

Operational Plan of the Commission for Environmental Cooperation

2007–2009



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1 Introduction

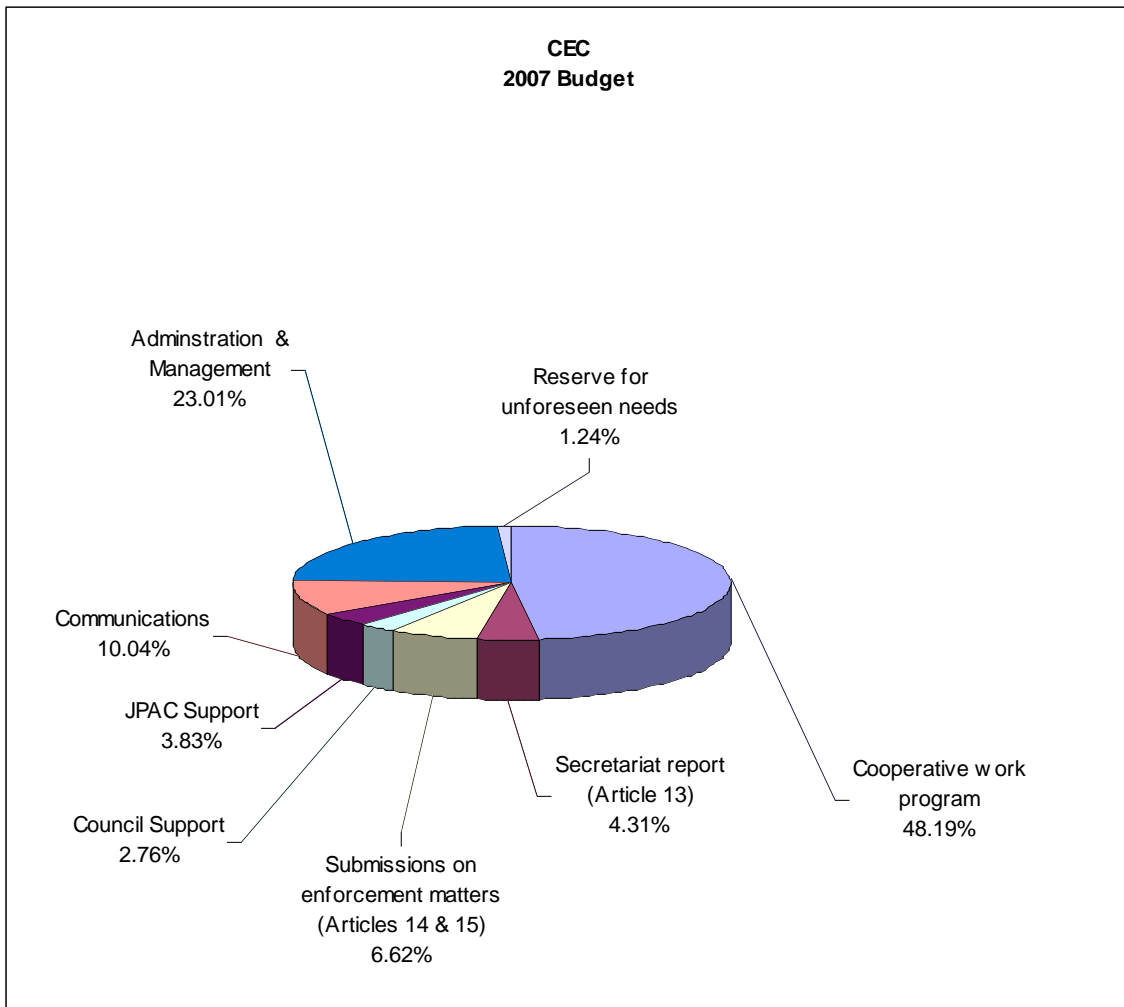
On the occasion of the Commission's tenth anniversary, the Council met in Puebla, Mexico, to review the CEC's progress, to re-affirm the Parties' commitment to the CEC, and to set the direction for the future (see [Puebla Declaration](#)) which it framed in three broad priority areas: Information for Decision-making, Capacity Building, and Trade and Environment. In June 2005, the Council adopted the CEC's Strategic Plan for 2005–2010 that describes the Council's priorities for its cooperative work program and the goals and initiatives for accomplishing them. In developing the Strategic Plan, the Council took into account recommendations of the report from the [Ten-year Review and Assessment Committee](#), the Joint Public Advisory Committee (JPAC), and key stakeholders.

This Operational Plan presents how the goals and objectives of the 2005–2010 Strategic Plan will be implemented through project activities and key initiatives, and specifies the budget for the Commission. The Operational Plan is updated annually while project planning focuses on a three-year horizon.

2 Budget for 2007

The CEC budget is based on the Parties' contributions totaling US\$9 million for 2007. The CEC budget is complemented by staff time, expertise, and other in-kind contributions from the Parties, and contributions from CEC partners.

The graph below depicts how the CEC budget is allocated.



CEC 2007 BUDGET

DESCRIPTION	2007 budget (all amounts in thousands of Canadian dollars)	% of Total
<u>REVENUES</u>		
Parties' contributions (US\$9,000 at 1.11 exchange rate for 2007, 2006 at 1.18)	9,990.0	
Interest	50.0	
Pré-2006 surplus	2,071.8	
Total revenues	12,111.8	
<u>EXPENSES</u>		
Cooperative work program		
Projects*	5,427.1	
Mexico Liaison office*	369.9	
Managing CEC environmental Information	40.0	
	5,837.1	48.19%
Secretariat report (Article 13) *	521.9	4.31%
Submissions on enforcement matters (Articles 14 and 15) *	801.5	6.62%
Council Support*	334.4	2.76%
JPAC Support*	463.4	3.83%
Communications*	1,216.0	10.04%
Administration and Management		
Executive Director's office	178.2	
Monitoring, evaluation and reporting	50.0	
External administrative support	256.0	
(Insurance, audit, fiscal expertise, banking, legal)		
Relocation/orientation and recruitment	200.0	
Operating expenses	1,019.7	
(Telecommunications, rent, operating equipment, office supplies)		
Administration and management salaries	1,083.7	
	2,787.6	23.01%
Reserve for unforeseen needs	150.0	1.24%
TOTAL EXPENSES	12,111.8	100.00%

* Includes salaries.

The following table itemizes the overall budgets for the individual projects within the Cooperative Work Program for 2007.

COMMISSION FOR ENVIRONMENTAL COOPERATION		
2007 COOPERATIVE WORK PROGRAM - PROJECTS		
(all amounts in thousands of Canadian dollars)		Budget 2007 C\$
1	<u>Monitoring and Assessing Pollutants across North America</u>	295.0
2	<u>Tracking Pollutant Releases and Transfers in North America</u>	535.0
3	<u>Enhancing North American Air Quality Management</u>	245.0
4	<u>Mapping North American Environmental Issues</u>	140.0
5	<u>Reporting on the State of the North American Environment</u>	70.0
6	<u>Strengthening Wildlife Enforcement Capacity</u>	75.0
7	<u>Improving Private and Public Sector Environmental Performance</u>	475.0
8	<u>Building Local Capacity for Integrated Ecosystem Management and to Conserve Critical Species and Spaces</u>	350.0
9	<u>Sound Management of Chemicals</u>	433.0
10	<u>Promoting the North American Renewable Energy Market</u>	340.0
11	<u>Encouraging Green Purchasing</u>	160.0
12	<u>Harnessing Market Forces for Sustainability</u>	133.0
13	<u>Trade and the Enforcement of Environmental Laws</u>	280.0
14	<u>Guidelines for Risk Assessment of Invasive Alien Species and their Pathways</u>	250.0
15	<u>Ongoing Environmental Assessment of NAFTA</u>	140.0
TOTAL PROJECTS		3,921.0
WORK PROGRAM SALARIES AND BENEFITS		1,506.1
TOTAL COOPERATIVE WORK PROGRAM		5,427.1

3 Cooperative Work Program

The CEC Council adopted the *Strategic Plan for the Commission for Environmental Cooperation 2005–2010* that commits the CEC to specific goals and objectives and a series of multi-year initiatives that the Council outlined under the three program priorities of the Puebla Declaration:

- Information for Decision-making;
- Capacity Building; and
- Trade and Environment.

The goals under these priorities are: to support better decision-making by providing information on the key environmental challenges and opportunities facing North America; to strengthen the capacities of the three countries to manage environmental issues of common concern; and to promote policies and actions that provide mutual benefits for the environment, trade, and the economy.

The Strategic Plan and its initiatives are executed through the annual Cooperative Work Program 2007–2009 described here. The projects that comprise the Cooperative Work Program support each of the Puebla Declaration priorities as cited above. As stated in the Strategic Plan, “*We intend to pursue these mutually supporting priorities as a comprehensive effort. Capacity-building is a built-in feature in projects under all three priorities; information projects will also contribute to the achievement of the trade and the environment objectives. We will design and manage the various projects under the priorities so as to strengthen these relationships.*”

The Council, as the governing body of the CEC, approves and oversees the implementation of the Work Program. The Secretariat provides technical, administrative and operational support to the Council and to committees and groups established by the Council in the implementation of the Cooperative Work Program.

The Council and the Secretariat consult with JPAC and stakeholders on an ongoing basis throughout implementation of the projects. In addition, the CEC is expanding its efforts to partner and engage with the private sector, as well as with other institutions from the public sector, to leverage resources and maximize results.

The Cooperative Work Program is updated annually as individual projects change or evolve and we make progress in achieving the goals and objectives established in the Strategic Plan. Changes in the projects and work program are subject to the approval by the Council.

What follows are summaries of the projects presented in the context of the CEC’s overall priorities, goals and objectives. Detailed project descriptions, including associated implementation tasks and detailed budgets, can be found in the appendix.

3.1 Priority 1: Information for Decision-making

To resolve environmental problems that are North American in scope, decision-makers at all levels in all three countries need the best information in order to set objectives, implement solutions and monitor the effectiveness of their choices.

To this end, the CEC's work strives to increase the comparability, reliability and compatibility of national and subregional information and has begun developing and linking multinational databases and information networks in such areas as pollutant releases, ecological integrity, and trade-environment relationships. This work continues in 2007 and entails as well the development of common standards and methodologies for integrating various information-related activities and reporting mechanisms being used in North America. The CEC is ensuring that its science and information products are of high quality. The CEC is also building on national efforts by focusing on North American issues that the Council has identified as priority concerns.

The CEC's goal for 2007 through 2010 is to support better decision-making by providing information on the key environmental challenges and opportunities facing North America. Its objectives are to:

- Strengthen the capacity of North American decision-makers to understand continental environmental issues of common concern;
- Establish an environmental information and knowledge framework for North America;
- Develop the information needed to describe the state of the North American environment and to identify emerging trends and issues; and
- Make environmental information more widely available to facilitate local, national and regional action.

To meet these objectives the CEC will implement the following projects:

Project 1: Monitoring and Assessing Pollutants across North America

The purpose of this project is to promote and facilitate the increasing comparability, reliability, relevance and availability of data and information on persistent toxic substances in the North American environment. It aims to improve the generation and management of the information needed to identify and assess critical trends and issues concerning contaminants and stressors that affect environmental and human health. A critical element is capacity building and international cooperation, emphasizing the strengthening of the capacity of Mexican experts to measure, monitor and assess persistent and toxic substances in Mexico.

This project originates from the North American Regional Action Plan on Environmental Monitoring and Assessment, known as the EM&A NARAP.

Principal tasks include:

- Assessing the state of environmental monitoring in Mexico, and making recommendations for the establishment of a national monitoring and assessment project in Mexico with support from other agencies;
- Facilitating the development of a North American Contaminants Monitoring Network;
- Compiling and assessing information regarding existing monitoring activities for NARAP substances and other persistent, bioaccumulative and toxic substances (PBTs) in North America; and

- Collaborating with PRTR officials and North American indigenous leaders to address toxics and contaminants from an indigenous and local community context.

Project 2: Tracking Pollutant Releases and Transfers in North America

The purpose of this project is to enhance the comparability of data on chemicals of common concern in North America, and to gather, analyze, and publish information on their amounts, sources and management. Project objectives are to:

- Support decision-making by governments, industry, nongovernmental organizations, and the public;
- Work to ensure that citizens across North America have access to information on pollutant releases and transfers in their countries and on a regional basis; and
- Stimulate reductions in pollutant releases and transfers from industrial activities by making factual information available to decision-makers at all levels.

These objectives are met through three primary efforts: assessment of North American data; capacity building to improve data quality and comparability; and analysis and publication of information products for decision makers. Officials of the three governments' Pollutant Release and Transfer Registries (PRTR) play a critical role in this process.

Principal tasks include:

- Publishing the *Taking Stock* report;
- Collecting and interpreting data and incorporating it into *Taking Stock Online* to support electronic access;
- Facilitating increased comparability in PRTRs to ensure consistency of reporting methodologies and chemicals;
- Promoting collaboration among industry and NGOs to strengthen comparable reporting and use of PRTR data;
- Providing capacity building support to Mexico to promote the RETC; and
- Continuing to develop our collaboration with indigenous communities to expand knowledge and use of PRTRs.

Project 3: Enhancing North American Air Quality Management

The purpose of this project is to provide a more complete North American picture of air quality and air emissions that can support decision making on air quality management. This will be accomplished by identifying air quality-related information and capacity needs of the Parties; helping to ensure that the capacity exists to develop harmonized air quality related information and programs for North America; developing information products to identify emerging trends and issues; and informing decisions relevant to the shared environmental interests of the Parties.

Two fundamental components of information for decisions in air quality management are *quantifying* air pollutants emitted from air pollution sources (emissions inventories) and *monitoring* ambient air quality.

In 2007, the CEC's work will build upon the first emissions inventory for Mexico to develop an updated inventory that accounts for growth, changes in trends, new data sources and methodologies, and then to build capacity for Mexico to sustain its emissions inventories in future years, in a manner

comparable to the United States and Canada, including coordination of inventory schedules. In addition, the Parties' experts will develop a comprehensive strategy and vision for the air quality-related work.

Project tasks include:

- Updating Mexico's emissions inventory;
- Developing additional capacity in Mexico to monitor ambient air; and
- Developing a CEC strategy for North American air quality management.

Project 4: Mapping North American Environmental Issues

The purpose of this project is to enable the visualization and analysis of environmental information from a North American perspective. This is being accomplished through the evolution of the existing North American Atlas Framework (NAAF) into a digital *North American Environmental Atlas*, integrated across the three countries. The Atlas framework will help develop an integrated and cohesive approach to the management and communication of information resources.

The project supports cooperative initiatives and decision-making to address North American issues of common concern, and to improve the accessibility of information on North American environmental issues and resources to citizens and the governments of the three Parties. Development of the Atlas is also expected, over time, to make a substantial contribution to the ongoing strengthening of regional information systems and knowledge.

Principal tasks include:

- Strengthening and facilitating North American collaboration on Atlas development and use;
- Making existing key datasets compatible with the NAAF; and
- Developing new base map layers to support CEC work program in priority areas.

Project 5: Reporting on the State of the North American Environment

The NAAEC commits the CEC Secretariat to preparing periodic reports on the state of the environment in the territories of the Parties. Beginning with a meeting of Party experts, this project seeks in 2007 to design the approach for reporting on the state of the environment within the context of the work of the CEC, including the relationship between trade and environment and indicator work done by the Parties. The reports themselves will help to characterize environmental trends and issues at the North American scale to guide decisions relevant to the shared environmental interests of the Parties. Indicators to measure progress may be derived from the CEC program of work, such as from the work and findings from the ongoing environmental assessment of NAFTA, and from existing national environmental information and indicators work, so as to present a consolidated North American view. Assessment of potential linkages with other CEC projects will be an important aspect of this scoping work.

3.2 Priority 2: Capacity Building

The CEC recognizes the continuous need to develop stronger institutions and to share environmental knowledge with stakeholders more efficiently. In this vein, the CEC aims to develop model approaches that can be adapted to other settings. Efforts are focusing on improving compliance with existing environmental laws; emphasizing institutions rather than individuals; addressing both environmental conservation and protection issues; and working with the private sector and communities as well as with government agencies.

The CEC's goal is to strengthen the capacities of the three countries to manage environmental issues of common concern. Its objectives for 2007–2010—focusing on Mexico—are to cooperate to:

- Strengthen capacities, where needed, to improve compliance with wildlife laws;
- Improve private sector environmental performance through model environmental compliance approaches;
- Strengthen capacities to conserve species and habitat of common concern by, among others, creating capacity building for planning, monitoring and management, with the participation of all relevant stakeholders; and
- Strengthen the Parties' abilities to assess and manage chemicals of concern.

To meet these objectives the CEC is implementing the following projects:

Project 6: Strengthening Wildlife Enforcement Capacity

More effective enforcement is a key element in the governments' efforts to implement a wide range of international and national laws that aim to conserve, protect and enhance wildlife. In applying these laws, governments rely on inspectors and agents responsible for monitoring and compliance who are well trained to anticipate, identify and combat illegal activities associated with the trade of wildlife. Building on past experience, this project enables the CEC to continue working closely with the Parties in identifying and implementing regional cooperative initiatives to strengthen their wildlife enforcement capacities and to improve compliance with their wildlife laws.

Principal tasks include:

- Assessing the needs for strengthening Mexico's wildlife enforcement capacities;
- Supporting a continuing forum for the North American wildlife enforcement agencies, known as the NAWEG; and
- Supporting the design and implementation of a three-year training initiative, anticipated to be a principal component of the work plan.

Project 7: Improving Private and Public Sector Environmental Performance

This project entails developing approaches and capacities for improving private sector environmental performance—and thereby competitiveness—through various features of “integrated environmental management.” The project engages Mexican industry, including small and medium-size enterprises. Though the project focuses on Mexico's needs, it will be increasingly expanded to involve and benefit all three countries.

The project has five complementary components:

Clean Electronics Pollution Prevention Partnership (CEP3)

- Continuing to implement the effort to improve environmental performance in North American electronics industry.

Partnership with the auto sector

- Facilitating positive environmental change while strengthening ties with the automotive sector, particularly through the Suppliers Partnership (SP).

Greening supply chains in Mexico

- Continuing to implement the multi-year effort based on a voluntary model of integrated environmental management in selected industry supply chains with demonstrable improvement in environmental compliance and competitiveness.
- Improving environmental performance in the supply chains of companies in Mexico.

Financing mechanism

- Continuing to engage key financial institutions in formulating financial mechanisms to support pollution prevention in small and medium-size enterprises.
- Informing small and medium-size enterprises of available financing mechanisms.

Capacity building for a Mexican state and municipality

- Continuing to design and implement the effort to strengthen environmental management capacities at the municipal level.
- Improving government/private sector capacity to design and implement cooperative integrated environmental management initiatives at the state level.

Project 8: Building Local Capacity for integrated Ecosystem Management and to Conserve Critical Species and Spaces

Numerous governmental and NGO participants from Canada, Mexico and the United States have, over the past four years and through the CEC, jointly developed a framework of priority conservation areas on the Pacific coast and in the grasslands of North America, as well as six North American Conservation Action Plans (NACAPs) for marine and terrestrial species of common continental concern.

This project continues to strengthen the capacities of diverse stakeholders working at the local level to enhance the protection of species of common conservation concern (SCCC) and their habitats in priority ecoregions of North America. The project provides guidance and technical training in practical methods and processes to conserve marine and terrestrial SCCC and to manage habitat impacts that will serve as model activities for other regions of North America.

The project's three principal components, and associated activities, are as follows:

Implementation of NACAPs

- Integrating information and facilitating data and information exchange for the development of a North American approach to monitoring and conservation of humpback whales.
- Conducting training workshops for Mexican fishermen on safe handling practices to protect leatherback turtles.
- Assessing pink-footed shearwater's habitat use patterns and residency times on wintering grounds and develop a web site containing this information.
- Supporting experts workshop to assess existing efforts and make recommendations for a trinational monitoring program for the Monarch butterfly.

Capacity Building

- Initiating a “train-the-trainer” approach to strengthen the capacity of practitioners responsible for marine and terrestrial species conservation, management and enforcement.

Ecosystem Monitoring Network

- Supporting capacity building and exchange activities among practitioners for Marine Protected Areas (MPA) monitoring personnel.
- Developing a web-based monitoring clearinghouse to facilitate communication and display information at multiple scales (MPA-ecoregion-Baja to Bering).

