuss the expansion of the network to other agencies. EWG outreach to provincial/state agencies. NAWEG outreach to other agencies (marine, parks), including state/provincial agencies. • Outreach to other regional and international networks. • Interagency exchange of information/regional priority-setting/strategy for enforcement of and compliance with environmental laws. • Adjunct meetings of enforcement task groups. • Consultations with JPAC, NACs, other groups 			
	1999	2000	2001
Total Resources Required	\$72,000	\$50,000	\$50,000

Public Participation

As outlined above, a major objective for this project over the next three years will be improving outreach to the public. Project bulletins will be published and distributed, providing updates on the membership, priorities and activities of the regional enforcement networks. All program reports and bulletins are now available in hard copy and on the CEC home page. In addition, mechanisms will be explored to allow for public involvement in the selection of priority enforcement matters meriting regional attention. In the planning and delivery of specific regional enforcement initiatives, attention will be placed on involving the interested public, including NGOs, industry, academics, where appropriate. As a start, the EWG and NAWEG will initiate consultations with JPAC and other groups.

Capacity Building

One of the direct benefits of the CEC support to the regional enforcement networks has been the immediate enhanced capacity of the Parties' environmental and wildlife enforcement agencies to work cooperatively in meeting the obligation of effective enforcement. The working groups have additionally spawned a number of joint initiatives directed at enhanced field capacity to track and enforce environmental and wildlife laws. These have included the series of regional seminars on enforcement of laws regulating trade in endangered species; a project to explore potential avenues for improving cooperation in the tracking and enforcement of laws regulating transborder movement of hazardous

wastes and CFCs; a project to improve the capacity of maquiladora industries to participate in pollution prevention and voluntary compliance programs; a cooperative information exchange initiative to improve respective policies and programs on voluntary compliance; and a joint initiative to develop improved criteria to evaluate the effectiveness of the enforcement policies and strategies of the Parties.

Expected Results

The project will provide continued support to the regional networks in furtherance of their mandates for regional cooperation in effective environmental enforcement and to help them serve as fora for development of the CEC Enforcement Cooperation Program. This includes continued responsibility for coordinating and preparing the report on enforcement-related obligations under NAAEC.

The challenge for the next three years will be to reexamine the structure and representation on the working groups to allow the participation of other relevant agencies, for example, fisheries, marine, parks and other levels of government, including provincial and state enforcement agencies. As discussed in the Public Participation section above, a parallel challenge for the immediate future is finding means to accommodate requests from the public, including NGOs, regulated industry, and academics, in the design and delivery of the Enforcement Program.

Negotiations are in process to formalize official status for the North American Wildlife Enforcement Group (NAWEG) as the North American regional link to the Interpol Wildlife Crimes Subgroup. Similar linkages are being explored with the World Customs Organization (WCO). Invitations have been extended to explore partnerships and exchanges with other enforcement networks, including the International Network on Environmental Compliance and Enforcement (INECE) and a proposed Americas-wide network under an OAS-sponsored initiative. Information on the CEC Enforcement Cooperation Program, the regional networks, and program publications will be highlighted at the November 1998 International Conference on Environmental Compliance and Enforcement.

The Secretariat will be exploring the option of hyper-linking the enforcement-related home pages of the Parties' agencies with the CEC home page to facilitate access to enforcement information and exchange of strategies. Alternative mechanisms will be explored to both inform and involve the North American public in the efforts of the regional networks.

Enforcement and Compliance Capacity Building

Project Summary

This is an ongoing project to support cooperative efforts to enhance the Parties' capacities for effectively enforcing their environmental laws and regulations. Consistent with NAAEC, the project responds to obligations to enhance skills of both government and community.

Objectives

The objectives of this project include:

- design and delivery of joint regional environmental and wildlife enforcement capacity building initiatives;
- examination of alternative approaches to effective enforcement and enhanced compliance with environmental and wildlife laws;
- support to development of regional enforcement data bases and enhanced opportunities for intergovernmental exchange of enforcement related information;
- support to the cooperative evaluation of the effectiveness of environmental management systems (including ISO 14001) in enhancing pollution prevention and overall environmental performance and compliance, including the exploration of pilot projects; and
- support to the delivery of the Parties' Article 6 obligation regarding private access to remedies.

Rationale

The project arises from the Parties' obligations under Article 5 of NAAEC to "effectively enforce their respective environmental laws" and the Council obligation under Article 10(4) to encourage effective enforcement and compliance and technical cooperation in that regard. In addition, Article 6 requires the Parties to provide private right of access to remedies.