Project 9: Sound Management of Chemicals

The Sound Management of Chemicals (SMOC) initiative provides a framework for regional cooperation in managing the full range of chemical substances of mutual concern throughout their life cycles. This framework includes pollution prevention, source reduction and pollution control. The focus is on chemical substances that are persistent and toxic, and that may bioaccumulate in living organisms. Those that may be transported long distances through the atmosphere receive priority. Council Resolution 95-05 on the Sound Management of Chemicals includes the development and implementation of NARAPs for PCBs, mercury, chlordane, and DDT. Based on experience gained from implementing the initial four NARAPs, Council authorized the environmental monitoring and assessment NARAP, and the development of NARAPs for dioxins, furans and hexachlorobenzene, as well as lindane and other hexachlorocyclohexane isomers.

More specifically, the CEC’s SMOC initiative supports capacity building and provides information for risk reduction on toxic substances of common concern by:

- Providing informed and authoritative guidance to the work on chemicals in the CEC context of the Puebla priorities;
- Developing NARAPs and proposing strategies for catalyzing cooperation to establish a long-term vision for the Parties’ efforts to address groups of chemicals, emerging issues and other chemicals management issues;
- Securing the support of outside partners and resources;
- Contributing to building a “knowledge base” on chemicals and contaminants in the North American region by building upon ongoing domestic work;
- Supporting the analysis of scientific data for decision making, tracking trends for contaminants of common concern, and monitoring the success of the NARAPs;
- Developing contaminant and other environmental stressors data in a format amenable to incorporation into the North American Environmental Atlas; and
- Improving the Parties’, and specifically Mexico’s, capacity to monitor and assess toxic substances management through NARAPs and strategies for catalyzing cooperation.

3.3 Priority 3: Trade and Environment

Promoting a better understanding of trade and environment relationships is one of the main reasons the CEC was established. As the North American economy becomes increasingly integrated, there continues to be a need to anticipate and address environmental concerns associated with increased trade, such as the spread of harmful exotic species, and to decouple economic growth from negative environmental impacts.

The CEC's goal for 2007 through 2010 is to promote policies and actions that provide mutual benefits for the environment, trade, and the economy. The objectives are to:

- Enhance North American trade in green products and services, with a view to improving environmental protection, promoting sustainable use of biodiversity, removing trade barriers and utilizing market-based approaches.
- Increase the capacity of the three countries to identify and address trade-related environmental concerns to achieve mutual benefits for trade and the environment and improve collaboration among the three countries in these areas.
- Broaden understanding of trade and environment linkages and thereby promote policy coherence, both at the domestic and regional levels in North America.
- Improve regional and national coordination, including coordination between the CEC and NAFTA Free Trade Commission through ongoing collaboration between trade and environment officials.

To meet these objectives the CEC will implement the following projects:

Project 10: Promoting the North American Renewable Energy Market

The purpose of this project is to enhance the development of the North American renewable energy market to attain the environmental, social, economic, and energy benefits that renewable energy provides. A market for renewable energy may help address the key challenges of sustainable development, promote energy diversification, and foster economic development whilst reducing the environmental impact of energy production and consumption. The project may also improve regional and national coordination and promote policy coherence on renewable energy.

The project's tasks include:

- Building the capacity of Mexican officials to develop renewable energy projects;
- Supporting information and technology transfer and capacity building for estimating and measuring renewable energy resources;
- Documenting best practices for developing small-scale renewable energy projects;
- Supplementing the database of existing and planned renewable energy capacity with existing laws and policies in each state and province related to renewable energy;
- Developing capacity to calculate the environmental benefits of renewable energy; and
- Facilitating the integration of renewable energy resources into the grid.

Project 11: Encouraging Green Purchasing

The purpose of this project is to help increase the proportion of "green products and services" in the procurement decisions of institutions—including governments at all levels, universities, hospitals, and private companies—and thus reduce their impact on the environment and human health. The

project aims to promote the improvement of regional and national coordination and achieve greater policy coherence in the purchase of green office supplies, energy from renewable resources, and green cleaning supplies.

“Green products and services” are defined as those having beneficial environmental and energy attributes, made from recycled materials, derived from energy-efficient production processes, or those which contain little or no hazardous or toxic constituents. Applying environmental criteria to procurement decisions for even a fraction of the one trillion dollar annual North American procurement market would stimulate the demand for green products and services and produce significant environmental benefits. The Parties to the NAAEC attach strong importance to the enhancement of North American markets for green products and services. They are committed to increasing their own procurement and use of such products and services, and to encouraging other government agencies and nongovernmental entities to do the same.

Implementation of this project includes a pilot project in Mexico on green cleaning products. The pilot project is expected to lead to the development of a model approach for the CEC to apply in addressing other types of green products and services in the future.

Project tasks include:

- Facilitating implementation of the master plan for increasing the procurement of green products and services;
- Developing a central resource of green procurement information tools; and
- Improving institutional green purchasing self-assessment and information-sharing tools.

Project 12: Harnessing Market Forces for Sustainability

The purpose of this project is to explore and expand the potential for using market based mechanisms to promote environmental conservation and protection, while increasing sustainable trade across North America.

The CEC’s previous work on shade-grown coffee, eco-palm fronds, grass-fed cattle and bison provide successful examples of market-based approaches to increase environmental protection and conservation while greening trade in North America. They show how the triple goals of sustainable land use, poverty alleviation, and economic and trade development can be mutually supportive.

This project aims to build on past experience. In 2007, the Trade and Environment group and the Biodiversity Conservation Working Group will evaluate areas of opportunity for the application of market-based mechanisms for the promotion of species and habitat conservation, and to develop a project plan.

Specific tasks include:

- Developing a market for the “habitat conservation” based on the scoping study conducted in 2006, and
- Continuing to update and disseminate methodology for developing sustainable markets.

Project 13: Trade and the Enforcement of Environmental Laws

The purpose of this project is to expedite and facilitate the movement of legal materials across borders; prevent illegal shipments of hazardous waste and materials, ozone depleting substances, protected species and wildlife and other illegal materials that could threaten human health or the environment in the territories of the NAFTA Parties; and improve enforcement capacity to ensure that

persons or entities that ship or attempt to ship such illegal materials are appropriately penalized. This is being accomplished largely by ensuring that officials in customs, environment, and law enforcement are informed of environmental laws affecting trade, that exporters and others have easy access to export requirements for environmentally sensitive materials, and by training customs and other law enforcement officials to be better able to expedite legal shipments across borders.

The project overall responds to the concerns of a variety of stakeholders: government agencies, trade associations, transporters and nongovernmental organizations who are interested in strengthening cooperation on the development and improvement of environmental laws, regulations, procedures, policies and practices and who are working to enhance compliance with, and enforcement of, environmental laws and regulations.

The three components of this project and their corresponding tasks are as follows:

Improve electronic and other information exchange on North American environmentally related trade data, laws, and policies

- Assessing current information tracking methods and practices; and
- Educating and informing industry about North American import and export laws to expedite legal transborder movement of goods and materials.

Provide training to customs and other law enforcement officials

- Developing new training materials for hazardous wastes and ozone depleting substances.

Build capacity in legal and judicial systems to support effective enforcement of environmental laws

- Developing a training plan to support effective enforcement of environmental laws; and
- Supporting a seminar on environmental law and the judiciary.

Project 14: Guidelines for Risk Assessment of Invasive Alien Species and Their Pathways

This project seeks to protect North America's marine, freshwater and terrestrial ecosystems from the harmful effects of invasive alien species (IAS) by developing a trilateral, science-based, approach to prevention through the development of risk assessment guidelines applicable to both pathways of introduction and high risk species. The goal is to develop a trilateral approach for selected IAS and related trade pathways that satisfy the North American Free Trade Agreement (NAFTA) requirements for risk assessment. The project will also enable all three countries to develop mutually supportive legal and policy frameworks.

This project will be accomplished by:

- Developing common risk assessment guidelines to be tested using one common pathway and species;
- Sharing existing information and information management systems related to risk assessment and strategies for managing risks from IAS; and
- Building capacity through the mutual exchange of scientific and technical expertise and knowledge.

For 2007, this project includes the following tasks:

- Finalizing testing and evaluating the CEC risk analysis guidelines at the species level;
- Developing a screening process for the aquarium pet trade pathway;
- Developing a North American Distributed Information System;
- Conducting risk assessment on one terrestrial invasive alien animal and/or wildlife disease and one pathway of introduction;

- Finalizing the North American risk assessment (voluntary) guidelines for trade-related pathways terrestrial invasive alien animals and/or wildlife disease (based on test case work); and
- Developing a management plan focused on a specific organism within a trade-related pathway.

Project 15: Ongoing Environmental Assessment of NAFTA

The purpose of this project is to consider the environmental effects of NAFTA and to broaden the understanding of trade and environment linkages to promote policy coherence, both at the domestic and regional levels in North America. The project also aims to increase the capacity of the three countries to identify and address trade-related environmental concerns, and to improve regional and national coordination, including coordination between the CEC and the NAFTA Free Trade Commission.

The CEC's efforts to document the environmental effects of trade liberalization in North America produce reviews and assessments that are utilized by trade and environment officials, nongovernmental organizations and the public in considering trade and environmental policies in the three Parties.

The project's components and corresponding tasks are as follows:

Environmental assessment of NAFTA

- Organizing and conducting high-level North American symposia on assessing the environmental impacts of trade.
- Examining emerging environmental trends and conduct monitoring and sectoral analyses.
- Exploring mechanisms to assess the environmental effects of NAFTA.

Support information sharing between Canada, the United States, and Mexico on methodologies for conducting environmental reviews of trade agreements

- Sharing experiences between Canada and the United States and with Mexico, as appropriate.
- Assisting the Parties in developing a viable approach to sharing information on environmental assessment with and from the Secretariat.

4 Secretariat Reports

The Secretariat initiated its sixth report under Article 13, on Green Building in North America, in February 2006. The Secretariat will develop the report in 2007 and submit it to Council by year's end. The Article 13 report will be developed with input from the Parties, JPAC, and interested members of the public, and with the assistance of appropriate independent experts and advisory groups.

The Secretariat's report will examine the current status of, and future prospects for, green (or sustainable) building in North America. Addressing both new construction and existing buildings, both residential and non-residential, the report will highlight the potential for environmental benefits, examine factors behind notable successes and difficulties, and outline public and private measures for fostering the adaptation of green building practices in North America. The report will contain recommendations from the Secretariat to the Council on the issues raised in the report.

An Advisory Group made up of leading North American architects; officials from construction, real estate and development companies; municipalities; federal government agencies; and nongovernmental organizations is guiding the Secretariat in the development of this report. JPAC is represented on the Advisory Group and the Parties have designated observers to attend Advisory Group meetings. The Advisory Group will issue a final statement and advise the Secretariat on recommendations to include in the report.

The Secretariat will develop background papers for the report, working with leading researchers in Canada, Mexico and the United States in areas such as energy and resource efficiency, environmental protection, government policies and programs, rating and certification systems, real estate finance, and housing programs as they relate to green building. Background papers will be reviewed by the Advisory Group and also peer-reviewed. The background papers will also be presented at a public forum and made available for comment by the public and the Parties.

The major activities for 2007 include:

- The development of background papers, according to a study plan developed in consultation with the Advisory Group;
- A public workshop, to be held in Mexico in February 2007;
- A public symposium and Advisory Group meeting in Seattle, Washington, on 1–2 May 2007; and
- Preparation of the final report for submission to the Council by December 2007.

5 Submissions on Enforcement Matters Process

The Submissions on Enforcement Matters process has the potential to approach environmental issues that have been difficult to resolve domestically and to invigorate responsive action by the public, government, and other stakeholders. The success of the process requires that it be well known, accessible, transparent, reliable, and that it be used appropriately. Achieving these goals entails timely processing of submissions and outreach that increases knowledge and awareness of the process among potential users and interested members of the North American public. Factual records should draw upon all relevant factual information from a comprehensive range of sources. As well, the credibility of NAAEC Articles 14/15 depends on objective, rigorous, and consistent consideration of submissions, in accordance with the NAAEC and the Guidelines for Submissions on Enforcement Matters.

The SEM budget for 2007 covers the processing of submissions, from their receipt through the publication of factual records, along with outreach and participation in official CEC activities related to SEM. The budget was based on a projection of the existing workload at the end of 2006 plus a number of new submissions estimated according to the historical average, using average costs at each stage of the submissions process. Information on the SEM process is available at: <<http://www.cec.org/citizen>>.

6 Institutional Support

The Secretariat provides support for and coordinates the operations of the Council to ensure that the directives and initiatives of the latter are carried out in a timely fashion. It also provides logistical and administrative support to JPAC.

6.1 *Council*

The Council, the governing body of the CEC, is composed of cabinet-level or equivalent environmental representatives of each country, or their designees. The Council convenes at least once a year in a regular session for the purpose of making decisions and developing recommendations on matters within the scope of the NAAEC, and to provide oversight on the operations of the CEC Secretariat. The Council's regular session also comprises a public meeting, which provides an opportunity to exchange with the North American public on environmental issues of importance.

It is the Secretariat's responsibility to submit the annual operating plan and budget of the Commission for the approval of the Council and to ensure that its directives and initiatives are carried out in a timely way. This entails liaison throughout the year with Council designees as well as administrative and logistical arrangements relating to the planning and conduct of regular sessions of the Council. In 2007, the regular session of the Council will be held in Mexico.

6.2 *Joint Public Advisory Committee*

JPAC was established as a cooperative mechanism to advise the Council in its deliberations and to advise the Secretariat in its planning and activities.

Its 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 Joint Public Advisory Committee (JPAC) is composed of fifteen citizens, five from each country.

In 2007, JPAC will hold four meetings, including one in Seattle, Washington, on Green Building in North America, and a second in Mexico, in conjunction with the annual Council Session. JPAC will also continue with its efforts to engage indigenous peoples as well as other stakeholders with support from the Secretariat.

7 Communications

Raising awareness of North American environmental issues and their relation to trade and the economy is fundamental to the CEC's mission. Moreover, effective communication of the results of CEC activity is integral to the Commission's success. Specifically, the CEC's ability to support decision-making and to be appreciated as a credible source of information depends in part upon the extent to which good communication practices generate visibility and support for our work with audiences throughout North America.

Communications activity in 2007 is intended to raise general awareness of CEC activities as well as to inform more specialized audiences of project-related information. Activities include producing general and specific information products, and managing their dissemination in print and electronic forms, outreach to target audiences, and media relations.

8 Administration and Management

The Secretariat is responsible for providing technical, administrative and operational support to the Council and to committees and groups established by the Council. Headed by an executive director, the Secretariat has an expert and highly motivated staff of approximately 55 people. While the Communications staff provides support integral to implementation of the cooperative work program, the Administration staff assists in the achievement of the institution's objectives by providing, in a timely manner, high quality resources including human, financial, material and services as well as information.

The CEC Secretariat is headquartered in Montreal with a regional office in Mexico City. The Mexico liaison office is engaged in promoting CEC's work and facilitating the interaction between the CEC and environmental stakeholders in Mexico.

8.1 Quality Assurance

The CEC's draft Quality Assurance Policy and Procedures document establishes the principles and mechanisms for ensuring the objectivity, utility, accuracy and integrity of CEC research and information products and services. This Operational Plan has been prepared in accordance with that draft policy. Individual Quality Assurance Project Plans will specify the particular steps required for each information product or service (including Party, peer and expert review, where appropriate) to meet the requirements of the CEC's Quality Assurance Policy.

8.2 Monitoring, Evaluation and Reporting

In the course of this year, Council, through its established representatives, will work closely with the Secretariat to develop an evaluation framework for documenting and measuring results under each of the projects identified in the 2007 work program project descriptions (see Appendix).

8.3 Managing CEC Environmental Information

The CEC is establishing a comprehensive, quality-assured information management system to make the best possible use of information for environmental protection and the description of environmental conditions in North America. The main task in 2007 is to develop policy and implementation guidance for information management in the CEC. This work will improve data quality as well as the CEC's capacity to manage and utilize information that supports the CEC's work program and its objectives.

Appendix: CEC 2007 Project Descriptions

Project 1	Monitoring and Assessing Pollutants across North America		
Start date	January 2005		
Planned Allocation	2007: C\$295,000	2008: C\$295,000	2009: C\$205,000

End Date	2010
Total	C\$795,000

Purpose and Background

The purpose of this project is to assist the Parties in increasing the comparability, reliability, relevance and availability of data and information on toxic substances in the North American environment. Specifically, it seeks to improve the generation and management of information needed to identify and assess trends and concerns related to contaminants and stressors that affect environmental and human health.

The information generated through the project provides the national governments and stakeholders with meaningful insight into the levels and impacts of contaminants in North America. The project also fosters and encourages cooperation and collective action in planning, conducting and reporting information from baseline surveys, monitoring, modeling and research regarding the status, trends and effects of persistent and toxic substances. The focus of the project is capacity building and international cooperation in efforts to measure, monitor and assess persistent and toxic substances across the continent.

The project originates from the North American Regional Action Plan on Environmental Monitoring and Assessment (EM&A NARAP). The EM&A NARAP was created to assist the Working Group for the Sound Management of Chemicals (SMOC) and its Implementation Task Forces in meeting the environmental monitoring and assessment obligations identified and implied under Council Resolution 95-05 and/or in substance-specific NARAPs developed pursuant to that Resolution. Resolution 95-05 directed the development of North American Regional Action Plans (NARAPs) for certain persistent and toxic substances. This Resolution also established a Sound Management of Chemicals Working Group and several Implementation Task Forces charged with implementing the decisions and

commitments set out in the Resolution, on behalf of the Council. Currently under development is an Information Road Map, which will outline how the SMOC Working Group will achieve its information goals for the next ten years. The Information Road Map will set priorities for work under the Monitoring and Assessing Pollutants Across North America project, largely related to the development of a regional approach to monitoring and bio-monitoring.

By including the EM&A NARAP in the Information for Decision-Making priority of the CEC's Strategic Plan, the Council recognizes the importance of building and improving monitoring, modeling and research at a North American-scale, to assess not only the progress of the CEC's SMOC initiative, but also to continuously improve the availability of information for decision making at many levels. Thus, this project supports and contributes to other priorities of the CEC and the Parties, including the incorporation of environmental data into the North American Atlas and the assembly of data for development of viable indicators for state of the environment reporting.

Co-chaired by representatives of the three Parties, a Standing Committee oversees and assists in the implementation of work under the EM&A NARAP and related tasks within the project. Over the next few years, the Standing Committee will concentrate not only on the implementation of the EM&A NARAP but will also assist the SMOC Working Group in developing its information priorities to 2020. These priorities contribute to building a "knowledge base" on chemicals and contaminants in the North American region that, consistent with the Puebla Declaration, will strengthen decision-making regarding chemicals and contaminants in air, land, and water, and bioaccumulation in humans and ecosystems in North America.

Recent accomplishments under this project include completion of a trinational maternal blood bio-monitoring study, co-funded by the World Bank. This study will provide comparable baseline information about the levels of persistent, bioaccumulating, toxic substances in maternal blood across the continent. Comparable, compatible monitoring data for North American has also been made available through projects monitoring ambient levels and wet deposition of mercury in Mexico, levels of persistent organic pollutants (POPs) in soil and air in Mexico, and levels of mercury in fish tissue from Mexico.

Approach

The project receives broad support among many stakeholders. These include the Parties, members of the general public and experts involved in monitoring and research on PBTS and other critical topic areas. Consultations with industry, academia, indigenous groups and representatives from health and environment advocacy groups will continue to be integral to the implementation of the project. Currently, the Environmental Monitoring and Assessment Standing Committee is working to increase the level of nongovernmental stakeholder participation in this project.

To manage chemicals effectively, decision makers need to understand not only the levels of chemicals of concern in both the environment and in humans but also how these levels are changing over time and across North America. Data from monitoring is one tool to be used in the decision making process, particularly in efforts to understand the location and concentration of chemicals in the environment, to identify and prevent potential problems, to evaluate the effectiveness of chemicals management strategies, and to set priorities for chemicals management.

A cooperative regional approach to monitoring is essential to address short and long-range transport of chemicals in air and water and to monitor chemicals and products in trade throughout their life cycles. Developing and implementing a North American monitoring network will enable decision makers to identify areas that are the most impacted on a regional scale. In addition, a regional approach to monitoring will help decision-makers link the effects of environmental policies and chemicals management. Short-term monitoring initiatives can provide limited focused information, while a long-term approach to monitoring provides more robust information about long-

A major initiative is currently underway to strengthen environmental monitoring and human bio-monitoring and assessment capacity in Mexico. Recent work on this initiative has included an assessment of existing Mexican data on persistent, bioaccumulative and toxic substances (PBTS), a preliminary assessment of environmental monitoring capacity in that country, and a trinational experts workshop to help develop a long-term, large-scale monitoring and assessment program.

term trends in substance levels and allows for the detection of changes.

The development and implementation of an integrated monitoring network in the three countries will not only support priority setting for chemicals management work, but will also allow for measurement of the success of other CEC projects. As such, development of a North American monitoring network is a primary task in the upcoming years. Critical to this network is the establishment of sustainable environmental and human bio-monitoring monitoring and assessment infrastructure in Mexico. The data from the environmental monitoring and human bio-monitoring network established in Mexico will be comparable and compatible to data generated at sites and through programs identified in the United States and Canada.

Data from the integrated North American monitoring network will provide the Parties with information about levels and trends of chemicals in humans and ecosystems from a regional perspective. This information will be beneficial for further development of the North American Atlas and for the CEC's work on state of the environment reporting.

A major challenge is to secure adequate resources to implement the monitoring network effectively on the continental scale. Success depends on leveraging significant partner funding, and seed funding from the CEC will be used to catalyze significant contributions from outside funding agencies.

The EM&A Standing Committee will concentrate on the development of an integrated, trinational environmental monitoring and human bio-monitoring network by identifying actions to be undertaken by the CEC that will be incorporated into the national priorities of the three countries, and actions

that may be addressed in international fora. The Standing Committee will attempt to secure partners and outside funding sources for implementation on a larger and more effective scale. The Secretariat will provide scientific oversight, project management, coordination, and communications capacity.

Principal tasks to be undertaken include:

- Further development and implementation of an integrated trinational monitoring network: A key activity will be to identify index sites from which data will be collected and harmonized. The program will recognize and incorporate compatible monitoring and assessment efforts in the countries to provide a common “knowledge base related to contaminants” for the North American region.
- Promotion of sustainable environmental monitoring and human bio-monitoring infrastructure in Mexico: This Mexican monitoring and assessment network will be part of the trinational monitoring network. A workshop with human and environmental bio-monitoring and assessment policy experts from all three countries will help establish long-term national monitoring and assessment infrastructure in Mexico. Following the workshop, a funding proposal will be submitted to an International Funding Institution. A workshop of scientific experts in 2006 will have established the scientific basis for the program and developed a proposed program, including specific monitoring sites, media and substances to monitor, infrastructure needs, and standards and protocols for sampling and analysis. Another key task in 2007 is a comprehensive review of “gray literature,” such as masters and doctoral theses and other

unpublished studies archived in university and institutional libraries in Mexico, to provide an improved baseline understanding about PBTS levels in Mexico.

- Audit and oversight function of the EM&A Standing Committee: Information about current monitoring activities of the substances covered by North American Regional Action Plans (NARAPs), as well as other PBTS monitored within these networks, will be compiled. The report produced will be the first of a series of biannual reports.
- Multiple trilateral monitoring initiatives will be developed and undertaken. These will include a pilot trilateral monitoring project of PBTS levels in biota. In addition, the EM&A Standing Committee will work with NARAP substance Task Forces to develop and implement projects to monitor dioxins and furans, lindane, and mercury. Data from these projects will support development of maps of baseline levels of persistent toxic substances; these maps will provide valuable graphic representations ideal for communications initiatives and for setting priorities for further environmental monitoring and assessment work.
- The EM&A Standing Committee will work with the Pollutant Release and Transfer Registry (PRTR) officials and aboriginal communities to develop a pilot project addressing PBTS from an indigenous context.

Communications

The success of this project depends upon developing and maintaining public support and continuing support from the monitoring and scientific communities. Communication through the release and dissemination of results, progress summaries, educational material and contributions to other outreach products, will encourage this support. Public consultation events, sponsored by the Standing Committee and the Sound Management of Chemicals Working Group, as well as reports submitted to the Council and

the CEC’s Joint Public Advisory Committee, will provide required levels of accountability.

Information Management

As the information may be of a technical nature and require assessment through statistical analysis and trends development, electronic storage and retrieval mechanisms will be required. A great deal of the data will be amenable to mapping and thus comparability and compatibility is of paramount importance. Presentation of the data in a North American context is of particular interest.

The accessing of outside funding may require sharing of information with

agencies such as the World Bank, PAHO, and GEF in order to fulfill contractual partnership agreements.

Summary Quality Assurance Project Plans

Summary Quality Assurance Project Plan	
Project: 1-Monitoring and Assessing Pollutants across North America, Task 2a, i	
Deliverable (Information product): Baseline PBTS Levels in Mexico: Comprehensive Review of Mexican Gray Literature	
Information Product Category: Background Paper	
Data Custodian: Luke Trip	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	August 2007
Stakeholder/Expert review (EM&A Standing Committee)	August 2007
Party Review (1)	September 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	November 2007
Party Clearance	December 2007

Publication	December 2007
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Summary Quality Assurance Project Plan	
Project: 1-Monitoring and Assessing Pollutants across North America, Task 2a, ii	
Deliverable (Information product): Proposal for Mexican Environmental Monitoring and Human Bio-Monitoring Program	
Information Product Category: Background Paper	
Data Custodian: Luke Trip	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	August 2007
Stakeholder/Expert review (EM&A Standing Committee, SMOC Working Group)	August 2007
Party Review (1)	September 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	October 2007
Party Clearance	November 2007
Publication	December 2007

Summary Quality Assurance Project Plan	
Project: 1-Monitoring and Assessing Pollutants across North America, Task 2b	
Deliverable (Information product): Recommendations for North American Index Sites	
Information Product Category: Background Paper	
Data Custodian: Luke Trip	
Quality Management Milestone	Target Completion Date

Internal Review	
Secretariat review	August 2007
Stakeholder/Expert review (EM&A Standing Committee, SMOC Working Group)	August 2007
Party Review (1)	October 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	November 2007
Party Clearance	December 2007
Publication	December 2007

Summary Quality Assurance Project Plan	
Project: 1-Monitoring and Assessing Pollutants across North America, Task 3	
Deliverable (Information product): Biannual Summary of Current Monitoring Activities in North America	
Information Product Category: Report	
Data Custodian: Luke Trip	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	April 2007
Stakeholder/Expert review (EM&A Standing Committee, SMOC Working Group)	April 2007
Party Review (1)	June 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	July 2007

Party Clearance	August 2007
Publication	September 2007 (web site)

Summary Quality Assurance Project Plan	
Project: 1-Monitoring and Assessing Pollutants across North America, Task 4e	
Deliverable (Information product): Report on Trinational Maternal Blood Monitoring Study	
Information Product Category: Report	
Data Custodian: Luke Trip	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	July 2007
Stakeholder/Expert review (EM&A Standing Committee, SMOC Working Group)	July 2007
Party Review (1)	August 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	October 2007
Party Clearance	November 2007
Publication	December 2007 (web site)

Summary Data and Information Quality Assurance Plans

Data and Information Quality Assurance Plan – Summary
Project: 1-Monitoring and Assessing Pollutants across North America, Task 4a
Database/Dataset/Online service description: Trilateral Biota Monitoring Data and Accompanying Metadata
Data Custodian: Luke Trip
Category: Project
Key dates: (development, availability online, etc) Development: September 2007 Availability online: December 2007

Data and Information Quality Assurance Plan – Summary
Project: 1-Monitoring and Assessing Pollutants across North America, Task 4b
Database/Dataset/Online service description: Dioxin and Furan Air Monitoring Data and Accompanying Metadata
Data Custodian: Luke Trip
Category: Project
Key dates: (development, availability online, etc) Development: January-December 2007 Availability online: April 2008

Data and Information Quality Assurance Plan – Summary
Project: 1-Monitoring and Assessing Pollutants across North America, Task 4e
Database/Dataset/Online service description: Trinational Maternal Blood Monitoring Data
Data Custodian: Luke Trip
Category: Project

Key dates: (development, availability online, etc)

Development: January-March 2007

Availability online: December 2007 (to be included in Report on Trinational Maternal Blood Monitoring Study)

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
1. Addressing North American needs for environmental monitoring and assessment (EM&A)	<p>The EM&A Standing Committee and its focus groups will collaborate to assess projects undertaken and prioritize projects for future implementation. The full Standing Committee, including the chairs of the SMOC NARAP Task Forces, indigenous and NGO representatives, will meet via regular conference call to ensure program needs are met.</p> <p>Outputs/Outcomes:</p> <p>Assessments on work completed and a path forward for future EM&A activities.</p>	Jan.-Dec.	\$20,000	The EM&A Standing Committee will meet to review projects undertaken and rank projects for future implementation. One face-to-face session will be held every other year.	Oct.	\$55,000	The EM&A Standing Committee will meet via monthly conference call to review projects undertaken and rank projects for future implementation.	Oct.	\$25,000	\$100,000
2. Development and implementation of an integrated North American contaminants monitoring network to produce comparable and compatible data	<p>The activities within this task will collectively contribute to the development of a regional monitoring network. In Mexico, the priorities are to gather baseline information, and to secure political and financial support for long-term environmental monitoring and human bio-monitoring infrastructure.</p> <p>a) Promotion of sustainable monitoring and assessment infrastructure in Mexico</p>									

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	<p>i. Comprehensive analysis of PBTS information in Mexico. As a follow up to a pilot “gray literature” study, a more comprehensive review of gray literature and its applicability to PBTS assessment in Mexico.</p> <p>Outputs/Outcomes:</p> <p>Baseline information about levels of PBTS in Mexico.</p>	Jan.- July	\$30,000	<p>Drawing on the gray literature study, “PRONAME scoping study”, identification of monitoring and analysis infrastructure in Mexico, and Assessment of NARAP</p> <p>Implementation report, a report will summarize existing information about PBTS in Mexico.</p> <p>Outputs/Outcomes:</p> <p>A comprehensive report, to be revised every 5 years, will present, summarize and analyze information about levels of PBTS in Mexico and identify information gaps.</p>	Jan.- Dec.	\$50,000	-	-	-	\$80,000
	<p>ii. The implementation of an integrated monitoring program in the three countries depends highly upon sustainable infrastructure in all three countries. Following on the 2006 science experts workshop, North American monitoring and assessment experts will meet with Mexican policy leaders to secure support for and commitment to long-term</p>	May	\$50,000	<p>Contingent on funding from an IFI, further promotion of a Mexican national monitoring and assessment program.</p>		\$40,000	<p>Contingent on funding from an IFI, further promotion of a Mexican national monitoring and assessment program.</p>		\$30,000	\$120,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	<p>environmental monitoring and human bio-monitoring and assessment infrastructure in Mexico. 40-50 people are expected to attend the meeting, with 10-20 receiving some financial support.</p> <p>Outputs/Outcomes:</p> <p>The workshop will result in secure commitments from Mexican leaders from multiple departments for long-term support for a national monitoring program. These outputs of will be included in a proposal for a Mexican environmental monitoring and human bio-monitoring program presented to an International Funding Institution.</p>									
	<p>iii. Development of a proposal for a Mexican environmental monitoring and human bio-monitoring program, to be presented to an International Funding Institution, to be based on outcomes of the 2006 science experts workshop and the 2007 policy leaders workshop, both of which will include Mexicans from multiple agencies, and Americans and Canadians with monitoring expertise.</p>	Oct.	\$15,000	-	-	-	-	-	-	\$15,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	<p>Output:</p> <p>A funding proposal for a sustainable Mexican monitoring and bio-monitoring will be submitted to an International Funding Institution.</p>									
	<p>b) Identification and analysis of potential North American index sites and analysis of data comparability.</p> <p>Outputs/Outcomes:</p> <p>Recommendations will be developed for index sites across North America and analysis of comparability and compatibility of data from existing PBTS monitoring programs.</p>	Jan.- Dec.	\$60,000	<p>Collection and harmonization of data from North American index sites and monitoring programs, focusing on data from the US and Canada.</p> <p>Outputs/Outcomes:</p> <p>Data collected will provide a common “knowledge base related to PBTS contaminants” for the North American region, in a format compatible with the North American Environmental Atlas and/or for use in standard Geographic Information System platforms.</p>	Jan.- Dec.	\$60,000	<p>Incorporation and harmonization of data from index sites and PBTS monitoring projects/programs in Mexico.</p>	Jan.- Dec.	\$45,000	\$165,000
3. Compilation and assessment of information regarding existing monitoring activities for NARAP substances and other PBTS in North America	<p>This task will compile information about existing efforts in the three countries related to monitoring of NARAP substances as well as other PBTS monitored in the same networks. The information gathered will be</p>	March -Oct.	\$25,000	<p>Compilation of information regarding current monitoring activities of NARAP substances in each country to be incorporated into the 2009 report.</p>	Jan.- Dec.	\$10,000	<p>Compilation of information regarding current monitoring activities of NARAP substances in each country, assessment of</p>	March- Oct.	\$25,000	\$60,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	<p>assessed, and recommendations developed for all three countries about the monitoring of these substances.</p> <p>Outputs/Outcomes: A biannual summary of current monitoring information in the three countries, and recommendations for monitoring of NARAP substances and other PBTS monitored in the same networks.</p>						<p>information, and development of recommendations.</p> <p>Outputs/Outcomes: A biannual summary of current monitoring in the three countries, and recommendations for monitoring of NARAP substances and other PBTS monitored in the same networks.</p>			
4. Trilateral monitoring projects	<p>These projects will provide information to all three North American countries about the levels of selected PBTS in various media. These projects will result in new data for Mexico that is comparable to data from the US and Canada, thereby improving the understanding of levels of PBTS across the region and greatly increased information for decision-making in Mexico.</p> <p>a. Pilot projects.</p> <p>Seed money to contribute to a pilot trilateral monitoring program, with resources leveraged from other organizations and agencies, to monitor levels of PBTS in biota (e.g., mussels and gull</p>	March -Dec.	\$30,000	<p>Seed money to initiate a pilot trilateral monitoring program to monitor levels of PBTS in biota.</p> <p>Estimate of one new project each year.</p>		\$35,000	<p>Seed money to initiate a pilot trilateral monitoring program to monitor levels of PBTS in biota.</p> <p>Estimate of one</p>		\$35,000	\$100,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	<p>eggs). Estimate of one new project each year.</p> <p>Outputs/Outcomes:</p> <p>These monitoring projects will produce data in a format compatible with the North American Environmental Atlas and/or for use in standard Geographic Information System platforms.</p>			<p>Outputs/Outcomes:</p> <p>These monitoring projects will produce data in a format compatible with the North American Environmental Atlas and/or for use in standard Geographic Information System platforms.</p>			<p>new project each year.</p> <p>Outputs/Outcomes:</p> <p>These monitoring projects will produce data in a format compatible with the North American Environmental Atlas and/or for use in standard Geographic Information System platforms..</p>			
	<p>b. Dioxin and furan air monitoring project.</p> <p>The air monitoring network in Mexico will be initiated (this was expected in 2006 but did not happen due to delayed commitment of US EPA to do analysis of samples). Following establishment of the network, air sampling for dioxins and furans will be undertaken seasonally (four times/year) at six sites in Mexico.</p> <p>Outputs/Outcomes:</p> <p>Data generated from these monitoring stations will be in a format compatible with</p>	Jan.-Dec.	\$25,000	<p>Continuation of dioxin and furan air monitoring and analysis, pending securing outside funding. Mexico will be encouraged to assume responsibilities for continuation.</p> <p>Outputs/Outcomes:</p> <p>Data will be in a format compatible with the North American Environmental Atlas and/or for use in standard Geographic Information System platforms.</p>	Jan.-Dec.	\$10,000	<p>Continuation of dioxin and furan air monitoring and analysis, pending securing outside funding. Mexico will be encouraged to assume responsibilities for continuation.</p>	Jan.-Dec.	\$10,000	\$45,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	the North American Environmental Atlas and/or for use in standard Geographic Information System platforms.									
	<p>c. Lindane monitoring project.</p> <p>The Lindane Task Force will work with the EM&A SC to scope possible areas for trilateral monitoring projects related to lindane and other organochlorine pesticides utilizing similar analytical methods. A pilot project for 2008 will be planned.</p>	Jan.- Dec.	\$10,000	<p>A pilot project identified by the Lindane TF and EM&A SC will be implemented. Seed money provided by CEC is intended to catalyze contributions from other agencies and interests.</p> <p>Outputs/Outcomes:</p> <p>Data generated from the pilot monitoring project will be in a format compatible with the North American Environmental Atlas and/or for use in standard Geographic Information System platforms.</p>	Jan.- Dec.	\$20,000	<p>Finalization of lindane monitoring project.</p> <p>Outputs/Outcomes:</p> <p>Data will be in a format compatible with the North American Environmental Atlas and/or for use in standard Geographic Information System platforms..</p>		\$20,000	\$50,000
	<p>d. Mercury monitoring project.</p> <p>The Mercury Task Force will work with the EM&A SC to implement trilateral monitoring and assessment projects related to mercury in cooperation with and funding leveraging from</p>	Jan.- Dec.	\$15,000	<p>The Mercury Task Force will work with the EM&A SC to implement trilateral monitoring and assessment projects related to mercury.</p>	Jan.- Dec.	\$15,000	<p>The Mercury Task Force will work with the EM&A SC to implement trilateral monitoring and assessment projects related to mercury. Projects TBD.</p>	Jan.- Dec.	\$15,000	\$45,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	UNEP and/or other organizations.									
	e. Maternal blood monitoring project As follow-up to the maternal blood monitoring study, a trinational report will be developed, to summarize and synthesize the results and propose areas for future study.	Feb.-Dec.	\$15,000							\$15,000
5. Addressing toxics and contaminants from an indigenous and local community context <i>(Note: Funds for this activity are presented in the PRTR project, task 7.)</i>	Jointly and collaboratively with the CEC's PRTR program, and in coordination with JPAC and the Parties, a workshop will of indigenous leaders from the three North American countries will be convened to: (1) formalize a North American indigenous environmental network, (2) share information about specific toxins, groups of chemicals, industry sectors, (3) cooperate to develop trilateral strategies to reduce risks of exposure, and (4) solicit feedback and ideas for continued indigenous involvement in CEC programs. Outputs/Outcomes: Indigenous communities will have improved access to information about toxic substances. A pilot project	July-Dec.	(funded under PRTR)	The EM&A Standing Committee and the PRTR Officials will initiate a collaborative pilot project addressing toxics and contaminants concerns of indigenous and local communities. Outputs/Outcomes: The pilot project will enhance the environmental management capacity of indigenous people of North America and further promote indigenous and local people's involvement in the CEC program	(funded under PRTR)		The EM&A Standing Committee and the PRTR Officials will finalize the collaborative addressing toxics and contaminants concerns of indigenous and local communities. Outputs/Outcomes: A paper will be developed with recommendations for further involvement of indigenous groups and local communities in the work of EM&A and PRTR.		(funded under PRTR)	

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	for 2008 to address toxics from an indigenous context will be developed. Indigenous engagement in the CEC program will be enhanced, and opportunities for further involvement will be identified.									
			Total 2007: \$295,000			Total 2008: \$295,000			Total 2009: \$205,000	Total three years: \$795,000

Project 2	Tracking Pollutant Releases and Transfers in North America		
Start date	January 1996		
Planned Allocation	2007: C\$535,000	2008: C\$540,000	2009: C\$500,000

End Date	December 2010
Total	C\$1,575,000

Purpose and Background

The CEC's North American Pollutant Release and Transfer Register project has tracked and published information on the amounts, sources and handling of toxic chemicals from industrial activities in North America since the early days of NAFTA. The purpose of this project is to enhance the comparability of data on chemicals of common concern in North America, and to gather, analyze, and publish information on the amounts, sources and management of these toxic chemicals.

The CEC will work with the Parties to improve methodologies for comparative analysis of North American PRTR data, in light of the addition of Mexican RETC data and the impact on Canada-US trend analysis of major expansion of the NPRI program in recent years.

The goals of this project include:

- Supporting decision-making by governments, industry, nongovernmental organizations and the public;
- Promoting comparable policies across North America;
- Enhancing citizens' access to regional information on pollutant releases and transfers; and
- Stimulating reductions in pollutant releases and transfers from industrial activities by making factual information available to decision makers at all levels.

The purpose and goals are met through three primary efforts: assessment of North American data; capacity building to improve data quality and comparability; and analysis and publication of information products for

decision makers at all levels. PRTR officials from the three governments play a critical role in this process.

The "Action Plan to Enhance the Comparability of Pollutant Releases and Transfer Registers in North America" seeks to enhance the comparability among the national PRTRs (Canada's National Pollutant Release Inventory (NPRI), the US Toxics Release Inventory (TRI), and Mexico's *Registro de Emisiones y Transferencia de Contaminantes* (RETC)). Through the "Taking Stock" report and web site, the PRTR project also aims to increase access to and the use of PRTR data by the public and interested groups to promote environmental improvements. Although the countries have made good progress in the comparability of data, significant work is still needed. This is particularly relevant now that 2004 Mexican data are available. However, because only approximately 60 of the chemicals tracked are currently comparable across the three countries, the CEC plans to work with the Parties and stakeholders to explore other methodologies to perform meaningful trilateral analyses, while at the same time using as much of the data from all three countries as possible. The CEC PRTR project has a role in facilitating the strengthening of the underlying compatibility and reliability of PRTRs in all three countries that will enhance information on chemicals throughout the continent on a multimedia basis.