To support fulfillment of these obligations, the Council, through Resolution 96-06, established the North American Working Group on Environmental Enforcement and Compliance Cooperation (EWG), whose mandate includes supporting capacity building in effective enforcement and enhanced compliance. In addition, the mandate of the adjunct North American Wildlife Enforcement Group (NAWEG) encompasses cooperation in capacity building for enforcement of wildlife laws and regulations. The project further reflects the direction provided by the CEC Council in the Shared Agenda for Action to provide compliance assistance and to enhance capacity to track and enforce CITES violations.

Progress to Date

The Enforcement Cooperation Program, under the guidance of the EWG and NAWEG, has to date concentrated the capacity building project in the following priority areas:

1. Wildlife Enforcement

a) CITES tracking and enforcement

Since 1995, cooperative efforts for capacity building have targeted enhanced capability to track and enforce regional implementation of CITES and related laws in North America. By the end of 1998, four regional training programs will have been delivered to enforcement officials on trade in endangered species of furbearing mammals, birds, reptiles and coral and marine invertebrates.

b) Wildlife forensics

In 1997, the CEC, in cooperation with NAWEG and US National Fish and Wildlife Forensics Laboratory and the *Universidad Nacional Autónoma*, sponsored a seminar for enforcement officials and forensics authorities of the three countries on forensic techniques, DNA identification techniques, crime scene investigation, necropsy issues, species' identification and medicinal trade issues.

c) Training exchanges

In 1998 the CEC provided support for training exchanges. Under those joint initiatives, subsidies were provided for the participation of wildlife enforcement officials in each others' training programs to facilitate the exchange of training information and techniques among the agencies. In addition, support was given to meetings of the NAWEG Inspection Task Group towards development of a long-term joint or cost-shared inspector training.

2. Pollution Control Tracking & Enforcement

A second identified priority area for enforcement capacity building is the tracking and enforcement of pollution control laws. To date, emphasis has been in three areas:

a) Capacity to track and enforce laws regulating the transboundary movement of hazardous wastes and CFCs in North America

Since 1996 the EWG has identified the need for cooperation improving the capacity to track and enforce laws regulating the transborder movement of hazardous wastes and CFCs. The CEC commissioned a report documenting current law, policy and practices as background for a trilateral meeting of hazardous waste enforcement officials. The product is a Regional Action Plan for exchanging tracking databases and compliance data; enhancing capacity to gather, utilize and exchange intelligence; improving compatibility in tracking systems; conducting training on intelligence-gathering, regional law and policy, safety, emergency response, and spill response; and understanding the nature of the regional illegal trade and the key players involved.

b) Sound Management of Chemicals

Since 1997 the Enforcement Working Group has been invited to participate in discussions on the implementation of action plans for the Sound Management of Chemicals Program. It is proposed that the EWG be invited to participate in the development stage of the action plans to ensure that alternative compliance strategies are also considered at the front end.

c) Alternative approaches to achieving compliance

The Enforcement Cooperation Program has been involved in the area of alternative or innovative tools for enhancing compliance and pollution prevention, including government and private sector voluntary compliance mechanisms and environmental management systems. The CEC has provided support for a series of joint information meetings for the maquiladora industries in the

Mexico-United States border area, with the objective of encouraging greater participation in private and government-driven pollution prevention and voluntary compliance programs.

The CEC has also supported a joint initiative for a regional policy on environmental management systems (EMSs) and compliance, reflected in Council Resolution 97-05 on Future Cooperation regarding Environmental Management Systems and Compliance and the related report by the EWG to Council in 1998. The project has also involved support for national initiatives to pilot alternative use of EMSs for compliance purposes, to assess the relative value of such systems as compliance triggers, and the inter-governmental exchange of these experiences.