Each year, the CEC publishes the *Taking Stock* report and web site, which provide a unique regional picture of pollutant data in North America, based on available data from the national PRTR systems. The CEC facilitates collaboration among the national PRTR programs to enhance the comparability among the three reporting systems, and helps identify possible data quality issues across the countries, with a view to gaining a sharper

picture of the sources and trends in pollutant releases and transfers across the continent. The tenth edition, and most recent publication of *Taking Stock* (reporting data from 2003), was released in July 2006. The new edition, covering 2004 data, is scheduled for publication in spring/summer 2007. Involving stakeholders and interested groups from across North America is another important aspect of the project. On a global level, the CEC participates in international PRTR activities under various entities (e.g., the

Organization for Economic Cooperation and Development—OECD, the Intergovernmental Forum on Chemical Safety—IFCS, United Nations Economic Commission for Europe—UNECE), in order to share North American experiences on PRTR implementation, provide support for the North American approach to PRTRs and contribute to the development and use of PRTRs worldwide.

Approach

The PRTR project is implemented through simultaneous and sequential efforts that include:

Party expert consultations and strategic planning

PRTR experts from the Parties meet on an annual basis and hold conference calls approximately every other month to assess the comparability of the Parties' PRTRs and develop strategies to improve it. The Secretariat and the experts develop and update the Action Plan as well as consult with stakeholders on the value and use of PRTR data, obtain input on the Taking Stock report and its web version, and consult on topics for the special feature chapter of the *Taking Stock* report. The Party experts review preliminary documents and reports before they are subject to Party review following the Quality Assurance Project Plan.

Capacity building

The PRTR experts and the Secretariat identify needs for data quality improvements and also develop materials as requested by Mexico to assist them in implementing the RETC. The Secretariat and Party experts also identify strategies and approaches to assist industry in complying with reporting requirements and reporting quality data, with a special emphasis on helping Mexican industries report under Mexico's new RETC. The Parties and the Secretariat may develop outreach/education materials, training materials, workshops, or guidelines to improve capacity, comparability, and quality of data.

Data collection and analysis

The Secretariat collects PRTR data from the three Parties and analyzes them to identify data quality issues and solutions, as well as to prepare analyses to incorporate into *Taking Stock*. The *Taking Stock* reports present an overview and analysis of data on pollutant releases and transfers from industrial facilities in North America, based on information collected through the national PRTR programs. Since 2001, the CEC has also provided access to North American PRTR data through the *Taking Stock Online* web site, which provides users with direct access to portions of the matched data sets used in the *Taking Stock* reports through a flexible Query Builder function.

To compare data from national PRTRs with different reporting requirements, the CEC selects the elements they have in common to create a matched data set. This matched North American data set is the basis for the information and analyses provided in *Taking Stock* and on the web site. Up through 2004, *Taking Stock* included data only from Canada and the United States, since comparable data from all three countries were not yet available. In the 2005 edition, a matched set of criteria air contaminants from Canada, the United States and Mexico were included for the first time. With the collection and publication of the Mexican RETC data in 2006, it is anticipated that the larger set of Mexican data can be incorporated into *Taking Stock* for publication in 2007. In the meantime, the CEC will continue its annual analysis of data and will review and integrate comparable data for criteria air contaminants from all three countries.

Outreach and information for decision makers

One of the primary products of this project is the *Taking Stock* report and its web version. The Parties and the Secretariat continually evaluate the audiences for this report and work to fine tune the report and web tools to meet the information needs of these audiences and to reduce costs. In developing the *Taking Stock* reports, the CEC uses an extensive consultative process that includes circulation of a discussion document, a public meeting of the trinational multi-stakeholder Consultative Group, receipt of written comments, and the preparation of a response-to-comments document. The CEC PRTR project has benefited greatly from the input and suggestions obtained through this consultative process. The Consultative Group has, in particular, helped to guide the development of the annual *Taking Stock* reports and other aspects of the CEC's PRTR program. Between 60 and 70 individuals participate in the annual meetings of the Consultative Group; however, the CEC's PRTR mailing list numbers more than 200 people from all three countries, including industry representatives, academics,

environmental and public health advocates, community activists, government representatives at the federal, state/provincial and local levels, researchers, policy analysts, and interested citizens. They may provide direction on activities of the CEC, participate in Officials' meetings and calls, provide active input as part of the Consultative Group, review and provide comments on Special Chapters for *Taking Stock*, etc. In addition, the Parties and the Secretariat may identify other audiences and mechanisms to reach out and educate target groups on PRTRs, chemicals, and the relevance and value of the PRTR information. For example, the Parties and the Secretariat are developing case studies and engaging indigenous representatives in the three countries to share the information and identify the information needs of indigenous communities.

Communication

PRTR is a project that produces valuable information resources and tools for decision makers in North America. Decision makers may include environmental and trade policy developers and regulators at the federal, state, local, tribal levels; nongovernmental organizations, academia, industry, and citizens. The project also increases the public's right-to-know about how chemicals are managed within their communities and seeks to stimulate reductions in pollutants by making factual information available to decision makers at all levels. The Parties and the CEC continually reevaluate all projects and products to identify the key audiences and messages for each and to identify the most effective and streamlined outreach mechanisms for each audience.

Taking Stock is a flagship publication of the CEC, and is the primary communications vehicle for the PRTR project. A number of changes have occurred and more are contemplated to improve the information provided to support decision-making by governments, industry, nongovernmental organizations and the public. Some examples are the streamlining of the

paper *Taking Stock* report and enhancement of *Taking Stock Online*, and the inclusion of analysis methodologies that allow for risk-based approaches and better understanding of trends.

Taking Stock 2004 (to be published in 2007) represents an important milestone with the inclusion of new RETC data from Mexico and will present the first fully North American assessment of a common set of chemical releases and transfers. Additional effort will be put towards outreach and stakeholder briefings to ensure the most thorough and informed consideration of the CEC's PRTR project and annual *Taking Stock* reports.

Information Management

Currently, *Taking Stock* appears in two forms. One is an annual publication of over 250 pages, comprising text tables and figures, that compares comparable release and transfer data any number of different ways, e.g., by country, state or province, by chemical, by media (air, water, land). The second form is through an electronic web-based *Taking Stock Online* from the CEC web site, which enables users to analyze the data through a searchable format. The CEC reviews and analyzes the basic data that are provided by each government. Through this analysis, the CEC extracts the data that are comparable; thus, the matched data set is a subset of the overall data provided by the governments. The matched data set is downloadable through the *Taking Stock Online* web site. Future work includes steps to upgrade and improve the functions of this online searchable data set as well as to ensure its operational continuity (currently provided and maintained by

a contractor). This will enable users to conduct analyses and access more data online, thereby reducing the size of the hard copy version of *Taking Stock*. The intent is to increase the capacity and robustness of the online database in order to streamline the hard copy report.

While these approaches meet the need of getting information out to the public, there are additional ways of displaying the data, e.g., GIS, North American Atlas, etc. The national PRTR data currently include lat/long data. Therefore, there is ample opportunity to apply new tools to make this data even more meaningful to interested publics.

Summary Quality Assurance Project Plans

Summary Quality Assurance Project Plan	
Project: 2-Tracking Pollutant Releases and Transfers in NA, Task 1	
Deliverable (Information product): <i>Taking Stock</i> and <i>Taking Stock Online</i> (2004 data)	
Information Product Category: Project report	
Data Custodian: Keith Chanon	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	Process is initiated with the data collected from the Parties (usually in the summer and 10 to 12 months prior to release of <i>Taking Stock</i> (targeted for April/May 2007). Consultants analyze the data and establish matched data set (within six months from receipt of data). CEC Staff review matched data analysis (months six to nine after receipt of data from Parties)

Stakeholder/Expert review	The Special Feature Chapter is circulated to selected stakeholders/experts for three-week review (Oct.-Nov. 2006)
Party Review (1)	Three-week Party review of Special Feature Chapter (four to five months following receipt of data from Parties (Oct.-Nov. 2006).
External Review	
Public review	The PRTR Consultative Group meets in Oct-Nov. 2006 to discuss <i>Taking Stock</i> and to advise on priorities for the PRTR project.
Peer review	The methodology for the CEC data analysis was peer reviewed in the early years of the project. The methodology has not changed.
Party Review (2)	Entire <i>Taking Stock</i> report is provided to Parties six weeks in advance of release as an embargoed copy to give Parties time to prepare for its publication (March-May 2007).
Party Clearance	Apr-May 2007: four-week advance copy of News Release
Publication	Spring-Summer 2007

Summary Quality Assurance Project Plan	
Project: 2-Tracking Pollutant Releases and Transfers in NA, Task 1 and 3	
Deliverable (Information product): <i>Taking Stock and Taking Stock Online (2005 data)</i>	
Information Product Category: Project report	
Data Custodian: Keith Chanon	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	Process is initiated with the data collected from the Parties (usually in the summer and 10–12 months prior to release of <i>Taking Stock</i> (targeted for April/May 2008). Consultants analyze the data and establish matched data set (within six

	months from receipt of data). CEC Staff review matched data analysis (months six to nine after receipt of data from Parties)
Stakeholder/Expert review	The Special Feature Chapter is circulated to selected stakeholders/experts for three-week review (Oct.-Nov. 2007)
Party Review (1)	Three-week Party review of Special Feature Chapter (4-5 months following receipt of data from Parties (Oct.-Nov. 2007).
External Review	
Public review	The PRTR Consultative Group meets in Oct.-Nov. 2007 to discuss <i>Taking Stock</i> and to advise on priorities for the PRTR project.
Peer review	The methodology for the CEC data analysis was peer reviewed in the early years of the project. The methodology has not changed.
Party Review (2)	Entire Taking Stock report is provided to Parties six weeks in advance of release as an embargoed copy to give Parties time to prepare for its publication (March-May 2008).
Party Clearance	Apr-May 08: four-week advance copy of News Release
Publication	Spring-Summer 2008

Summary Quality Assurance Project Plan	
Project: 2-Tracking Pollutant Releases and Transfers in NA, Task 4	
Deliverable (Information product): Discussion Paper for Consultative Group	
Information Product Category: Background paper	
Data Custodian: Keith Chanon	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	Sept.-Oct. 2007

Stakeholder/Expert review	NA
Party Review (1)	Oct: two-week review by PRTR Officials
External Review	
Public review	Paper will guide discussions at Consultative Group meeting
Peer review	NA
Party Review (2)	NA
Party Clearance	NA
Publication	Nov. 2007 in advance of Consultative Group meeting

Summary Data and Information Quality Assurance Plan

Data and Information Quality Assurance Plan - Summary
Project: 2-Tracking Pollutant Releases and Transfers in North America, Task 3
Database/Dataset/Online service description: <i>Taking Stock Online</i>
Data Custodian: Keith Chanon
Category: Electronic Information product
Key dates: (development, online availability, etc.) Extract data and prepare matched database (June-Dec. 2007); Prepare data for on-line Query Builder (Feb.-May 2008); Release data with publication of the <i>Taking Stock</i> report.

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
1. Publish <i>Taking Stock</i> reports	<p>Complete and publish <i>Taking Stock 2004</i>.</p> <p>Will incorporate data from the RETC and will aim to advance the release schedule to an earlier date in 2007</p> <p>Will work with the Parties to begin to migrate more analysis to <i>Taking Stock Online</i> and streamline the hardcopy report.</p> <p>Outputs:</p> <p>A North American comparative analysis of PRTR data to inform decision makers about the status, trends, and management of industrial pollutants.</p>	April	\$115,000	<p>Complete and publish <i>Taking Stock 2005</i>.</p> <p>Data that have been pulled together and assessed from the TRI, NPRI, and RETC sets will be analyzed and published in 2008. Continue to work with the Parties to migrate more analysis to <i>Taking Stock Online</i> and streamline the hardcopy report.</p> <p>Outputs:</p> <p>A North American comparative analysis of PRTR data to inform decision makers about the status, trends, and management of industrial pollutants.</p>	March	\$110,000	<p>Complete and publish <i>Taking Stock 2006</i>.</p> <p>Continue to accelerate the pace of analyzing and publishing <i>Taking Stock</i> earlier than previous years to ensure relevancy to the public and decision-makers. Continue to migrate more analysis to <i>Taking Stock Online</i> and streamline the hardcopy report.</p> <p>Outputs:</p> <p>A North American comparative analysis of PRTR data to inform decision makers about the status, trends, and management of industrial pollutants.</p>	March	\$105,000	\$330,000
2. Collect and interpret data for <i>Taking Stock</i>	<p>Collect and analyze trilateral data for <i>Taking Stock 2005</i>.</p> <p>Consult with the Parties on potential</p>	July-Oct.	\$130,000	<p>Collect and analyze trilateral data for <i>Taking Stock 2006</i>.</p> <p>Consult with the Parties on potential</p>	July-Oct.	\$130,000	<p>Collect and analyze trilateral data for <i>Taking Stock 2007</i>.</p> <p>Consult with the Parties on potential use with</p>	July-Oct.	\$130,000	\$390,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	use with Atlas base maps and standard GIS systems. Explore opportunities to use innovative methodologies to increase the amount of data that can be compared, to describe trends, and to provide risk-based information. Outputs: A comparable and matched data set using 2005 reporting year PRTR data from the Parties. This data set will become the basis for <i>Taking Stock</i> .			use with Atlas base maps and standard GIS systems. Outputs: A comparable and matched data set using 2006 PRTR data from the Parties. This data set will become the basis for <i>Taking Stock</i> .			Atlas base maps and standard GIS systems. Outputs: A comparable and matched data set using 2007 PRTR data from the Parties. This data set will become the basis for <i>Taking Stock</i> .			
3. Upgrade and enhance <i>Taking Stock Online</i>	Incorporate data into <i>Taking Stock Online</i> to support electronic access and customized searches of the database. Consult with the Parties about potentially integrating mapping capability consistent with the North American Atlas Framework	Jan.-Dec.	\$40,000	Incorporate data into <i>Taking Stock Online</i> to support electronic access and customized searches of the database. Outputs: An expanded and improved electronically searchable database of the matched PRTR data with links to	Jan.-Dec.	\$40,000	Incorporate data into <i>Taking Stock Online</i> to support electronic access and customized searches of the database. Outputs: An improved electronically searchable database of the matched PRTR data with links to analytical maps.	Jan.-Dec.	\$35,000	\$115,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	Outputs: An expanded electronically searchable database of the matched PRTR data with links to analytical maps.			analytical maps.						
4. Conduct stakeholder consultations through annual Consultative Group meeting	a) Convene the consultative group meeting to solicit multi-stakeholder input on future analyses for <i>Taking Stock 2006</i> . The consultations of 2005 identified recycling as an important area of focus in addition to guidance for industry reporting and outreach to NGOs and the public. b) Prepare discussion papers and proposals for <i>Taking Stock 2006</i> incorporating conclusions from the Consultative meeting and input from PRTR Officials. Convene routine conference	Oct.- Nov.	\$60,000	a) Undertake stakeholder consultation to identify areas of study and analysis for <i>Taking Stock 2007</i> . b) Prepare discussion papers and proposals for <i>Taking Stock 2007</i> incorporating conclusions from the Consultative meeting and input from PRTR Officials. Convene routine conference calls with officials	Oct.- Nov.	\$60,000	a) Undertake Stakeholder consultation to identify areas of study and analysis for <i>Taking Stock 2008</i> . b) Prepare discussion papers and proposals for <i>Taking Stock 2008</i> incorporating conclusions from the Consultative meeting and input from PRTR Officials. Convene routine conference calls with officials.	Oct.- Nov.	\$60,000	\$180,000
		Aug.- Dec.	\$50,000	Outputs: Identification of areas of focus for <i>Taking Stock 2006</i> and suggestions for future directions of the PRTR project. Discussion paper, summary of the CG meeting and “Response to	Aug.- Dec.	\$50,000	Outputs: Identification of areas of focus for <i>Taking Stock 2006</i> and suggestions for future directions of the PRTR project. Discussion paper, summary of the CG meeting and “Response to Comment”	Aug.- Dec.	\$50,000	\$150,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>calls with officials.</p> <p>Outputs:</p> <p>Identification of areas of focus for <i>Taking Stock 2006</i> and suggestions for future directions of the PRTR project.</p> <p>Discussion paper, summary of the CG meeting and “Response to Comment” document, and overall priority-setting for <i>Taking Stock 2006</i>.</p>			<p>Comment” document, and overall priority-setting for <i>Taking Stock 2007</i>.</p>			<p>document, and overall priority-setting for <i>Taking Stock 2008</i>.</p>			

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
5. Facilitate increased comparability of PRTRs to ensure consistency of reporting methodologies and chemicals	Building on the updated Action Plan, continue to identify and address issues of compatibility between the national PRTRs with special emphasis on RETC data sets so that a more fulsome North American picture of releases can emerge in <i>Taking Stock</i> . Continue work with the Parties to explore other methodologies to perform meaningful trilateral analysis of the data. Outputs: Parties are aware of issues related to and impeding PRTR data comparability and potential actions to facilitate greater comparability.	Ongoing	\$15,000	Continue to identify and address issues of compatibility between the national PRTRs with special emphasis on RETC data sets so that a more fulsome North American picture of releases can emerge in <i>Taking Stock</i> . Outputs: Parties are aware of issues related to and impeding PRTR data comparability and potential actions to facilitate greater comparability.	Ongoing	\$15,000	Facilitate actions promoting comparability of PRTRs. Outputs: Parties are aware of issues related to and impeding PRTR data comparability and potential actions to facilitate greater comparability.	Ongoing	\$15,000	\$45,000
6. Capacity building to improve trilateral data quality and support PRTR implementation in Mexico: a) Improve data	a) Work with PRTR officials to facilitate improvement of trilateral data quality and comparability for key industry sectors. Activities could include workshops in	Jan.-Dec.	a) \$40,000	Continue to: a) work with PRTR officials to facilitate improvement of data quality and comparability for key industry sectors. b) Work with the Parties to identify priority needs of the	Jan.-Dec.	a) \$40,000 b) \$25,000	Continue to a) work with PRTR officials to facilitate improvement of data quality and comparability for key industry sectors. b) Work with the Parties to identify priority needs of the	Jan.-Dec.	a) \$25,000 b) \$10,000	\$235,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
<p>quality and comparability among key industry sectors</p> <p>b) Support RETC comparability with TRI and NPRI</p> <p>c) Support stakeholder (NGO) outreach efforts and information exchange on PRTR issues</p>	<p>Mexico to exchange information on reporting/monitoring approaches, and improved guidance for reporting facilities.</p> <p>b) Work with the Parties to identify priority needs of the Mexican RETC to promote comparability with Canada and the US. Activities could include support for the Mexican Official Standard, development of the chemical list, and comparable reporting thresholds.</p> <p>c) Build capacity of Mexican media to understand the value of RETC data. Educate Mexican stakeholders about the RETC and the development of the Mexican Official Standard and extend outreach/educational efforts for <i>Taking Stock</i>.</p> <p>Outputs:</p>		<p>b) \$25,000</p> <p>c) \$15,000</p>	<p>Mexican RETC to promote comparability with Canada and the US.</p> <p>c) Build capacity of Mexican media to understand the value of RETC data. Educate Mexican stakeholders about the RETC and the development of the Mexican Official Standard and extend outreach/educational efforts for <i>Taking Stock</i>.</p> <p>Outputs:</p> <p>a) Improved data quality, comparability, and guidance for estimating emissions, building on trilateral coordination.</p> <p>b) Increased comparability of chemical lists and reporting thresholds.</p> <p>c) Informed media reporting and increased involvement of Mexican stakeholders in the development of the RETC Official Standard (NOM) and</p>		<p>c) \$25,000</p>	<p>Mexican RETC to promote comparability with Canada and the United States.</p> <p>c) Build capacity of Mexican media to understand the value of RETC data. Educate Mexican stakeholders about the RETC and the development of the Mexican Official Standard and extend outreach/educational efforts for <i>Taking Stock</i>.</p> <p>Outputs:</p> <p>a) Improved data quality, comparability, and guidance for estimating emissions, building on trilateral coordination.</p> <p>b) Increased comparability of chemical lists and reporting thresholds.</p> <p>c) Informed media reporting and increased involvement of Mexican stakeholders in the development of the RETC Official Standard (NOM) and increased awareness and use of <i>Taking</i></p>		<p>c) \$30,000</p>	

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>a) Improved data quality, comparability, and guidance for estimating emissions, building on trilateral coordination.</p> <p>b) Increased comparability of chemical lists and reporting thresholds.</p> <p>c) Informed media reporting and increased involvement of Mexican stakeholders in the development of the RETC Official Standard (NOM) and increased awareness and use of <i>Taking Stock</i>.</p>			increased awareness and use of <i>Taking Stock</i> .			<i>Stock</i> .			
7. Coordination with indigenous communities in using PRTR data and in engaging in other CEC activities (e.g., EM&A)	In coordination with JPAC and the Parties, a workshop of indigenous leaders from the three North American countries will be convened to formalize a North American indigenous environmental	Jan.-Dec.	\$40,000	Building on the indigenous activities in 2007, coordinate with JPAC, EM&A, etc. to strengthen collaboration with North American indigenous communities. Output: Existence of a North	Jan.-Dec.	\$40,000	Building on the indigenous activities in 2008, coordinate with JPAC, EM&A, etc. to strengthen collaboration with North American indigenous communities. Output: Maintained communications with a	Jan.-Dec.	\$35,000	115,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	network, share information about toxic substances, including outreach materials regarding the use and interpretation of PRTR data, and to solicit feedback and ideas for continued indigenous involvement. Output: Establishment of a mechanism to involve and communicate with indigenous groups regarding CEC PRTR and chemical programs.			American indigenous network to inform the CEC.			North American indigenous network.			
8. Present and support North American approach to PRTR implementation in international efforts (OECD, UNECE, UNITAR) to advance PRTRs	Continue to present the North American approach to PRTRs and share experiences with PRTR implementation in the OECD PRTR Working Group and International Coordinating Group to facilitate the adoption of PRTRs globally. Outcomes:	Feb.- Mar.	\$5,000	Continue to present the North American approach to PRTRs and share experiences with PRTR implementation in the OECD PRTR Working Group and International Coordinating Group to facilitate the adoption of PRTRs globally. Outcomes: Increased understanding of	Feb.- Mar.	\$5,000	Continue to present the North American approach to PRTRs and share experiences with PRTR implementation in international work as it relates to advancing the use of PRTRs globally (OECD, UNECE). Outcomes: Increased understanding of regional approaches to assessing PRTR data	Feb.- Mar.	\$5,000	\$15,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	Increased understanding of regional approaches to assessing PRTR data through participation in meetings of the OECD PRTR Working Group and International PRTR Coordinating Group.			regional approaches to assessing PRTR data through participation in meetings of the OECD PRTR Working Group and International PRTR Coordinating Group.			through participation in meetings of the OECD PRTR Working Group and International PRTR Coordinating Group.			
			Total: \$535,000			Total: \$540,000			Total: \$500,000	Total: \$1,575,000

Project 3	Enhancing North American Air Quality Management				
Start date	January 2005			End Date	December 2009
Planned Allocation	2007: C\$245,000	2008: \$260,000	2009: \$260,000	Total	C\$765,000

Purpose and Background

The long-term goal of this project is to provide a more complete North American picture of air quality and air emissions that will support decision making on air quality management. This will be accomplished by identifying air quality related information and capacity needs of the Parties; helping to ensure that the capacity exists to develop harmonized air quality related information and programs for North America; developing information products to identify emerging trends and issues; and informing decisions relevant to the shared environmental interests of the Parties.

Two fundamental components of information for decisions in air quality management are *quantifying* air pollutants emitted from air pollution sources (emissions inventories) and *monitoring* of ambient air quality.

Air emissions inventory information is fundamental to identifying and estimating the contribution of key source sectors to local, regional and global air quality, thus helping decision makers design and prioritize their control strategy options. Coupled with air quality modeling, emission inventories can help identify important source regions that affect air quality in downwind and cross border locations. They also provide the public with basic information on local air quality and the environmental performance of emission sources located in their communities.

Air quality monitoring information provides decision makers and the public with current air quality conditions, as well as the ability to track trends over time. It also helps air quality planners verify the ability of air quality models to reproduce observed air pollutant levels reasonably, and thus provide confidence in models used for informing emissions control decisions.

While Canada and the U.S. are currently able to manage air issues using

comparable methods and information, Mexico lacks the capacity at this time to harmonize its monitoring and reporting efforts to allow for the creation of a comprehensive and coherent North American picture. For instance, even though Mexican emission inventories were completed fairly recently, data used to populate them are now seven to thirteen years old. It is critical, therefore, to begin updating Mexico's National Emissions Inventory. Working with Mexico to develop the updated inventories must also focus on building capacity for Mexico to provide inventory updates in 2010–2012 and beyond.

As an example, the mobile sources inventory must be updated to take into account the astronomical growth in vehicles and consequent increase in emissions. Mexico recently enacted law to phase in the introduction of ultra-low sulfur diesel fuel, beginning with the border area in 2007, and moving to major cities and the rest of Mexico in 2009. The time then is ripe to update Mexico's mobile emissions inventory to enable decision makers to develop strategies based on age of the fleets, emissions from those fleets, fleets carrying goods across the border for trade and the proximity to sources of ultra-low sulfur diesel (ULSD).

A key step in 2007 will be to reconvene the principals of the North American Air Working Group (NAAWG) to review the CEC's current air quality work and to formulate a more comprehensive strategy and long term plans for enhancing North American Air Quality Management. It is hoped that this strategy, or a proposal for formulating it over the course of the year, can be presented to Council in June 2007 for approval and further direction.

Approach

Differences in capacity to monitor air quality and collect air emissions information can hinder the development of the North American picture. However, there is common recognition that emissions inventories and monitoring have the highest priority for cooperative work on North American air quality issues. Consequently, the momentum is strong for developing common methods and techniques and capacities for monitoring air quality and estimating air emissions, and for managing the collected information in a manner that improves its accessibility to the Parties and the public.

In 2001 under Resolution 01-05, the CEC Council agreed to work towards promoting comparability of air emissions inventory information in North America. Since then, the CEC has pursued two goals in this regard: 1) facilitating the development of comparable air emissions data for use in transborder air quality planning, and 2) enhancing the public availability of air emissions information in North America.

The CEC carried out extensive work in promoting the development of North American air emissions inventories by supporting Mexico's first national air emissions inventory in ways that meet Mexico's planning needs, as well as having direct applications to transborder air quality planning.

To continue improving capacity and comparability, work in 2007 will build upon that first inventory to start developing an updated emissions inventory accounting for growth, change in trends, new data sources and methodologies, etc. That work will also support development of Mexico's

capacity to sustain its emissions inventories in future years, in a manner comparable to the United States and Canada, including coordination of inventory schedules. Mexico recognizes its responsibility to provide the necessary monitoring infrastructure (CEMs, ambient monitors, networks etc.) to obtain emissions data comparable to that collected by Canada and the United States.

Updating the inventory will require up to three years. The 2007 work will include a contract to develop the Mexican version of the Mobile 6 model, which is used by the United States and Canada (Mobile 6C) to populate their respective mobile emission inventories. Additional effort will be required in 2008 and 2009 to continue the updating effort and to ensure that the approach is sustainable in Mexico. These efforts will enhance comparability among the three countries, both in terms of methodologies and inventory update schedules. The information can then be used to guide decision makers in determining the impact of existing air quality policies, identifying areas for additional reductions, and modifying ongoing control strategies as appropriate.

In addition to updating the emissions inventory, the CEC will, with the guidance of the NAAWG, begin developing a comprehensive strategy for addressing North American air quality issues over the long term.

Communications

Communications and outreach strategies will depend on progress in updating the emissions inventories and will be developed by the Parties Air experts as

part of their overall strategy for air quality and information activities.

Information Management

To be developed following discussions with the North American Air Working Group.

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
1. Define a comprehensive strategy and supporting plans for cooperation on North American air quality issues	Convene a meeting and subsequent conference calls, as required, of the Parties' working level officials and other experts to support the development of a long-term and comprehensive strategy for cooperation on North American air quality issues, and to facilitate their consultations on the implementation of CEC air quality-related activities in 2007 and beyond.	February (meeting)	\$15,000 (meeting and conference calls)	Convene meeting.		\$10,000	Convene meeting.		10,000	\$85,000
	Convene a meeting of the principal members of the North American Air Working Group to consider the preparatory work on the strategy and to articulate a "vision" for the strategy for presentation to Council in June 2007.	April	\$10,000 for meeting							
	The above work will be accomplished with the support of consultants who will assist the Secretariat in designing and facilitating the	May-June (draft "vision" document)	\$40,000 for consultant support							

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	meetings and conference calls, preparing discussion papers as required, documenting the outcome of the meeting, soliciting stakeholder and JPAC input, and preparing documents and presentations for Council consideration, as appropriate. Outputs: A “vision” document is presented to Council in June 2007 for approval and further direction to be developed further as a North American Air Quality Strategy. Council receives advice on the implementation of the CEC’s air quality activities.									
2. Update Mexico’s emissions inventory: a. Customize AP-42 emissions factors and the Mobile 6 model for Mexico	Initiate updating Mexico’s National Emissions Inventory, using methodologies that ensure comparability with the US and Canada. Customize AP-42 emissions factors and the Mobile 6 model, update mobile source inventory, and conduct	June-Dec.	\$180,000	Compile stationary source data from states, using comparable methodologies as the US and Canada, coupled with additional emissions inventory training workshop(s).	Jan.-Dec.	\$150,000	Complete updated three-year inventory with data on area sources, using comparable methodologies to the US and Canada. Complete training workshops to build emissions inventory capacity.	Jan.-Dec.	\$150,000	\$480,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
b. Update mobile source inventory via contract c. Compile stationary source data from states d. Work with states to compile area source data	training workshop in inventory methodologies and processes. Outputs: Updated inventory to inform decision makers, and provide additional data related to trade and the environment.									
3. Air quality monitoring Develop additional capacity in Mexico to monitor ambient air, along with monitoring methods, analysis, and computer-based networking		-	-	Outputs: A complete set of monitors to measure data in a comparable manner to the US and Canada. Updated information on the impacts of trade across borders. Begin creation of a computer-based distributed air monitoring network, development of procedures and protocols, and operator training		\$100,000	Harmonize air quality monitoring protocols and systems, connect Mexico's distributed network with US and Canada's, and provide training to both policy makers and technical experts in air monitoring.		\$100,000	\$200,000
			Total: \$245,000			Total: \$260,000			Total: \$260,000	Total: \$765,000

Project 4	Mapping North American Environmental Issues		
Start date	January 2005		
Planned Allocation	2007: C\$140,000	2008: C\$110,000 (TBD)	2009: C\$110,000 (TBD)

End Date	December 2009
Total	C\$360,000 (TBD)

Purpose and Background

The purpose of this project is to enable the visualization and analysis of environmental information from a North American perspective. This will be accomplished through the evolution of the existing North American Atlas Framework into a digital *North American Environmental Atlas*. The Atlas will provide georeferenced information at the North American scale, add to awareness of environmental issues that span the continent, and leverage prior and ongoing CEC programmatic work.

The Atlas framework is a key component of information management at CEC. It is critical to achieving the goal of the *Information for Decision-making* priority of the CEC Strategic Plan; that is, to provide “credible, balanced and timely information on the North American Environment... available and accessible to all interested parties....”

The project thus supports cooperative initiatives and decision-making to address North American issues of common concern and to improve the accessibility of information on North American environmental issues and resources by citizens and the governments of the three Parties.

The Atlas Framework will assist decision makers by providing:

- the ability to look at issues from a North American perspective;
- information to address issues of common concern at a continental scale;
- a view of cross-cutting issues and insight into cause-and-effect relationships; and
- connection of political jurisdictions to environmental landscapes such as watersheds and ecoregions.

Work has been proceeding for several years on developing a framework for

visualizing North American environmental issues and resources. The CEC and the National Atlas programs in Canada, Mexico and the United States have partnered to compile a number of base map layers into the North American Atlas Framework (NAAF) in both hard copy and as a digital “platform.” These six map themes were compiled from various national sources and released for public access in June 2004. They include populated places, water (lakes, rivers, coastlines), transportation (road/rail networks), political and administrative boundaries (national and subnational), bathymetry, and glaciers/sea ice.

The NAAF base map layers are now available free-of-charge for download from servers in each of the three countries. Each country is responsible for its own quality control and ongoing maintenance of the information. The CEC’s role thus far has been to convene the three countries’ experts and facilitate their cooperative efforts.

As part of their ongoing mandates, the countries’ Atlas programs will continue to integrate additional base maps. For example, work is currently underway that will continue the partnerships to develop a harmonized framework of North American watersheds. This digital framework is an ideal base for reporting on the characteristics associated with cross-border North American watersheds and for analyzing and presenting cross-cutting environmental issues. The watershed mapping was completed in 2006 and a printed version of the map released. Technical integration into the NAAF and release of the geo-spatial files will be completed in 2007.

The CEC will continue to support and facilitate development of the NAAF into a continental scale North American Environmental Atlas—drawing both upon mapping resources and databases of the three countries, and also upon

the CEC's own information resources—by depicting an increasing number of environmental issues, resources and management practices.

The Atlas will be further developed with support from the CEC, and will result in the public release of selected thematic data sets over the next few years. The quality-managed thematic data sets will reflect issues or topics falling within the priorities of the Council, or that serve the purposes of other CEC initiatives, such as indicators and state of the environment reporting or *Taking Stock* reports.

Approach

The development of the digital North American Environmental Atlas will continue in five main areas of work designed to:

- Continue strengthening the already excellent collaboration among the Atlas and Environmental agencies of the three countries. This will promote the identification of issues of common interest and foster improved exchange of and access to regional environmental information.
- Develop additional base map layers covering North America that are seamless, harmonized, and consensus-based. Base map layers depict fundamental information about the Earth's surface, such as landforms and drainage, as well as depicting landmark features like roads, railways, and populated places. These base maps serve as the framework or platform for displaying and analyzing environmental information on the continental scale.
- Make existing key CEC data sets compatible with the North American Atlas Framework. Any data set that includes location data such as latitude and longitude or jurisdiction is potentially compatible with the

Communications

The results of this project require communication to key audiences and the public. To the extent they are relevant, North American data sets will be presented as applications of the North American Environmental Atlas for public display. Future editions of *Taking Stock* will benefit from the incorporation of map displays of PRTR information.

It is also expected that other users will contribute to the Atlas by utilizing its underlying standard digital mapping platform for their own applications. Eventually, the CEC's role will evolve from one of championing the Atlas, to that of being one user among many. The CEC will facilitate the efforts of partners in the three countries to improve the technology and processes for managing, mapping and integrating North American environmental information. Supporting this project will be a substantial and continuing effort to compile, harmonize, synthesize and analyze high quality information on an ongoing basis through related CEC projects.

NAAF. This work will populate the digital mapping platform with relevant environmental information based on CEC's own work in various areas such as air quality, chemical management, PRTR, and biodiversity.

- Create environmental thematic applications that meet users at their level of technical expertise. This requires enhancements to the CEC website to make base layers, georeferenced data files, and maps available to interested parties. It will also involve producing a limited number of new maps every year incorporated into quality assured reports and other information products.
- Strengthen the CEC's capacity to identify and manage information assets, and provide effective means to use them to maximum benefit—with a particular emphasis on integrated georeferenced or "GIS-based" information.

Information Management

This project requires and has a task dedicated to strengthening the GIS capacity of the Secretariat.

Summary Quality Assurance Project Plans

Summary Quality Assurance Project Plan	
Project: 4-Mapping North American Environmental Issues, Task 3	
Deliverable (Information product): Scoping study for incorporation of New Base Map Layers in NA Atlas	
Information Product Category: Background paper	
Data Custodian: Cody Rice	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	February 2007
Stakeholder/Expert review	March 2007 (NAACG)
Party Review (1)	April 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	June 2007
Publication	July 2007

Summary Quality Assurance Project Plan	
Project: 4-Mapping North American Environmental Issues, Task 4	
Deliverable (Information product): Pilot study and demonstration maps for consideration for <i>Taking Stock</i> report	
Information Product Category: Background paper	
Data Custodian: Cody Rice	
Quality Management Milestone	Target Completion Date

Internal Review	
Secretariat review	July 2007
Stakeholder/Expert review	August 2007 (PRTR Consultative Group)
Party Review (1)	September 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	October 2007
Publication	November 2007

Summary Data and Information Quality Assurance Plans

Data and Information Quality Assurance Plan - Summary
Project: 4-Mapping North American Environmental Issues, Task 1
Database/Dataset/Online service description: Watershed database (data files and metadata) for NAAF
Data Custodian: Cody Rice
Category: Ongoing
Key dates: Database already developed, update schedule TBD Party Review, February 2007 Availability online as database, metadata, and Atlas map layer, January 2007

Data and Information Quality Assurance Plan - Summary
Project: 4-Mapping North American Environmental Issues, Task 2
Database/Dataset/Online service description: Renewable Energy Capacity Database by Jurisdiction for NAAF
Data Custodian: Chantal Line Carpentier
Category: Ongoing
Key dates: Database already developed, update schedule TBD Party Review, May 2007 Availability online as database, metadata, and Atlas map layer, June 2007

Data and Information Quality Assurance Plan - Summary
Project: 4-Mapping North American Environmental Issues, Task 2
Database/Dataset/Online service description: B2B Priority Conservation Areas for NAAF
Data Custodian: Hans Herrmann
Category: Ongoing
Key dates: Database already developed, update schedule TBD Party Review, July 2007 Availability online as database, metadata, and Atlas map layer, September 2007

Data and Information Quality Assurance Plan - Summary
Project: 4-Mapping North American Environmental Issues, Task 2
Database/Dataset/Online service description: Grasslands Priority Conservation Areas for NAAF
Data Custodian: Hans Herrmann
Category: Ongoing
Key dates: Database under development, update schedule TBD Party Review, July 2007 Availability online as database, metadata, and Atlas map layer, September 2007

Data and Information Quality Assurance Plan - Summary
Project: 4-Mapping North American Environmental Issues, Task 3
Database/Dataset/Online service description: Terrestrial Ecoregions (levels I and II) for NAAF
Data Custodian: Hans Herrmann
Category: Ongoing
Key dates: Database already developed, updates on <i>ad hoc</i> basis Party Review, February 2007 Availability online as database, metadata, and Atlas map layer, March 2007

Data and Information Quality Assurance Plan - Summary
Project: 4-Mapping North American Environmental Issues, Task 3
Database/Dataset/Online service description: Marine Ecoregions for NAAF
Data Custodian: Hans Herrmann
Category: Ongoing
Key dates: Database already developed, updates on <i>ad hoc</i> basis Party Review, July 2007 Availability online as database, metadata, and Atlas map layer, September 2007