Actions

Wildlife and CITES Tracking and Enforcement Capacity

<i>1999</i>	
<ul style="list-style-type: none"> • Conference on wildlife forensics. • Wildlife enforcement training network and partnership. 	
Total Resources Required	\$95,000

<i>2000</i>	
<ul style="list-style-type: none"> • Follow up work developing a wildlife forensics network; training materials on wildlife forensics. • Planning work for 2001 seminar on trade in endangered plant species. • Support to wildlife inspector network. 	
Total Resources Required	\$100,000

<i>2001</i>	
<ul style="list-style-type: none"> • Seminar on tracking and enforcement for endangered plant species. • Support to networking and outreach to other agencies to identify priorities for joint capacity building initiatives and to explore potential sources of support. 	
Total Resources Required	\$90,000

Pollution Control Tracking and Enforcement Capacity

1999	
<ul style="list-style-type: none"> • Continued joint initiative for the piloting and evaluation of EMS as mechanisms to improve compliance with environmental laws and regulations. • Joint initiative of legal experts and hazardous waste officials to consider methods for improving the Parties' ability to gather, use, and exchange intelligence on the illegal trade in hazardous waste and CFCs. • Development of a compliance strategy in support of the Sound Management of Chemicals action plans. 	
Total Resources Required	
\$65,000	

2000	
<ul style="list-style-type: none"> • Participation in Sound Management of Chemicals initiative to identify alternatives for improved control through enhanced compliance (specific action plans for priority chemicals). • Support to joint initiative to examine EMS as a mechanism to enhance compliance including outreach to other regions. • Support to the joint action to improve tracking and enforcement of laws regulating transborder movement of hazardous wastes and CFCs. 	
Total Resources Required	
\$80,000	

2001	
<ul style="list-style-type: none"> • Continued work on EMS and compliance. • Seminar on a capacity building priority area identified in 2000. • Project to examine obligation to provide private remedies. 	
Total Resources Required	
\$110,000	

Public participation

A number of specific initiatives will be incorporated in this project over the next few years to both ensure that the views of the public and regulated industry are considered in selecting priorities for cooperative action and for the delivery stage of specific initiatives. One potential initiative, subject to availability of funds, is a review of current policy and practices of the Parties in implementing their respective obligations under Article 6 to extend prescribed opportunities for the public to participate in enforcement processes of the respective Parties. A second initiative involves dialogue between the EWG, NAWEG and public on the issue of priorities and alternative strategies for improved enforcement.

Expected Results

Support for capacity building for effective environmental enforcement and compliance will be phased in over time, reinforcing ongoing efforts and reflecting the allocation of resources to this program. Wildlife enforcement capacity building initiatives will involve continued support to the joint efforts of NAWEG, in their pursuit of cooperative approaches to sharing information and expertise in order to enhance the capacity to track and enforce wildlife laws. In the wildlife area particular attention will be given in the next few years to expanding their activities, so far as resources permit, to include other national, state and provincial agencies and associations. Pollution control tracking and enforcement initiatives will address three priorities: (1) evaluation of environmental management systems and compliance, (2) enforcement and compliance aspects of the Sound Management of Chemicals, and (3) regional tracking and enforcement of hazardous wastes and CFCs.

1. Wildlife Enforcement

Future priorities for joint activity in this area include:

- a) Support to the development of a regional network on wildlife forensics through sponsorship of a major meeting of North American wildlife enforcement and forensic scientists; the initiative encompasses a wide array of issues from review of tariff barriers to technology transfer, to mutual exchange of forensic expertise to mutual assistance in enforcement proceedings.
- b) Joint production of training materials on field level techniques for tracking and responding to CITES violations and on wildlife forensics.
- c) Delivery of a joint seminar on the tracking and enforcement of laws regulating trade in endangered plant species.
- d) Planning work for a joint seminar for wildlife and pollution control enforcement officials to enhance capacity to respond to violations concerning wildlife mortality from environmental contaminants.
- e) Joint exploration in enforcement protocols, for example, for the return of confiscated wildlife.
- f) Joint consultation in enforcement protocols, for example, for the return of confiscated wildlife.
- g) Consultation with relevant NGOs on potential avenues of cooperation on specific projects to improve compliance with wildlife and related laws.

2. Pollution Control Tracking & Enforcement Capacity

Future priorities for capacity building in this area include:

- a) Tracking and enforcement of hazardous wastes and CFCs, including such activities as:
 - i) development of a regional training strategy on the topic of improved tracking and enforcement of transboundary shipments of hazardous wastes and CFCs for customs and environmental enforcement officials; and
 - ii) support to agencies for the joint examination of improved systems to gather and utilize intelligence for tracking illegal movements of hazardous wastes and CFCs.
- b) Development of a compliance strategy in support of the actions plans under the Sound Management of Chemicals initiative.
- c) Cooperative analysis of the effectiveness of EMSs (including ISO14001) in enhancing pollution prevention and overall environmental performance and compliance, including:
 - i) joint review of domestic experience with pilot application of voluntary compliance mechanisms and environmental management systems;
 - ii) continue to cooperate in the review of the effectiveness of EMSs (including ISO14001) in enhancing pollution control, overall environmental performance and compliance, including exploration of cooperative pilot projects;
 - iii) continue to explore needs and opportunities for awareness of EMSs by small to medium-size enterprises and ensure their environmental compliance and improved performance;
 - iv) continue to exchange information with other countries, regions and organizations regarding polices and programs that involve EMSs and compliance; and
 - v) evaluate and, as appropriate, make recommendations to the Council on core elements of EMSs (including ISO 14001) for consideration in domestic polices and programs.
- d) Exploration of enhanced opportunities for effective involvement of the public in enforcement processes.

Partnerships

Effective delivery of this capacity building initiative will require enhanced interaction among the various related working groups and projects in the CEC, including:

- the Sound Management of Chemicals initiative;
- the project to examine trade in wildlife; and
- the initiative under the Environmental Standards and Performance Program to examine technical capacity and accreditation in environmental laboratories in order to ensure consideration of enforcement needs and priorities in design and implementation of the projects.

Partnerships will continue between the CEC and the Parties' pollution control and wildlife enforcement agencies, without whose cooperation the program would not be possible. It is also recognized that efforts must be made to expand the regional enforcement network for capacity building to other related agencies responsible for fisheries and parks, as well as to state and provincial agencies and those of tribal governments and First Nations. In the future, partnerships will also be sought with nongovernmental organizations regarding exercise of their rights and opportunities under Article 6 of NAAEC, and to ensure observance of NAAEC commitments to participation and transparency.

Efforts will be intensified to forge working relationships with other institutions and agencies such as the World Bank, UNEP and OAS to explore opportunities for cost sharing in capacity building.

Indicators of Effective Environmental Enforcement

Project Summary

This project involves a cooperative and multi-stakeholder effort to explore indicators for measuring and evaluating the effectiveness of the enforcement and compliance strategies of each Party. The ultimate goal is the development of effective North American environmental enforcement and compliance indicators.

Objectives

The objectives of this project include:

1. In the short term:
 - document actions to date by the Parties to implement criteria and processes for evaluating and responding to indicators of effectiveness of their respective environmental enforcement policies, programs and strategies;
 - facilitate intergovernmental exchange of information and expertise in the development and use of indicators of effective enforcement; and
 - provide a forum for dialogue among government, public and industry on the development and use of indicators, and analysis of trends in each country's performance with a view to establishing a baseline.
2. In the long term:
 - explore the feasibility North American indicators of effective environmental enforcement policies, programs and strategies;
 - support the development of more effective indicators; and
 - provide public reports on the government delivery of their enforcement obligations using the agreed indicators.

Rationale

This project is directly related to the Parties' obligations under NAAEC to "effectively enforce their respective environmental laws." The Council is mandated to encourage the technical cooperation of the Parties toward effective enforcement and compliance with their respective environmental laws. In support of this obligation, the CEC, under the guidance of the Enforcement Working Group, in 1997 initiated a project to examine approaches to measuring the performance of enforcement and compliance programs. Consistent with NAAEC principles of transparency and participation, the intention is to engage the North American public and regulated industry in the development of criteria for use in improving and evaluating national enforcement and compliance policies, strategies and responses.

Progress to Date

During the past two years, baseline reports were prepared by the CEC on:

- current systems and proposed new programs in each country for measuring, reporting, and evaluating enforcement and compliance, including initiatives by government, industry and public;
- the use of public-response indicators in Canada implementing effective enforcement strategies; and
- a brief survey of European experiences with measuring and reporting on environmental enforcement and compliance.

These background reports served the foundation for a CEC-sponsored Dialogue on Indicators of Effective Environmental Enforcement in May 1998 in Puebla, Mexico, with representatives of government, industry and the public. Proceedings of that dialogue will be distributed to the public for review and comment by the fall of 1998 and will serve as the building block for the next phase.