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
1. Strengthen and facilitate North American collaboration on Atlas development and use	<p>Continue to strengthen the collaborative efforts of the three national Atlas programs and other key mapping agencies, including providing secretariat support to the collaboration and a central focal point for coordination and communication of priorities for advancing the Atlas.</p> <p>Outputs:</p> <p>Coordination meeting of national Atlas agencies, and potential partners.</p> <p>Updated strategic plan, including a long-term vision for improvement of the existing basemaps and addition of new priorities map coverages.</p> <p>Improved formalization and established institutional arrangements for the</p>	Jan.-Dec.	\$40,000	<p>Continue to strengthen the collaborative efforts of the three national Atlas programs and other key mapping agencies, including providing secretariat support to the collaboration and a central focal point for coordination and communication of priorities for advancing the Atlas.</p> <p>Outputs:</p> <p>Coordination meeting of national Atlas agencies, and potential partners.</p> <p>Updated strategic plan, including a long-term vision for improvement of the existing basemaps and addition of new priorities.</p>	Jan.-Dec.	\$40,000	<p>Continue to strengthen the collaborative efforts of the three national Atlas programs and other key mapping agencies, including providing secretariat support to the collaboration and a central focal point for coordination and communication of priorities for advancing the Atlas.</p> <p>Outputs:</p> <p>Coordination meeting of national Atlas agencies, and potential partners.</p> <p>Addition of base maps by cooperating agencies to meet priorities.</p> <p>Updated strategic plan.</p>	Jan.-Dec.	\$40,000	\$120,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>collaboration, including processes to maintain and update existing maps.</p> <p>Coordinated public release of updated versions of NAAF basemaps with the addition of the geo-spatial files of the new tri-laterally developed Watersheds basemap.</p> <p>Design and preliminary implementation of a central web presence for the Atlas basemaps and associated datasets</p>									
2. Make existing key CEC data sets compatible with the NAAF	<p>Each relevant data set to undergo a logical sequence of documented steps, including identification and documentation of sources; quality review, checking and verification; conversion to NAAF compatibility and verification; archiving; and making accessible.</p> <p>Outputs:</p> <p>Small number of selected data sets reviewed for quality, converted and made</p>	Jan.-Dec.	\$15,000	<p>Further integrate selected key data sets in priority areas into North American Environmental Atlas.</p> <p>Outputs:</p> <p>Small number of selected data sets reviewed for quality, converted and made available. Particular emphasis on identified data sets relevant to environment-trade linkages.</p> <p>Plan for update of terrestrial ecoregions.</p>	Jan.-Dec.	\$15,000	<p>Continue integrating selected key data sets.</p> <p>Outputs:</p> <p>Selected new Atlas layers of relevant environmental information drawn from key indicators/priority areas.</p> <p>Possibly update terrestrial ecoregions.</p>		\$15,000	\$45,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	publicly available for use with the Atlas basemap files. Priorities for 2007: <ul style="list-style-type: none"> • Renewable Energy Database • B2B and Grasslands Priority Conservation Areas 									
3. Develop new base map layers to support CEC work program in priority areas	Identify information needs and sources; resolve comparability issues; and make data accessible in Atlas format. Outputs: a) A small number of selected thematic geo-spatial basemaps added to the Atlas and made available for download as documented “shape” files in NAAF format, through a central webpage coordinated by the CEC. To complete and release in 2007: <ul style="list-style-type: none"> • Updated terrestrial ecosystems (with descriptions) • Marine ecoregions of North America (with descriptions) b) Scoping studies	Jan.-Dec.	\$30,000	Identify information needs and sources; resolve comparability issues; and make data accessible in Atlas format. Outputs: Thematic data sets available electronically that can be displayed and analysed in the consistent framework of the North American Environmental Atlas. Themes to be selected according to CEC priorities and issues and user feedback.	Jan.-Dec.	\$30,000	Continue mapping of key indicators and priority thematic areas. Outputs: A more complete atlas with relevant environmental information drawn from key indicators/priority areas. Themes to be selected according to CEC priorities and issues and user feedback.	Jan.-Dec.	\$30,000	\$90,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	(review of data availability, compatibility and scientific issues) for: <ul style="list-style-type: none"> • Land cover • Aquifer/groundwater • Population • Protected Areas Note: Achieving these outputs is predicated on in-kind support from Party agencies.									
4. Integrate PRTR/ <i>Taking Stock</i> with NAAF feasibility study	Conduct pilot studies of spatial analysis and map depiction of <i>Taking Stock</i> data using administrative, watersheds, ecoregional and other spatial frameworks. Convene meeting of PRTR users to evaluate map-based display of PRTR data. Outputs: Map-based demonstration products for consideration for future incorporation in the <i>Taking Stock</i> report. Pilot study report regarding the	Jan.-Dec.	\$30,000	Develop access methods and dissemination methods for <i>Taking Stock</i> data in NAAF in response to feasibility study. Outputs: Improved <i>Taking Stock Online</i> to make facility locations available. Availability online of selected map products of PRTR data on NAAF basemaps. Availability for download of selected <i>Taking Stock</i> data with latitude/longitude references for the facilities.	Jan.-Dec.	TBD	Complete integration	Jan.-Dec.	TBD	\$30,000 (TBD)

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>depiction of <i>Taking Stock</i> data and potential for interactive public access.</p> <p>(Both to be conducted in conjunction with the Ontario Ministry of Environment.)</p> <p>Report from users' meeting establishing priorities for further map-based analysis and data display.</p>									
5. Develop Secretariat capacity to support North American Environmental Atlas	<p>Establish institutional capacity within CEC to support Secretariat applications of the North American Environmental Atlas, including:</p> <p>Outputs:</p> <p>Established capacity to post and maintain the geospatial datasets of the NAAF and to provide download capacity for general public access through the CEC website.</p> <p>A coordinated feedback page on the CEC web site that can receive user inputs on identified errors in the existing basemaps and direct them to the</p>	Jan.- Dec.	\$25,000	Continue to strengthen and maintain capacity, as needed.	NA	\$25,000	Continue to strengthen and maintain capacity, as needed.	NA	\$25,000	\$75,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	appropriate agency for action. Licences for GIS software to provide geo-spatial GIS analysis capability to the program staff of the Secretariat.									
			Total: \$140,000			Total: \$110,000 (TBD)			Total: \$110,000 (TBD)	Total: \$360,000 (TBD)

Project 5	Reporting on the State of the North American Environment		
Start date	January 2006		
Planned Allocation	2007: \$70,000	2008: TBD	2009: TBD

End Date	December 2009
Total	C\$70,000-TBD

Purpose and Background

The NAAEC requires the preparation of a periodic report on the state of the North American environment. This project will meet that commitment by identifying environmental trends and issues at the North American scale so as to inform decisions relevant to the shared environmental interests of the Parties and to help identify gaps in capacity.

The CEC's first state of the environment report, *The North American Mosaic*, described the scope and complexity of the North American environment, introduced the main issues, and provided a comprehensive snapshot of conditions. However, *Mosaic* incorporated limited statistics and few indicators. And, although the ecoregions of North America were introduced,

there was little analysis using that spatial framework. Thus, *Mosaic* did not lead to an ongoing monitoring or "vital signs" approach that would serve tri-lateral decision-making and help in setting priorities for future initiatives under the NAAEC.

In moving forward, there is much foundation work on which to base reporting in the CEC context. This includes the Parties' own significant capacity and investment of staff, technical, and information resources in the creation of indicators, reports on the environment, and assessments of environmental and related conditions in each Nation.

Approach

The "Information for Decision-making" priority of the CEC Strategic Plan restructured the CEC programs towards a more strategic and central role for environmental information activities, and hence invited a rethinking of environmental reporting. The CEC's environmental reporting will seek to track North American progress in addressing continent-wide environmental issues as identified by the Council. The reporting process must be accompanied by efforts towards greater consistency and compatibility of data within the countries; the ability to link and aggregate data seamlessly across countries; and the assessment of data gaps and approaches to resolve them. Thus, the underlying assessment and research work will be supported by and integrated with the pertinent program objectives and project activities contained in the CEC's cooperative program.

This focused reporting will not emphasize county-to-country or jurisdictional comparisons of "environmental performance." Rather, it will track progress

and trends on the North American scale. This reporting is critical for many reasons. It provides the means for identifying, assessing and tracking environmental issues of continental concern. It is urgently needed to support the measurement of the effects of trade on the shared environment. It is timely, since it reflects best the desire of the Parties to inform decision makers, as expressed by the Puebla Declaration. And it is a logical step to take within the CEC's programming as it integrates all information products into a holistic continental environmental portrait.

The first step in designing the reporting framework is a scoping exercise to define the existing extent of national and international environmental reporting and indicators for North America, including opportunities for the CEC to add value. This scoping will address existing national reporting initiatives by the Parties, national contributions of standardized environmental data to OECD, and CEC's own work. This scoping of existing

indicators approaches and their applicability to a North American perspective is expected to be completed using resources allocated for 2006. Opportunities for linking the work done and products produced in the *Ongoing Environmental Assessment of NAFTA* project will be considered in the scoping study.

Indicators to measure progress will likely be derived from the CEC program of work, existing national information networks, and the scientific literature where these can be made compatible to present a consolidated North American view. Assessment of potential linkages with other CEC projects will be an important aspect of this scoping work. In particular, projects such as *Tracking Pollutant Releases and Transfers*, *Monitoring and Assessing Pollutants across North America*, and *Enhancing North American Air Quality Management* may provide information that can be incorporated into state of the environment reporting for North America. Likewise, the *Ongoing*

Communications

In the near term, this project would generate technical background information and procedural options that would not be expected to hold wide public interest or require an external communications strategy. In 2007, the project would be conducted primarily within the yet-to-be identified network of indicator and environmental reporting Party experts.

The long-term goal of this project is to assemble and disseminate information useful for decision-making and that enhances public understanding of *North American* environmental issues and progress. This would require an external

Information Management

The project will require the ability to coordinate with existing information networks and indicator programs in the three countries, and the development of databases and information systems for harmonizing and managing key indicators. This must be linked to the information management activities of the other CEC programs, especially those in the Information Pillar. There must be integration with the improved GIS capacity to present materials in

Environmental Assessment of NAFTA project should be evaluated as a framework and possible approach for generating environmental indicator reports. Review of CEC experience and consultation amongst national and international experts will be essential to selecting a suitable core set of indicators and a reporting process and format.

As a next step in 2007, this project would convene a key group of experts from the Parties who have helped create their national indicators and reports, and who can help compare methodologies for indicator development including data sources, data gaps, peer review, quality assurance, and effectiveness of indicator reporting. This process will entail a review of the scoping report and the definition of next steps for developing the CEC's contribution in appropriate subject areas at the continental scale.

communications strategy. A periodic *North American Environmental Report* would be a significant production, and would serve to integrate and communicate other CEC project outputs.

Presumably, any reporting would make use of electronic publishing as much as possible to minimize expensive printing. Supporting data tables and maps could be made easily available online utilizing the North American Atlas Framework.

the North American Atlas Framework as well as strengthening of the website capacity to provide online access to databases, tables, and maps.

It is expected that the Parties would begin to inventory and share data from existing national environmental reporting systems during 2007. Specific information management requirements for state of the environment reporting by CEC will be developed during 2007 as scoping for North American state of the environment reporting progresses.

Summary Quality Assurance Project Plan

Summary Quality Assurance Project Plan	
Project: 5-Reporting on the State of the North American Environment, Task 1	
Deliverable (Information product): Plan for CEC State of Environment Reporting	
Information Product Category: Background Paper	
Data Custodian: Cody Rice	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	March 2007
Stakeholder/Expert review	April 2007
Party Review (1)	June 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	September 2007
Party Clearance	October 2007
Publication	November 2007

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
1. Planning and Options Assessment	Consult with Parties' experts on a scoping report that presents options for proceeding with the development of the CEC's State of the Environment (SOE) reporting for the North American region. Consult with stakeholders on the strategy emerging from discussions with the Parties' experts. Finalize and define actions for implementing the strategy from review and agreement by the Parties. Begin implementation.	Jan.- Dec.	\$70,000							\$70,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	Party agreement on the strategy and consensus on the plan for CEC SOE reporting, informed by the stakeholder input.									
2. Reporting on State of North American Environment				TBD This may take a variety of forms depending on expert consensus and guidance from the Council. Planning for specific outputs will be based on the outcome of the first task.	Jan.-Dec.	TBD	TBD This may take a variety of forms depending on expert consensus and guidance from the Council. Planning for specific outputs will be based on the outcome of the first task.	Jan.-Dec.	TBD	TBD
			Total: \$70,000			Total: TBD			Total: TBD	Total: \$70,000 (TBD)

Project 6	Strengthening Wildlife Enforcement Capacity				
Start date	2006			End Date	December 2009
Planned Allocation	2007: C\$75,000	2008: C\$81,000	2009: C\$81,000	Total	C\$237,000

Purpose and Background

Wildlife enforcement is a key element in the governments’ efforts to implement a wide range of international and national laws that aim to conserve, protect and enhance wildlife. In applying these laws, governments rely on inspectors and agents responsible for monitoring and compliance who are well trained to anticipate, identify and combat illegal activities associated with the trade of wildlife.

The CEC’s former Environmental Enforcement Cooperation Program (EECP) has, over the years, supported the Parties’ efforts to strengthen their wildlife enforcement capacities, and thereby helped strengthen regional capabilities for enforcing national laws and for implementing international wildlife obligations, particularly the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

More specifically, work done through the CEC has helped the Parties to identify priorities for regional cooperation in wildlife enforcement. In the context of capacity building, activities have included regional training programs for enforcement officials on the identification of and trade in endangered species of flora and fauna; seminars on wildlife forensics techniques, crime scene investigation and necropsy issues; training seminars on intelligence gathering and analysis to support wildlife enforcement; training exchanges of enforcement officials; sharing of training information; and production of publications aimed at strengthening wildlife inspection activities in North America.

A key activity has been the holding of annual seminars for wildlife

enforcement officials. This has proven to be a successful way in which to provide training to inspectors and to facilitate the exchange of expertise in topics of common concern. The annual seminars have typically involved 25 to 30 Mexican officials, and 15 from each of Canada and the United States. Collaboration and participation in the CEC’s capacity building initiatives has in total provided training for some 600 Profepa officials.

Building on this experience, the current project enables the CEC to continue working closely with the Parties in identifying and implementing regional cooperative initiatives to strengthen their wildlife enforcement capacities and to improve compliance with their wildlife laws.

Over the course of the next three years, the focus of the CEC’s involvement will be on supporting Mexico’s efforts to institutionalize a domestic capacity building program on wildlife enforcement, including ongoing training for wildlife enforcement officials of Profepa’s offices in Mexico City and the various states. Thus, the project concentrates on implementing and institutionalizing the continuance of a three-year training initiative. Development of superior training materials, identification of mechanisms for ensuring the training can be sustained in Mexico, and establishing the ongoing exchange of expertise on areas such as wildlife inspection, investigation and identification techniques, are all key objectives of the project.

Approach

The initial task for this project entails an assessment of the needs for strengthening Mexico's wildlife enforcement capacities. The assessment will identify gaps and constraints, as well as opportunities for enhancing and ensuring continuing governmental capacity to offer training. It will also identify means for developing and improving training plans within local and federal environmental agencies; for developing training materials; for identifying and designing domestic training courses and seminars; and for designing and initiating mentoring programs.

The second task supports a continuing forum for the North American wildlife enforcement agencies, known as the NAWEG. In mid-2007, the group will meet to, among other things, consider the results of the needs assessment produced from the first task and to define a work plan for addressing the most critical of those needs.

The third task supports the design and implementation of a three-year training initiative, which is anticipated to be a principal component of the work plan, and one that the CEC is well-positioned to support. The CEC's efforts following the NAWEG meeting will focus on designing and implementing this training initiative, beginning in the latter part of 2007 and continuing through to 2009, at which time responsibility for training will fall to Mexico. Thus, measures for this training in Mexico will be assessed and instituted in parallel with the actual training conducted during 2008 and

2009. It is anticipated that this will be accomplished by establishing a permanent training group in an educational institution yet to be identified.

To ensure that wildlife enforcement officers receive the most from the training, and to ensure that this initiative can be taken over by Mexico, careful attention will be placed on identifying the best methodology for delivering, evaluating and documenting each training event. The training supported by this project will be provided to Profepa officials, but it is expected that the training modules and resources will be transferable to State level officials in future.

Alternative approaches such as the use of satellite, Internet and video conferencing will be considered to ensure the larger number possible of trainees can be reached at reasonable cost. Special effort will also be made to disseminate the training materials gathered and produced through this initiative so that they can be made available to the North American wildlife enforcement community, through the CEC's web site.

An ancillary task within this project is to continue the annual review and update of the CEC-NAWEG publication *North American Wildlife Forensic Laboratories*.

Communications

It is essential to communicate project results to enforcement partners and practitioners as well as the general public. The <cec.org> web site can be utilized to provide more descriptive information concerning wildlife enforcement on the part of the CEC's government and other partners, and to deliver background and training materials to the wildlife community. Component and training materials require a common project overview and common CEC identification

There are distinct audiences for the products, services, and general information concerning the CEC's support for wildlife enforcement and

other means of disseminating pertinent information concerning the project's objectives and outcomes will be developed. In this regard, it is important to build public awareness and support for the project by communicating both general project progress as well as highlighting specific topic areas, while at the same time respecting the more restricted information requirements of enforcement officials.

General communication materials (including project fact sheets and public outreach products) will serve to describe the project's integrity, and to make clear the CEC's contribution to this trilateral effort.

Information Management

Support may be needed to redesign and update the present content of the CEC/NAWEG web page and provide for improved access to resource materials.

Summary Quality Assurance Project Plans

Summary Quality Assurance Project Plan	
Project: 6-Strengthening Wildlife Enforcement Capacity, Task 1	
Deliverable (Information product): Capacity Building Needs Assessment, Wildlife Enforcement in Mexico	
Information Product Category: Background paper	
Data Custodian: TBD	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	April 2007
Stakeholder/Expert review (NAWEG))	June-July 2007
Party Review (1)	NA
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	NA
Publication	August

Summary Quality Assurance Project Plan	
Project: 6-Strengthening Wildlife Enforcement Capacity, Task 3	
Deliverable (Information product): Three Year Training Initiative (Plan)	
Information Product Category: Background paper	
Data Custodian: TBD	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review (NAWEG)	October 2007
Party Review (1)	November 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	December 2007
Party Clearance	December 2007
Publication	January 2008

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Three-year Total
1. Support Mexico's efforts to develop and institutionalize a capacity building program for wildlife enforcement officials	Conduct an assessment of the most critical capacity building needs for strengthening wildlife enforcement in Mexico. Outputs: Capacity building needs assessment for consideration by Mexico and by the NAWEG.	Jan.- March	\$20,000	-	-	-	-	-	-	\$20,000
2. Facilitate information exchange and cooperation among the North American wildlife enforcement agencies	Support the annual meeting of the NAWEG and facilitate their planning activities. Outputs: Interagency exchange of information and regional priority setting and strategy for enhancing regional wildlife enforcement capacity.	May	\$10,000	Support the annual meeting of the NAWEG and facilitate their planning activities. Among other topics, the NAWEG will continue to identify means for addressing capacity building needs identified through the needs assessment in 2007, and for institutionalizing	May	\$10,000	Support the annual meeting of the NAWEG and facilitate their planning activities. Among other topics the NAWEG will address the transfer of responsibility of the training initiative to Mexico. Outputs:	May	\$10,000	\$30,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Three-year Total
	Coordination of the Parties' support to the implementation of the training initiative on wildlife enforcement in Mexico (Task 3).			continuing training in Mexico. Outputs: Interagency exchange of information and regional priority setting and strategy for enhancing regional wildlife enforcement capacity. Coordination of the Parties' support to the implementation of the training initiative on wildlife enforcement in Mexico (Task 3).			Interagency exchange of information and regional priority setting and strategy for enhancing regional wildlife enforcement capacity. Coordination of the Parties' support to the implementation of training initiative on wildlife enforcement in Mexico. Effective "hand-off" of responsibility for the training initiative to Mexico.			
3. Support the design and implementation of a three-year North American training initiative for wildlife enforcement	Facilitate the design and initiate the implementation of a three-year training initiative that addresses the critical needs and priorities of wildlife enforcement officers	Jan.-Dec.	\$41,000	Continue implementation of the training initiative. Outputs: Continued implementation of the training initiative.	Jan.-Dec.	\$70,000	Conclude CEC's implementation of the training initiative and transfer responsibility to Mexico. Outputs/Outcom	Jan.-Dec.	\$70,000	\$181,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Three-year Total
	within Profepa and facilitates the institutionalization in Mexico of ongoing training to combat the illegal trade of wildlife. Outputs: Three-year training initiative designed and initiated.						es: Continued implementation of the training initiative. Transfer of responsibility for training to Profepa for implementation through an educational institution.			
4. Disseminate, through the CEC web site, training materials to the wildlife enforcement community	Post training materials generated through the Mexican training initiative (Task 3) and provided by the wildlife enforcement agencies. Outputs: Disseminate wildlife enforcement training materials and related information.	Jan.-Dec.	\$2,000	Update the CEC web page with new and/or revised training materials. Outputs: Disseminate wildlife enforcement training materials and other related information.	Jan.-Dec.	\$1,000	Update the CEC web page with new and/or revised training materials. Outputs: Disseminate wildlife enforcement training materials and other related information.	Jan.-Dec.	\$1,000	\$4,000
5. Review and update the CEC-NAWEG publication North American Wildlife	Disseminate updated directory of wildlife forensic laboratories in North America to stakeholders.	Jan.-Dec.	\$2,000	Update and disseminate the directory Outputs: Disseminate an	Jan.-Dec.	TBD	Update and disseminate the directory Outputs: Disseminate an	Jan.-Dec.	TBD	\$2,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Three-year Total
Forensic Laboratories	Outputs: Disseminate an updated directory of existing wildlife forensic centers in North America.			updated directory of existing wildlife forensic centers in North America.			updated directory of existing wildlife forensic centers in North America.			
			Total \$75,000			Total \$81,000			Total \$81,000	Total \$237,000

Project 7	Improving Private and Public Sector Environmental Performance				
Start date	2005			End Date	December 2009
Planned Allocation	2007: \$475,000	2008: \$492,500 (TBD)	2009: \$422,500 (TBD)	Total	C\$1,390,000 (TBD)

Purpose and Background

The purpose of this project is to assist Mexico in developing approaches and capacities for improving private sector environmental performance—and thereby competitiveness—through various features of “integrated environmental management.” The project principally engages Mexican industry, including small and medium-size enterprises (SMEs), and expands in 2007 to engage the North American automotive industry. In accordance with CEC’s Strategic Plan, the project is focused in the first three years primarily on Mexico’s needs, though it involves, and its benefits extend to, all three countries.

The principal outcomes are anticipated to be:

- Models of trilateral cooperation to reach specific environmental performance goals in North American industry.
- Model of integrated environmental management in selected industry supply chains with demonstrable improvement in environmental compliance and competitiveness.
- Improved government/private sector capacity to design and implement cooperative integrated environmental management initiatives in a Mexican state.
- Innovative mechanisms to provide financial assistance for environmental compliance, pollution prevention and environmental management.

In the Mexican context, there is need for practical means to increase compliance with national environmental protection requirements by enhancing the ability of the federal and local governments to work

cooperatively with federal/state counterparts, companies, NGOs, communities and others in effecting improved environmental management. The critical role of industry in increasing environmental performance, in concert with the fair and consistent enforcement of environmental laws and other requirements by governments, is widely acknowledged. In fact, there are many examples of successful initiatives taken by companies on their own, and by governments in collaboration with industries. Experience also shows that successful “working models” of integrated environmental management and government/private sector cooperation have a powerful effect in stimulating similar initiatives in other places. Thus, this project will test and demonstrate ways of enhancing government/private sector interaction to achieve environmental protection objectives, while increasing productivity and improving competitiveness.

While situated primarily in Mexico, the project will contribute increasingly to the experience of governments and companies in all three countries as the scope of its activities broadens over time. The project builds on other CEC sponsored work in Mexico and North America such as the Fund for Pollution Prevention¹ (*Fondo de Prevención de la Contaminación—Fiprev*), the Mexican pollution prevention roundtables, and the North American Pollution Prevention Partnership (NAP3).

The private sector will be engaged by taking advantage of various mechanisms for heightening interest and involvement in the project, including a Memorandum of Understanding (MOU) signed by the US

¹ Fiprev is a successful financial mechanism designed to enhance the competitiveness of small and medium-size enterprises by means of technological modernization and pollution prevention projects already in place in Mexico.

Council for International Business (USCIB), the Canadian Council for International Business (CCIB) and the *Confederación de Cámaras Industriales* (Confederation of Industrial Chambers—Concamin). Other potentially important partners include technical assistance centers,

universities, citizen environmental councils, financial institutions, state and federal governments, and ENGOs.

Approach

Parallel with increasing the capabilities of environmental authorities to deal with environmental problems, the project also aims to foster private sector partnerships and voluntary mechanisms to help improve performance and reduce environmental compliance pressures.

The project has five complementary components that operate at different geographic scales with different mixes of participants. The first involves a private/government partnership at a North American level. The second is a partnership with the auto sector. The third is principally a company-to-company partnership situated in Mexico. The fourth is centred on Mexican local government. A fifth component involves application of a “financial mechanism” to support the other components.

Component A. Clean Electronics Pollution Prevention Partnership (CEP3)

This component builds on previous experiences in North America in exploring a trilateral cooperation mechanism to facilitate the transition of the electronics industry to meet new global environmental requirements. It aims to help improve competitiveness, access to global markets and environmental performance while advancing pollution prevention strategies in North America.

The project is designed to provide resources, technical assistance, and promote voluntary efforts to eliminate or significantly reduce the uses of electronic products manufactured or imported in the North American market that contain a variety of hazardous and toxic constituents. The project could include harmonization of current efforts in North America, such as the EPEAT tool in the United States and TerraChoice in Canada, implementation of best management practices, promotion of compliance assistance tools for pollution prevention programs, and cleaner production technologies.

The CEP3 will promote a coordinated effort to align the goals of the partnership, recognizing the need for program flexibility and effective communication, to provide participants with the ability to leverage available resources to help promote improved environmental performance throughout North America.

The CEP3 will be guided by the designated Parties’ representatives and the existing North American Pollution Prevention Partnership (NAP3). The NAP3 invites representation from the Parties and companies and/or associations within the electronics industry. Industry associations such as The Electronics Industries Alliance (EIA), The National Electrical Manufacturers Association (NEMA), The IPC – the Association Connecting Electronic Industries (IPC), Canieti (*Cámara Nacional de la Industria de Informática, Electrónicas y Telecomunicaciones*) and Electronics Product Stewardship (ESP) Canada, are expected to participate in the project.

A CEP3 steering committee will coordinate the activities proposed under this component. It will have representation from industry, government, academia, and nongovernmental organizations from all three countries, including one representative from each of the NAP3 pollution prevention roundtables. The CEC will support the program activities of the steering committee, and ensure timely reporting on activities and results to the NAP3 and the public.

Component B: Partnership with the North American Auto sector

In 2007, the ambit of the project will be expanded to engage the automotive sector in all three countries. The automotive sector accounts for one quarter of North American trade. This sector has the potential to achieve real environmental benefits from improved performance, and thus demonstrate leadership for other industry sectors. Virtually all of the multinational automotive companies’ supply chains cross North American borders. Their suppliers play a large role in the manufacture of automobiles; some

estimates place current levels of outsourcing in the automotive market at 70% of final assembly.² The automotive sector thus provides an important opportunity for the CEC to facilitate positive environmental change while strengthening ties with the private sector. Gaining the necessary commitment from this sector, initially through the Suppliers Partnership (SP), is an important first step. The SP is a partnership in the United States among automobile original equipment manufacturers, their suppliers and the US EPA, for undertaking the EPA's Green Suppliers Network (GSN) program in the automotive industry.

Component C. Greening supply chains

This component profiles the potential for larger companies to influence and mentor their "supply chain" companies to improve business and environmental performance through such measures as pollution prevention, improved on-site chemicals management, implementation of waste exchange schemes, adoption of best practices, reducing the use of toxic and/or non-renewable materials, enhancing energy efficiency, and promoting consistent work practices and procedures to reduce environmental impacts. The project is building upon the experience gained by the CEC in 2005 and 2006 in various industrial sectors, including the pharmaceutical and cosmetics sectors, in Mexico.

As is the case for Component A, potential benefits for SMEs include lower transaction costs, better ability to react to changes in the market, decreased product obsolescence, reduction of inventory, improved business relationships and improved management of environmental risks. Some Mexican SMEs involved thus far have expressed their interest in being "Industria Limpia certified" at the conclusion of the project. This could involve a parallel process by which SMEs participating in the project have the opportunity to seek "Industria Limpia" certification by means of the design and implementation of a collective certification mechanism allowing SMEs a simplified process. Results are being measured in terms of raw material, water and energy savings, as well as emissions reductions. Lessons learned are being used to improve the process adopted and it's

² Scannell, T, Vickery, S, and Droge, C, (2000), "Upstream supply chain management and competitive performance in the automotive supply industry," *Journal of Business Logistics*, Vol.21, No.1, pp.23-48.

being applied to new supply chains. Initially the project is focused on 1st tier suppliers of large companies and gradually evolves to involve 2nd tier suppliers to shift from a suppliers project to a supply chain project. It is expected that large companies will assimilate the model into their own operations and that suppliers continue to work together taking advantage of a "team" approach.

Component D. Capacity building in a Mexican state

This component will strengthen existing institutional environmental management capacities, and build new ones in a Mexican state. It involves engaging the cooperation of the private sector, the local government, the federal government and stakeholders in identifying capacity building needs in terms of the current institutional framework; targeted training; information gathering and management; communication and interaction with stakeholders; and awareness-raising and outreach activities.

Specific activities that might be launched include assisting and supporting a state government decentralizing the voluntary environmental audit program of the federal government. The expected outcome is stronger and more efficient environmental management in that state. This component will also seek to develop a mechanism to improve environmental performance and compliance through a state's auditing scheme.

Local industry associations and industry in general will be involved during design and implementation, as well as relevant ENGOs. Both segments of this component will be undertaken in close cooperation the Mexican government. Assistance will also be sought from Canadian and US states and/or municipalities who might be interested in setting up a "twinning" arrangement with the selected Mexican state.

Component E. Financing mechanism

The sustainability of environmental initiatives involving partners often demands significant initial investments, and following that, stable and self-sustaining means of financing. This component of the project will be geared to securing the resources needed at the outset of the components described above, and establishing and initiating ongoing financial mechanisms. Involvement of the Mexican Ministry of Economy, Fiprev and other financial institutions will be pursued to provide competitive and attractive funding for pollution prevention, technology advancement and sound

environmental management projects. SMEs will be coached on accessing available financing mechanisms and financial resources. Training will be provided to key personnel at financial institutions to improve their ability to evaluate environmental projects and applications for financial support. The potential for instituting actual financing mechanisms, perhaps modeled on

the Fiprev example, will be examined and, if feasible, will be put in place for each of the other project components. The expected outcome is that companies pursuing better environmental performance and sustainability in Mexico, and particularly those participating in this project, find appropriate financial resources to do so.

Communications

Successful implementation of this project will require strong and consistent communications efforts for all components. The CEP3 will need trilateral coverage inviting North American electronics industry to participate, as well as to report annually on progress. Acknowledgement of firms participating in components A, B and C of the project will be critical. The financial assistance component will similarly require good communication and outreach, particularly to SMEs, both to promote this mechanism and to publicise results. Specific communication activities are foreseen for:

- Supply chain: project launching (every year); progress reports, video,

presentations in meetings.

- Acknowledgment of participating companies and communication of interim results.
- Mexican state capacity building: launch, community and local information updates and progress reports.
- Financial assistance components: outreach, particularly to SMEs.

Information Management

Component C. Greening supply chains in Mexico will report on results gained in 2005 and 2006 in a document to be published in 2007. This will be done after completion of the appropriate review and approval processes

required by the Quality Assurance Policy and Procedures for Publications and Information Products of the CEC.

Summary Quality Assurance Project Plans

Summary Quality Assurance Project Plan	
Project: 7- Improving Private and Public Sector Environmental Performance	
Deliverable: Greening the Supply Chain in Mexico: Progress Report	
Information Product Category: Outreach	
Data Custodian: Hernando Guerrero	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	September 2008
Stakeholder/Expert review	NA
Party Review (1)	November 2008
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	First quarter of 2009
Publication	Third quarter of 2009

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
Component A: Clean Electronics Pollution Prevention Partnership (CEP3)										
1. Design the multi-year project for improving environmental performance in North American electronics industry supply chains	Support the CEP3 Steering Committee and, in conjunction with the NAP3, prepare a project design plan. Outputs/Outcomes: CEP3 steering committee operating. Design plan prepared.	Jan.- March	\$22,500	Continue liaising with the NAP3 and providing support to the CEP3 Steering Committee. Outputs/Outcomes: CEP3 steering committee continues to provide feedback on the implementation of the project.	Jan.- Dec.	\$27,500	Continue liaising with the NAP3 and providing support to the CEP3 Steering Committee. Outputs/Outcomes: CEP3 steering committee continues to provide feedback on the implementation of the project.	Jan-Dec	\$27,500	\$77,500
2. Implement project activities according to the design plan	Conduct CEP3 meetings and conference calls. Facilitate cooperation of the electronics industry in implementing the CEP3. Support the NAP3 in providing guidance on project implementation. Outputs: A number of enterprises	March- Dec. March- Dec. June- Dec.	\$15,000 \$50,000 \$15,000	Conduct CEP3 meetings and conference calls. Continue facilitating the cooperation of the electronics industry in implementing the CEP3. Support the NAP3 in providing guidance on project implementation. Outputs: Increased number of enterprises	Jan.- Dec. Jan.- Dec. Jan.- Dec.	\$15,000 \$50,000 \$25,000	Conduct CEP3 meetings and conference calls. Continue facilitating the cooperation of the electronics industry in implementing the CEP3. Support the NAP3 in providing guidance on project implementation.	Jan.-Dec. Jan.-Dec. Jan.-Dec.	\$15,000 \$50,000 \$25,000	\$260,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>manufacturing and / or importing electronic equipment in North America are engaged in the project.</p> <p>Reduction in the amounts of toxic substances being released.</p>			<p>manufacturing and / or importing electronic equipment in North America engaged in the project</p> <p>Increased reduction of amount of toxic substances released in North America</p>			<p>Outputs:</p> <p>Increased number of enterprises manufacturing and / or importing electronic equipment in North America engaged in the project</p> <p>Increased reduction of amount of toxic substances released in North America</p>			
3. Evaluate results				<p>Conduct quantitative and qualitative analysis of CEP3 results</p> <p>Outputs:</p> <p>Preliminary information for refinement of the project in 2009.</p>	Oct.- Dec.	\$15,000	<p>Review and evaluate project effectiveness and efficiency, and report on results.</p> <p>Outputs:</p> <p>Assessment to support decisions on extension or replication of the project in other industry sectors</p>	Oct.- Dec.	\$25,000	40,000
			Total Component A: \$102,500			Total Component A: \$132,500			Total Component A: \$142,500	\$377,500

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
Component B: Partnership with the North American Auto sector										
1. Initiate development of a cooperative initiative with the automotive sector	Conduct a trilateral meeting to scope the initiative and to begin designing an implementation plan.	TBD	\$70,000	TBD		TBD	TBD		TBD	\$70,000 (TBD)
	Facilitate development of and Party agreement on the implementation plan.	August-Sept.								
	Incorporate implementation plan into 2008 Operational Plan. Outputs/Outcomes: Project Implementation Plan	October								
			Total Component B: \$70,000			Total Component B: TBD			Total Component B: TBD	\$70,000 (TBD)
Component C: Greening supply chains										
1. Implement the multi-year project to improve environmental performance in the supply chains of large companies, in selected sectors	Secure the involvement of additional private sector / Mexican companies in current activities. Conduct a technical training and assistance program.	Jan.-Dec.	\$115,000	Secure the involvement of additional private sector /companies. Facilitate assimilation by larger companies of the project's activities into their operations.	Jan.-Dec.	\$15,000	Secure the involvement of additional private sector /companies. Facilitate assimilation by larger companies of the project's activities into	Jan.-Dec.	\$15,000	\$85,000
		Feb-Dec			Jan.-Dec.					
		Jan.-Dec.			Jan.-Dec.					

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>Promote <i>Industria Limpia</i> certification among Mexican suppliers.</p> <p>Promote grouping of and interchange among participating supplier companies to enhance their performance.</p> <p>Outputs/Outcomes: 60-80 projects implemented in SMEs. New industry sectors involved. Some suppliers certified in <i>Industria Limpia</i> program. Creation of suppliers clubs for continuous improvement.</p>	Jan.-Dec.		<p>Incorporate new elements (like lean manufacturing) into the program.</p> <p>Conduct technical training and assistance program.</p> <p>Promote <i>Industria Limpia</i> certification among suppliers.</p> <p>Promote grouping of and interchange among participating supplier companies to enhance their performance.</p> <p>Outputs/Outcomes: 60-80 projects implemented in SMEs. New industry sectors involved. Project activities assimilated by large companies into their operations. More suppliers certified in <i>Industria Limpia</i> program. Creation of suppliers' clubs for continuous improvement.</p>	<p>Jan.-Dec.</p> <p>Jan.-Dec.</p> <p>Jan.-Dec.</p>	\$85,000	<p>their operations.</p> <p>Conduct technical training and assistance program.</p> <p>Promote <i>Industria Limpia</i> certification among suppliers.</p> <p>Promote grouping of and interchange among participating supplier companies to enhance their performance.</p> <p>Outputs/Outcomes: 60-80 projects implemented in SMEs. New industry sectors involved. Project activities assimilated by large companies into their operations. More suppliers certified in <i>Industria Limpia</i> program.</p>	<p>Jan.-Dec.</p> <p>Jan.-Dec.</p>		

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
							Creation of suppliers' clubs for continuous improvement.			
2. Communicate project results	Implement company recognition program. Communicate interim results to government and other stakeholders by preparing a presentation/video that includes testimonials from participants. Outputs/Outcomes: Recognition of 1or 2 large companies and certification of 20 SMEs Presentation/video with testimonials from participants in the project	Jan.-Dec.	\$10,000 \$10,000	Publish and disseminate project results through publications and a presentation/video containing testimonials from participants.	Oct.-Dec.	\$20,000	Publish and disseminate project results.	Oct.-Dec.	\$20,000	\$60,000
3. Evaluate project results	Develop and initiate a performance measurement system. Conduct an overall project evaluation and refine the project plan for completion of project in 2008 or 2009.	Sept.-Nov.	\$15,000	Conduct project evaluation Design and assess potential methodologies for replicating the project elsewhere. Outputs/Outcomes: Project report.	Aug.-Sept.	\$20,000	Conduct final project evaluation Outputs/Outcomes: Final project report. Decision on continuance or replication for	Aug.-Sept.	\$20,000	\$55,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>Outputs/Outcomes:</p> <p>Performance measurement system for the project is designed and implemented.</p> <p>Evaluation of a voluntary market-based model for integrated environmental management in industry supply chains.</p> <p>Identification of project elements that may be improved, as well as the means to do so.</p> <p>Evaluation of project effectiveness and costs.</p>			<p>Decision on replication of the project for other industry sectors and/or other locations.</p> <p>Draft potential methodologies for replicating the project elsewhere.</p>			other industry sectors			
			Total Component C: \$150,000			Total Component C: \$140,000 (TBD)			Total Component C: \$140,000 (TBD)	\$430,000 (TBD)
Component D: Capacity building for a Mexican state										
1. Design and initiate project	Secure cooperation with a Mexican state. Identification of	Jan.- March	\$5,000	Identify investment priorities based on an analysis of	Jan.- Apr.	\$25,000	Identify investment priorities based on	Jan.-Apr.	\$25,000	\$142,500

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>environmental infrastructure needs and financing sources.</p> <p>Support to preparation of an infrastructure project proposal for the selected financial institution.</p> <p>Outputs/Outcomes:</p> <p>Capacity building needs identified; overall project design prepared and agreed upon.</p> <p>Infrastructure project proposal to a selected financial institution.</p> <p>Municipal and Stakeholder engagement and commitment secured.</p>	<p>Apr.- June</p> <p>June- August</p>	<p>\$15,000</p> <p>\$22,500</p>	<p>constituent needs.</p> <p>Develop a multi-year financial plan for environmental infrastructure.</p> <p>Outputs/Outcomes:</p> <p>Investment needs and priorities identified.</p> <p>Multi-year financial plan for environmental infrastructure prepared.</p>	<p>Apr.- June</p>	<p>\$25,000</p>	<p>an analysis of constituent needs.</p> <p>Develop a multi-year financial plan for environmental infrastructure.</p> <p>Outputs/Outcomes:</p> <p>Investment needs and priorities identified.</p> <p>Multi-year financial plan for environmental infrastructure prepared.</p>	<p>Apr.- June</p>	<p>\$25,000</p>	
<p>2. Develop work plans for specific projects to strengthen existing capacities and to develop new ones</p>	<p>Provide support for decentralization of the National Environmental Auditing program to the state.</p> <p>Implement mechanism for improved environmental performance and</p>	<p>Jan.-Dec.</p> <p>Jan.-Dec.</p>	<p>\$15,000</p> <p>\$40,000</p>	<p>Facilitate design and presentation of state's environmental infrastructure projects to development and financial institutions.</p> <p>Assist the state in implementing and environmental infrastructure project.</p> <p>Outputs/Outcomes</p>	<p>July- Dec.</p>	<p>\$50,000</p>	<p>Facilitate design and presentation of additional state environmental infrastructure projects to development and financial institutions.</p> <p>Outputs/Outcomes:</p>	<p>Jan.-Dec.</p>	<p>\$40,000</p>	<p>\$145,000</p>

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>compliance through state's auditing scheme in selected industry sectors.</p> <p>Outputs/Outcomes:</p> <p>Initial National Environmental Auditing program decentralization to selected state.</p> <p>25 to 30 projects implemented in SMEs</p>			<p>High quality environmental infrastructure projects are proposed to and are accepted by development and financial institutions.</p> <p>Implementation of an environmental infrastructure project in the state.</p>			<p>Environmental infrastructure projects proposed are being implemented and additional projects are accepted.</p>			
3. Promote the National Environmental Audit Program and pollution prevention in industry in the state	<p>Conduct training workshops on environmental auditing procedures and regulations.</p> <p>Conduct a pilot project on joint state-federation environmental audits.</p> <p>Outputs/Outcomes:</p> <p>Improved enforcement capacities in a selected state through better qualified staff, and a new environmental audit program.</p>	<p>Jan.- March</p> <p>Apr.- Dec.</p>	<p>\$10,000</p> <p>\$25,000</p>	<p>Conduct local environmental enforcement and audit program evaluation and review.</p> <p>Outputs/Outcomes:</p> <p>Identification of elements of the program that may be improved to replicate the project successfully.</p>	Jan.- Aug.	\$115,000	<p>Initiate environmental auditing decentralization project's replication in another state</p>	Jan.-Dec.	\$40,000	\$190,000
			Total Component D:			Total Component D:			Total Component D:	\$477,500

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
			\$132,500			\$215,000			\$130,000	
Component E: Financing mechanism										
1. Key financial institutions involvement and engagement to find and implement mechanisms promoting pollution prevention in small and medium-size enterprises	Conduct workshop with financial institutions to promote funding mechanisms for pollution prevention in small and medium-size enterprises.		\$5,000							\$5,000
2. Promote SME awareness of available financing mechanisms	Continue conducting seminars and workshops on available financing mechanisms. Outputs/Outcomes: SMEs are aware of and begin seeking financial resources to improve environmental performance.	Jan.-Dec.	\$5,000	Continue conducting (and possibly conclude in 2007) seminars and workshops on available financing mechanisms. Outputs/Outcomes: SMEs are aware of and begin seeking financial resources to improve environmental performance.	Jan.-Dec.	\$5,000	-	-	-	\$10,000
3. Promote financing mechanisms to support all components above	Continue establishing operating financing mechanisms and arrangements in all components of the project.	Jan.-Dec. Oct.-	\$10,000	Continue operating financing mechanism in all components of the project. Increase Fiprev's funds from 5 to 10 million dollars to	Jan.-Dec.		Promote Fiprev in new states and regions in Mexico. Outputs/Outcomes: Increase Fiprev's	Jan.-Dec.	\$10,000	\$20,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	Conduct mid-project evaluation on the financial sustainability of each component. Outputs/Outcomes: 40-60 loans granted to SMEs Evaluation of project and refinement and adjustment of activities as required.	Dec.		assist pollution prevention projects in other regions (e.g., Nuevo León, Jalisco). Outputs/Outcomes: 80-120 loans granted to SMEs Increased funds for pollution prevention projects in Mexico			geographic coverage.			
			Total Component E: \$20,000			Total Component E: \$5,000			Total Component E: \$10,000	\$35,000
			Total: 475,000			Total: 492,500 (TBD)			Total: 422,500 (TBD)	Total: 1,390,000 (TBD)

Project 8	Building Local Capacity for integrated Ecosystem Management and to Conserve Critical Species and Spaces				
Start date	July 2005			End Date	December 2010
Planned Allocation	2007: C\$350,000	2008: TBD	2009: TBD	Total	TBD

Purpose and Background

The purpose of this project is to assist the Parties in strengthening the capacities of diverse stakeholders to conserve priority species of common concern and their habitats in ecologically significant regions of North America. This will be achieved by:

- Assisting the Parties in identifying, assessing, and addressing the underlying causes of decline of four species of common concern to North America.¹
- Helping fill the capacity gaps required for managing, conserving, and monitoring species and spaces of common concern, by strengthening the capacity of local stakeholders, in particular local authorities.
- Supporting the establishment of a North American network of Marine Protected Areas to assess and monitor the ecological integrity of species and habitat of common concern.
- Promoting the project experience as a replicable model valid for application to other ecologically significant areas in North America.