Actions

1999	
	<ul style="list-style-type: none">• Meeting of the EWG Task Group and Expert Advisory Group to review proposed indicators/methodologies. Consideration of use of agreed indicators. Review to include any comments from public on initial work.• Progress report to CEC Council on development and testing of alternative indicators. Special report on EMS mechanisms as triggers for enhanced compliance.• Ongoing exchange of information and expertise in the development and application of indicators.
Total Resources Required	\$68,000

<i>2000</i>	
<ul style="list-style-type: none"> • EWG Task Group agrees on selected indicators for annual report on enforcement. • Interagency exchange of information and expertise on indicators of effective enforcement. 	
Total Resources Required	\$50,000

<i>2001</i>	
<ul style="list-style-type: none"> • Public consultation to evaluate new indicators. • EWG Task Group meets to reconsider indicators. 	
Total Resources Required	\$50,000

Public Participation

From its inception, the project was designed to involve the public, including NGOs, academics, and the regulated industry. One of the key background papers included an analysis of government use of public views and responses as a means of measuring the relative effectiveness of government enforcement policy and programs. The Dialogue on Indicators of Effective Environmental Enforcement included representatives from NGOs, industry and independent experts. The background papers and proceedings of the Dialogue will be distributed widely to the public to provide expanded opportunity for input to the design and delivery of the initiative. In addition, an expert advisory group (appointed fall 1998), consisting of NGOs, industry and other individuals with related expertise, will work in tandem with the task group of enforcement officials to advise the CEC in the project. Finally, it is the intent of the CEC to ensure that the focus of the initiative continues to include consideration of the public role in any evaluation processes.

Capacity Building

A component of the project continues to be support to the development and application of more effective indicators. As an adjunct to this the intent is to continue to provide a series of fora the regional sharing of experiences with evolving tools and evaluation processes.

Expected Results

In the next phase of this ongoing project, efforts will shift to the piloting and review of alternative improved indicators. During the follow-up meeting of enforcement officials, a variety of options for next steps were discussed, including:

- interagency review of innovative new indicators and review processes;
- joint evaluation of “best practices” in enforcement evaluation, including alternative indicators or criteria and evaluation processes;
- possible pilot applications of indicators or methodologies;
- direct ongoing participation of NGOs, industry, academics and other experts in the delivery of this phase; and
- eventual utilization of agreed-upon indicators for the purpose of annual reporting on enforcement.

The CEC will expand the review to explore provincial/state or local experiences, and to involve the public in the development and review of alternative indicators and methodologies.

Other Initiatives of the CEC

This section includes information on activities of the CEC that are either mandated by the NAAEC, as in the case of Specific Obligations Under the Agreement (SOUN) and the Joint Public Advisory Committee, or that stem directly from decisions taken by the Ministers, such as the creation of NAFEC.

Specific Obligations under the Agreement (SOUN)

In addition to the actions and initiatives described in this three-year program plan, the CEC will continue to support the specific obligations of the North American Agreement for Environmental Cooperation. This includes:

- facilitating the public's access to information on the environment that is held by public authorities of each Party, as specified under Article 10(5)(a) of NAAEC, by means of the North American Information Management Program (the "CEC Information Centre");
- cooperating with the NAFTA Free Trade Commission, as specified by Article 10(6);
- transboundary environmental impact assessment under Article 10(7);
- reciprocal access to courts as set forth in Article 10(9);
- preparing the Annual Report as called for by Article 12(1);
- preparing the State of the Environment Report as mandated by Article 12(3);
- developing such reports as the Secretariat deems appropriate under Article 13 of NAAEC;
- processing citizen submissions and the development of factual records pursuant to Articles 14 and 15 of the NAAEC; and
- performing other obligations specified by NAAEC.

North American Fund for Environmental Cooperation (NAFEC)

Based on directives in the *Shared Agenda*, and in response to recommendations contained in the report of the Independent Review Committee, NAFEC will:

- continue to support community-based projects and ensure that they address issues of importance to the three countries ("thinking regionally, acting locally");
- continue to emphasize aspects of capacity building and the development of partnerships across borders and sectors;
- focus grant awards on projects that support the CEC's three-year program plan and link the results of those projects to other components of CEC's work program;¹ and
- emphasize public participation within CEC processes and within other processes of regional relevance.

The NAFEC Guidelines will be revised immediately following approval of the three-year program plan and a 1999 Call for Preproposals (released in December 1998)² will specify a 10 March 1999 deadline. The 1999 Call will explain that NAFEC projects funded during 1999–2001 must reflect the focus of the 1999–2001 Program Plan. Focus and deadlines for 2000 and 2001 will remain the same but updated Calls for Preproposals will be issued to reflect progress within the program plan.

¹ Independent Review Committee's Recommendation 17: "Building on the three-year program cycle, NAFEC should seek to fund projects so as to develop a critical mass of community-based experiences on key topics in the CEC work program, in order to help inform the Secretariat and Council in their respective program and decision-making functions."

² Disbursement of grants will be subject to availability of funds and final approval of the CEC 1999 Program and Budget.

NAFEC represents an opportunity for the CEC to work in partnership with NGOs throughout North America. Community-based organizations can respond creatively to clearly defined CEC goals and initiatives for integrating their work with the wider CEC work program. In turn, the CEC can benefit from projects carried out at relatively low cost (due to the capacity of NGOs to limit costs and obtain other funding) and meet its commitment to cooperation and public participation.

NAFEC will continue the process (begun during the NAFEC Interim Evaluation) of developing indicators to measure the impact of NAFEC grants, individually and collectively. These indicators will be developed in collaboration with NAFEC grantees and other CEC stakeholders. Results will be documented in an annual publication that will serve both to assess the performance of NAFEC and respond to some of the questions that both NAFEC grantees and other communities are asking about how best to move toward sustainability.

	1999	2000	2001
Total Resources Required	\$1,000,000	\$1,000,000	\$1,000,000

The Joint Public Advisory Committee (JPAC)

The Joint Public Advisory Committee (JPAC) is one of the constituent bodies of the Commission for Environmental Cooperation, along with the Council and the Secretariat. As a group of fifteen volunteer citizens, five from each country, JPAC recognizes its functions in one respect as a microcosm of the public: independent individuals who contribute diverse institutional experience and cultural perspectives. JPAC may provide advice to the Council on any matter within the scope of NAAEC. As the representative of the North American community-at-large, one of its important obligations is to ensure that public concerns are taken into account when formulating its advice to Council.

JPAC's vision is to promote continental cooperation in ecosystem protection and sustainable economic development, and to ensure active public participation and transparency in the actions of the Commission. The members share in a commitment to preserve and enhance the North American environment and to achieve a sustainable society.

JPAC's work plan for 1999–2001 will continue to be oriented around the CEC plan, the *Shared Agenda for Action*, adopted by Council. This document launched a three-year project cycle for the Commission, and requires that JPAC create new working groups and reactivate existing ones to develop specific advice on the new initiatives. JPAC will work closely with the Secretariat to advise the Council on the development of the 1999–2001 CEC Program Plan and the specific work program for the three years.

JPAC is very concerned with the relationship between environment, economy and trade and wishes to focus on improving the quality of life for all citizens of North America. JPAC has also agreed that environment, human health and societal well-being form a matrix within which all of the Commission's activities should be developed and evaluated, and will continue to introduce these cross-cutting issues throughout the delivery and monitoring of the three-year program plan and its associated projects.

Projections: 1999–2001

The Joint Public Advisory Committee (JPAC)

	1999	2000	2001
Total Resources Required	\$160,000	\$160,000	\$160,000

Note: The public consultation budget is reflected in the specific CEC projects.

Annex: A Shared Agenda for Action

A statement on the future work of the Commission for Environmental Cooperation

Mérida, Mexico, 26 June 1998

The three North American environment ministers have reviewed the implementation of the North American Agreement on Environmental Cooperation during its first four years, as well as the operations and effectiveness of the Commission for Environmental Cooperation (CEC).

We have listened to comments and advice from a wide range of people, and particularly want to thank the Independent Review Committee and the Joint Public Advisory Committee.

The CEC is a unique and valuable institution. It represents the state of the art in considering environmental issues in trade agreements, and it has a mandate to promote sustainable development. The CEC brings together two members of the G-7 group of industrialized nations and Mexico, still in many ways a developing country. This grouping of nations provides a microcosm of many of the problems of sustainable development facing the world today. The discussion of sustainability through the CEC provides for direct public input from the citizens of all three countries.

The Commission launched a wide range of projects in its first four years, and has many successes to its credit. It is now time for the CEC to further sharpen its focus. This document begins the process of developing a longer term and more strategic approach to the work of the CEC.

This framework builds on the CEC's strengths. It is trilateral, and should continue to focus its work on issues of common importance to the three countries. It has the concept of sustainable development at its core, and is therefore in an ideal position to identify policies that can promote environmental sustainability.

The CEC is a new institution within a forest of international organizations, and so must continue to select its niche with care, avoiding duplication with other institutions supported by the three countries, and building upon their work where appropriate. It has shown an ability to leverage its limited financial resources and use them to stimulate financial commitments from larger organizations. It can deliver projects "on the ground," and build capacity for environmental management. Because of its emphasis on public participation, the CEC can develop partnerships with the private sector and other actors in civil society.

Given the CEC's resources, it needs to focus on a limited number of projects. The Commission should aim to produce tangible results from some of its projects each year. It will also make capacity building an important part of the work program.

The following two priority areas will be the focus of the CEC's workplans over the next several years: Pursuing Environmental Sustainability in Open Markets, and Stewardship of the North American Environment.

I. Pursuing Environmental Sustainability in Open Markets

Trade liberalization that is supportive of environmental priorities can be helpful in achieving sustainable development. It can provide additional financial resources for environmental protection, and it can provide meaningful employment opportunities for the disadvantaged. It can facilitate the importation and use of the cleaner and more efficient technologies necessary for the transition to sustainable development. It can open new market niches for environmentally friendly products.

But freer trade without robust national environmental policies can also accelerate environmental degradation. There have been fears that it could lead to a “race to the bottom” if countries lower their standards in order to remain competitive and attract foreign investment, and it could lead to unsustainable consumption of natural resources.

However, enlightened management of the trade and environment relationship can result in improved conditions in both sectors. The CEC can help governments to formulate actions and policies that promote the kind of trade that supports sustainable development. It can help governments to monitor trends in domestic legislation and compliance to ensure that domestic laws are being effectively enforced. The Commission can assist the three countries by facilitating cooperative efforts in ensuring compliance.

Pursuing environmental sustainability in open markets includes the following areas of concentration: promoting trade in environmentally friendly goods and services; exploring the linkages between environment, economy and trade; environmental standards, enforcement, compliance and performance; and regional action on global issues.

Promoting Trade in Environmentally Friendly Goods and Services

The market for cleaner, environmentally sound technologies is estimated at over \$250 billion annually in the OECD countries alone. North America has only scratched the surface of the potential for “greener trade.”

It is important to find ways to make biodiversity conservation more economically viable. Increased legal trade in wildlife, if managed sustainably, can provide resources to preserve and enhance biodiversity in the three countries. As part of seeing that such trade does not harm biodiversity, the CEC should facilitate cooperative efforts by the countries to meet their obligations under Convention on International Trade in Endangered Species of Wild Flora and Fauna, to prevent illegal trade in endangered species.

Properly managed, ecotourism can also bring badly needed financial resources to North America’s poorest regions. It can provide employment, and preserve biodiversity and natural beauty.

More sustainable forms of agriculture provide products for emerging markets. For example, coffee that is planted together with trees, rather than in open fields, can help preserve biodiversity, particularly bird life.

The new project on by-product synergy promises a pioneering experiment among private entrepreneurs, by encouraging industries to exchange, recycle or minimize the creation of materials that are now discharged as wastes. A material that is a waste to one company may be used as a product by another company.

Exploring the Linkages between Environment, Economy and Trade

The CEC will study the positive and negative outcomes for the environment of NAFTA on an ongoing basis. In addition, the CEC will work towards identifying emerging trends related to the environment resulting from expanding economic activity. Identification of these trends will enable the CEC to examine ways in which the parties can foster policies that benefit the environment, and support the development of regional and domestic responses to adverse trends.

The CEC will work with other NAFTA bodies and appropriate international institutions to ensure that trade and environment policies are mutually reinforcing.

Environmental Standards, Enforcement, Compliance and Performance

Experience has shown that it is extremely difficult to compare environmental performance among countries, or even among regions of the same country. Standards are different, pollutants are monitored differently, and legal systems differ. The CEC should therefore build on its existing work on enforcement cooperation. The CEC should concentrate on:

- the analysis of trends in each country's performance to establish a baseline,
- compliance assistance and information sharing,
- development of compliance indicators that show real changes in environmental performance, and
- the promotion of improved performance through helping to develop expertise in government environmental management systems, voluntary agreements and ways to improve environmental standards.

Regional Action on Global Issues

There is a realization that the traditional "command and control" approach to environmental protection needs to be supplemented by the use of economic instruments and other market based approaches. North America has a wealth of experience in this area. The solutions to global environmental problems will require new partnerships between North and South. Because of its unique structure, the CEC can provide leadership in the development of some of these partnerships. For example, the Kyoto Protocol on climate change calls for the creation of a Clean Development Mechanism. Within the framework of the protocol, the CEC will work with the three nations and the private sector to develop North American opportunities for the Clean Development Mechanism. The three countries would involve the private sector in efforts to disseminate more environmentally friendly energy technologies. The CEC will also look at how to maximize the potential for carbon "sinks," such as forests.

II. Stewardship of the North American Environment

North Americans are trustees of an amazing range of terrain, climate and marine, and terrestrial ecosystems. For example, Mexico's biodiversity places it among the 10 "megadiversity" countries in the world. Many of the problems that affect the continental environment are national, and many are shared by two of the three countries. However, there are a number that are spread across the continent as a whole. It is these problems that should concern the CEC.

Stewardship of the North American environment includes: identifying trends in the North American environment; protecting human and ecosystem health; and sustaining North American biodiversity.

The North American Environment—Identifying Emerging Trends

The CEC will continue to provide an important service by identifying emerging threats to the shared environment, thus allowing governments to anticipate these problems and prevent them before they happen. This effort will help governments to move away from the traditional, and more expensive, "react and cure" approach. Identifying emerging threats could be done initially through a regular "issue scan," prepared by leading authorities from the three countries. Because of the interdependence of the region's environment and its economy, such a scan would need to take account of economic, as well as environmental, trends. The environmental effects of deregulation of the electricity sector could be a case in point. The CEC's State of the Environment report could provide one of the bases for the scan.

Protecting Human and Ecosystem Health

Here, the CEC has an excellent record of achievement, and has a number of continuing projects such as:

- Cooperation on North American air quality issues
- The Sound Management of Chemicals
- North American Pollutant Releases and Transfers, which produces the *Taking Stock* reports

This work will continue to provide a critical part of the continuing program of the CEC.

Sustaining North American Biodiversity

The CEC has also made a promising start in this area through its work with the North American Biodiversity Information Network, the mapping of ecologically significant areas, and the drafting of a North American cooperative strategy for birds. This could be used as a platform to move toward:

- developing and applying a set of basic "conservation status" indicators, and
- capacity building to help the countries meet their biodiversity objectives.

Bearing in mind the complexity of the issue and the number of activities in this area already underway in North America, a scoping study is required to derive other future program options.

Developing a Strategic Plan and Three-Year Project Cycle for the CEC

To implement a longer-term strategic approach, the CEC will move to a “rolling” three-year plan. The organization will always be planning ahead, and will review and renew its long-term plan every year. This provides an appropriate balance between timeliness of results and the security needed for multi-year projects.

At the organizational level, this approach will be based on close cooperation among the partners which comprise the CEC: Council, the Joint Public Advisory Committee (JPAC) and the Secretariat. The public will be engaged openly and effectively. The Secretariat and JPAC will be working from the start with representatives of the countries to develop the first rolling plan this year and the work program for 1999. In the first year, the influence of the Strategic Plan on the workplan will be limited, as many projects are already in the pipeline. But, by the end of second year, most of the CEC’s projects should be developed in accord with the strategic plan.

This will require detailed planning for projects. The Secretariat will need to survey available information resources and, when appropriate, the science base for the issue. In light of the CEC’s limited resources, and its function as a catalyst for most of the issues it tackles, projects will need to be able to produce concrete results, and usually be of limited duration. When possible, projects should reflect national priorities to which the governments are willing to commit their own resources for implementation of project results. Most projects will require “exit strategies” detailing how they will be carried on after CEC support has come to an end.

Projects will be designed to include milestones, and an internal mechanism to ensure their achievement. This will also entail regular project evaluation.

The North American Fund for Environmental Cooperation

The North American Fund for Environmental Cooperation (NAFEC) will continue to be a source for community funding, and its effectiveness will be enhanced by focusing grants awards on projects that support CEC’s new three-year plan; and NAFEC will also focus on developing the capacity in public participation. This new focus for NAFEC will result in an enhanced capacity of citizens to become active partners in improving the North American environment.

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In North America, we share a rich environmental heritage that includes air, oceans and rivers, mountains and forests. Together, the elements of this heritage form the basis of a rich network of ecosystems that sustains our livelihoods and well-being. If these ecosystems are to continue being a source of future life and prosperity, our environmental heritage must be protected. Doing so is a responsibility shared by Canada, Mexico and the United States.

The Commission for Environmental Cooperation (CEC) is an international organization whose members include Canada, Mexico and the United States. The CEC was created under the **North American Agreement on Environmental Cooperation (NAAEC)** to address regional environmental concerns, help prevent potential trade and environmental conflicts and promote the effective enforcement of environmental law. The Agreement complements the environmental provisions established in the North American Free Trade Agreement (NAFTA).

To find out more about the CEC's activities, or to get up-to-date information on the projects described in this document, including related announcements and publications, please visit the CEC's Internet home page or contact us using the addresses below.

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