The Parties recognized the CEC's potential for helping strengthen capacities for environmental conservation when they endorsed the *Plan for North American Cooperation for the Conservation of Biodiversity*² (Biodiversity Strategy) in 2003. Holistic in design, the Biodiversity Strategic Plan is

¹ Along with the three marine NACAP species the project includes the Monarch butterfly, *Danaus plexippus*.

² CEC. 2003. *Strategic Plan for North American Cooperation in the Conservation of Biodiversity*.

<http://cec.org/pubs_docs/documents/index.cfm?varlan=english&ID=1088>.

intended to conserve species and spaces and deal with common threats by strengthening local capacity and using economic incentives and financial instruments in priority ecoregions and conservation sites. This project constitutes pilot implementation of the Biodiversity Strategy in regions of high ecological significance.³

Capacity building and training in support of conservation and maintenance of ecologically significant North American regions and species is one of the six goals of the Strategic Plan. To advance its implementation, numerous governmental and NGO participants from Canada, Mexico and the United States have, over the past four years and through the CEC, jointly developed a framework of priority conservation areas on the Pacific coast and in the grasslands of North America, as well as six North American Conservation Action Plans (NACAPs) for marine and terrestrial species of common continental concern.

It is within this context that this multi-year, multi-faceted “pilot project” will be implemented to show how conservation can be effected more rapidly and sustainably, and with greater impact, through integrated activities that capitalize on the capacities of and partnerships with all stakeholders, including governments.

³ http://cec.org/programs_projects/conserv_biodiv/priority_regions/index.cfm?varlan=english

Approach

The Parties selected the Baja to Bering (B2B) area of the North American West Coast and “key” Mexican states for the capacity building activities of the project. The basis for selecting this area includes the CEC’s framework and assessment of conservation concerns for two priority North American ecoregions.

Scoping and priority setting work has been completed for the B2B region and for three associated marine NACAPs for the humpback whale (*Megaptera novaeangliae*), the Pacific leatherback turtle (*Dermochelys coriacea*), and the pink-footed shearwater (*Puffinus creatopus*). Capacity building activities will occur in “key” Mexican states, as well as in B2B Priority Conservation Areas that are encompassed by the three marine NACAPs.

During 2007, the Parties, with the assistance of the BCWG, will review the progress and impact of all initiatives carried out under this project, in particular, the implementation of NACAPs and the North American Marine Protected Areas Network (NAMPAN), and will advise Council of any new priorities and consequent courses of action.

Project implementation has three components: A. Species conservation actions: **NACAP implementation**; B. Addressing capacity gaps to enhance conservation of species & spaces of common concern: **Capacity Development**; and C. Monitoring vital signs (environmental indicators) in Priority Conservation Areas of the West Coast of North America: **Ecosystem Monitoring Network**.

Component A. NACAP Implementation

On-the-ground activities will be carried out by local stakeholders with the guidance of technical experts from the Parties. Actual implementation will be guided by wildlife management needs of Mexican states and established action plans aimed at assisting the parties in identifying, assessing, and addressing the underlying causes of decline of three species identified above.

Since all NACAP species face the common threat of unsustainable practices, a cluster of activities that deals with training and capacity building will be done jointly (i.e., training local communities in sustainable fishing practices).

Due to the Parties’ shared interest and common concern for protecting the Monarch butterfly and its habitat, the BCWG has recommended that a Monarch butterfly cooperation initiative, similar to the NACAPs, be

facilitated by the CEC and included in this project. In 2007, the major outcome of this initiative will be the development of a Trilateral Monarch Butterfly Sister Protected Areas (SPA) Network.

The specific objectives of the NACAPs⁴ and the Monarch initiative are as follows:

Humpback Whale:

- Compile a comprehensive assessment of the status, distribution and abundance of North Pacific humpback populations.
- Conduct an assessment of the intensity, frequency, seasonality, and trends of impacts (entanglement, collisions, tourism) on critical areas for humpback populations in Mexico.
- Develop an integrated dataset and photographic catalog of North Pacific humpback whales.
- Develop a unified system for gathering and archiving data and identification photographs of humpback whales in Canada, Mexico and the United States.
- Train Mexican researchers in the use of Access relational database.
- Train Mexican stranding networks on responding to entangled whales.
- Produce training materials for tourist operators.

Eastern Pacific Leatherback Turtle:

- Train Mexican fishermen⁵ in safe handling practices for de-hooking and disentangling leatherback turtles to reduce the bycatch of SCCC in artisanal fisheries.⁶

⁴ The implementation of these objectives is and will be done in partnership with several government agencies (i.e., NOAA, DFO, Environment Canada, the *Comisión Nacional de Áreas Naturales Protegidas* (Conanp), and various NGOs (i.e., Defenders of wildlife, and research centers (i.e., Cascadia Research). The role of the CEC is to facilitate a trilateral approach, and leverage funds for specific activities.

⁵ As a 2006 activity of the OP, the CEC, in partnership with Conanp and Defenders of Wildlife, organized three training workshops on sustainable fishing practices in three major shark fishing ports: Mazatlán, Sinaloa; Manzanillo, Colima; Puerto Madero, Chiapas.

Pink-Footed Shearwater:

- Evaluate gaps in tracking program.
- Based on the previous tracking mentioned above, conduct an evaluation of gaps in migration and wintering ground habitat use patterns to prioritize future tracking studies (2007–2008 season). Future tracking may rely on either satellite transmitters or geo-location tags.
- Perform retrospective analyses of at-sea survey data, establishing a technical working group to aid in the compilation and analyses of existing at-sea survey data from US and Canadian waters to determine if population trends are detectable for this species. This effort will require collaboration of researchers from Canada, Mexico, the United States and elsewhere (timing of this is dependent upon funding availability).
- Involve Mexican researchers in the investigation of potential shearwater habitat hotspot off Baja California, detected in 2006 using the satellite tracking data (2007–2008 season).
- Develop a bycatch assessment program for fishing communities in Mexico using the existing “Pro delphinus” (www.prodelphinus.org/home.php) program developed in Peru as a model. Use of questionnaires and surveys to obtain feedback from fishers about bycatch rates and species composition

Development and implementation of a Trilateral Monarch Butterfly Sister Protected Areas (SPA) Network:

- Promote the monarch butterfly and Monarch Butterfly SPA Network as a symbol of trinational cooperation for conservation.
- Facilitate public awareness of the monarch butterfly’s life cycle and the importance of protecting habitat in all three nations through environmental education materials available in Spanish, French, and English.

- Develop and implement a shared monitoring program that includes standard monitoring protocols and is coordinated and linked to existing citizen science monitoring programs.
- Facilitate the exchange of data among researchers in Canada, Mexico, and the United States.

Component B. Capacity Development

Within the context of Mexico’s process to decentralize wildlife management functions to state officials, a series of capacity building workshops was initiated in 2005 to train local wildlife managers on their new tasks. The workshops are providing the scientific and technical basis for proper species and spaces conservation, management and monitoring. Lecturers from more than 20 institutions of all three North American countries are training local wildlife officials on all relevant aspects of biodiversity conservation and management. At the same time, a network is being created that will ensure contact and information flow among wildlife managers of all three countries.

During this phase, the project will foster conditions and develop skills that allow for concerted and complementary actions among local stakeholders, including local authorities, and increased public awareness of biodiversity issues concerning to the B2B area under the NAMPAN program, three selected marine NACAPs and wildlife management needs of Mexican states.

Among the activities envisioned are those aimed at:

- building local and regional capacity to support voluntary compliance to protect the selected species and their habitats;
- increasing the skills and knowledge of current practitioners responsible for marine and terrestrial species conservation, management, and enforcement; and
- developing a hands-on network of stakeholders involved in the protection of the selected species and their priority conservation areas to share lessons learned, best practices, new technologies and management strategies, to help implement integrated ecosystem management approaches in the B2B.

The specific objectives are as follows:

Training Workshop

⁶ In 2006 the CEC partnered with WWF, to assess the impact that artisanal fishing had on species of common concern to North America. That report also recommended further training activities for selected fishing communities of the Mexican Pacific Coast.

- Provide the theoretical and practical basis for wildlife and habitat conservation and sustainable management.
- Provide a general introduction to the existing legislation that regulates wildlife conservation and management in Mexico.
- Review the techniques and tools for priority habitat and species monitoring.
- Briefly review the techniques for addressing and monitoring wildlife disease in wildlife conservation.
- Provide basic training in the use of Geographic Information Systems (GIS) and their relevance on habitat monitoring and wildlife conservation.
- Provide a frame for collaboration in species and spaces conservation and monitoring by creating a network of stakeholders involved in the protection of species and habitats, both locally and regionally.

Component C. Ecosystem Monitoring Network

To be effective and long lasting, conservation actions in the areas of high ecological significance will address the symptoms of ecological stress and their root causes. Expected outcomes in the B2B region include:

- identification and assessment of vital signs within Priority Conservation Areas,
- identification and assessment of environmental stresses,
- effective outreach to local stakeholders (fishing communities, resource leasers, and resource managers), and
- enhanced local capacity to address—on a sustained basis—biodiversity protection, poverty alleviation and local economic development.

The specific objectives are as follows:

- Develop and/or improve information that is relevant to address threats to the selected priority conservation areas, and create the tools

to make it available and useful to key stakeholders and the general public.

- Fill capacity gaps (technical expertise, management skills, and required infrastructure) to assess the state of priority conservation areas, selected species, and environmental stressors, based upon long-term monitoring and assessment strategies using key indicators.
- Implement an exchange program for practitioners responsible for the implementation of monitoring programs in sister sites.
- Continue implementation of the shared trilateral monitoring program for marine protected areas situated along the Pacific coast.
- Create a North American clearinghouse and online database to store monitoring data collected at sister sites.
- Produce concise and scientifically defensible information that can be accessed by decision makers, scientists, managers and other stakeholders to promote conservation of priority conservation areas and species in the selected project areas.

Approaches followed and the lessons learned will be documented, and communications materials produced, as follows:

- Develop publications that will present scientific findings, policy briefs, fact sheets for the general public, and handbooks to facilitate use by others of methods used and of information and experience developed.
- Maintain project information on a dedicated web site under the CEC's main web site.
- Upload all project information into the CEC's North American Data Atlas, after the information has been quality checked.
- Plan the development of additional NACAPs for other species of common conservation concern, with a special emphasis on capacity building.

Communications

Each component has distinct communications requirements. Those of components 1 and 2 relate primarily to the development and delivery of capacity building information to ensure understanding and support for the projects at both a continental and local level, including information materials and action to support local conservation action. Component 3 focuses more on the communication of results and preparation of information necessary to support ongoing decision-making assessments based on Vital Signs information on the B2B. In addition to sharing results and information with partners, public education and information is essential to build support for conservation actions:

- The CEC, with partners, to announce local projects upon approval of the 2007 Operational Plan.
- Locally-focused communication efforts throughout the project that will provide significant benefits to Mexico.
- Project fact sheets, media materials to communicate the activities of the CEC's Biodiversity Conservation Working Group and CEC Parties in the development and implementation of capacity building activities to protect priority ecoregions and selected species of common conservation concern.
- CEC/Semarnat/partner web site content, including links to partners in Canada and the United States.
- Local radio features prepared in Spanish, French and English that can be used to inform North Americans about the scope of CEC activities and the support provided by the CEC's Biodiversity Conservation Working Group.
- Drawing upon the strength of project content (species and habitat), develop continental/regional information products (fact sheets, updates, publications) to secure broader-based interest and support (in Mexico and the rest of North America).
- Emphasize links between CEC program elements: i.e., Trade and Environment, Information for Decision-making, and other Capacity Building projects.
- Audience includes conservation partners, governments, local communities, businesses, media and the public.
- Determine the next series of NACAPs through outreach to technical experts in North America.

Information Management

NOTE: The Parties will review and provide clearance for all CEC publications prior to public release.

Summary Quality Assurance Project Plans

Summary Quality Assurance Project Plan Project: 8-Building Local Capacity for Integrated Ecosystem Management and to Conserve Critical Species and Spaces HUMPBACK WHALE, Task 1	
Deliverable: Humpback Whale Best Practices Brochure	
Information Product Category: Outreach	
Data Custodian: Hans Herrmann	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review	NA
Party Review (1)	November 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	December 2007
Party Clearance	December 2007
Publication	February 2008

Summary Quality Assurance Project Plan Project: 8-Building Local Capacity for Integrated Ecosystem Management and to Conserve Critical Species and Spaces HUMPBACK WHALE, Task 2	
Deliverable: Humpback Whale Fact Sheets	
Information Product Category: Outreach	
Data Custodian: Hans Herrmann	

Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	August 2007
Stakeholder/Expert review	NA
Party Review (1)	September 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	October 2007
Party Clearance	December 2007
Publication	December 2007

Summary Quality Assurance Project Plan	
Project: 8-Building Local Capacity for Integrated Ecosystem Management and to Conserve Critical Species and Spaces	
PINK-FOOTED SHEARWATER, Task 2	
Deliverable: Pink-footed Shearwater Web Site	
Information Product Category: Outreach	
Data Custodian: Hans Herrmann	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	July 2007
Stakeholder/Expert review	NA
Party Review (1)	August 2007
External Review	
Public review	NA

Peer review	NA
Party Review (2)	September 2007
Party Clearance	September 2007
Publication	October 2007

Summary Quality Assurance Project Plan	
Project: 8-Building Local Capacity for Integrated Ecosystem Management and to Conserve Critical Species and Spaces	
MONARCH BUTTERFLY, Task 2	
Deliverable: Brochure about the Trilateral Monarch Butterfly Sister Protected Areas (SPA) Network	
Information Product Category: Outreach	
Data Custodian: Hans Herrmann	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	January 2008
Stakeholder/Expert review	NA
Party Review (1)	February 2008
External Review	
Public review	NA
Peer review	NA
Party Review (2)	March 2008
Party Clearance	March 2008
Publication	May 2008

Summary Quality Assurance Project Plan	
Project: 8-Building Local Capacity for Integrated Ecosystem Management and to Conserve Critical Species and Spaces	
NORTH AMERICAN MARINE PROTECTED AREAS NETWORK (NAMPAN), Task 3	
Deliverable: NAMPAN Clearinghouse (descriptions)	
Information Product Category: Background paper (CD QAPP for electronic information product)	
Data Custodian: Hans Herrmann	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	February 2008
Stakeholder/Expert review	NA
Party Review (1)	March 2008
External Review	
Public review	NA
Peer review	NA
Party Review (2)	April 2008
Party Clearance	April 2008
Publication	June 2008

Summary Quality Assurance Project Plan	
Project: 8-Building Local Capacity for Integrated Ecosystem Management and to Conserve Critical Species and Spaces	
TERRESTRIAL ECOREGIONS	
Deliverable: Descriptions of Terrestrial Ecoregions, Level III	
Information Product Category: Background paper (CD QAPP for electronic information product)	
Data Custodian:	
Quality Management Milestone	Target Completion Date

Internal Review	
Secretariat review	September 2007
Stakeholder/Expert review	NA
Party Review (1)	October 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	November 2007
Party Clearance	November 2007
Publication	December 2007

Summary Data and Information Quality Assurance Plans

<p>Data and Information Quality Assurance Plan – Summary Project: 8-Building Local Capacity for Integrated Ecosystem Management and to Conserve Critical Species and Spaces NORTH AMERICAN MARINE PROTECTED AREAS NETWORK (NAMPAN), Task 3</p>
Database/Dataset/Online service description: Monitoring Web-based Clearinghouse (MPA-ecoregion-B2B)
Data Custodian: CONANP; Parks Canada; NOAA; mirrored at CEC: Hans Herrmann
Category: Ongoing
<p>Key dates: (development, availability online, etc)</p> <ul style="list-style-type: none"> • Collection of data, Jan 2007-Dec. 2007 • Population of NA (B2B) database, Jan.-Feb. 2008 • Quality Assurance process at each information Hub (Conanp, NOAA, Parks Canada), Feb.-May, 2008 • Data displayed at the NA Clearinghouse, June 2008 • The data will be stored and maintained at each partner institution

Data and Information Quality Assurance Plan – Summary Project: 8-Building Local Capacity for Integrated Ecosystem Management and to Conserve Critical Species and Spaces TERRESTRIAL ECOREGIONS
Database/Dataset/Online service description: Descriptions of Terrestrial Ecoregions, Level III, including the following elements: fact sheets, regional overview, physical setting, biological setting and human activities
Data Custodian: INEGI (Francisco Takaki)
Category: Project
Key dates: (development, availability online, etc.) <ul style="list-style-type: none">• Integrate regional task groups, May 2007• Drafting of descriptions, August 2007• Review of first draft to Secretariat, September 2007• The draft descriptions to be sent to the task groups for final technical approval, October 2007• Submitted to the Parties for their review, October 2007• Online publication, December 2007

Implementation Plan

Tasks and Activities by Sub-Project	2007 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	Three-Year Total
Component A. NACAP Implementation										
Pacific Humpback Whale Capacity Building Activities										
1. Integration of information from the monitoring of humpback populations in Baja California Sur & Nayarit, into an outreach best practices document	Humpback Whale Best Practices Brochure to include: collisions, entanglement, and whale watching.	Nov. 2007 for Parties review. Publication, Feb. 2008	15,000	TBD			TBD			
2. Facilitate data and information exchanges to allow for the development of a North American approach to the monitoring and conservation of humpback	Five Mexican Splash scientists trained at Cascadia Research. Humpback Whale Fact sheets.	Sept. 2007 for Parties review. Publication, Dec. 2007	\$15,000	TBD			TBD			

⁷ Subprojects & activities beyond 2007 are to be defined.

Tasks and Activities by Sub-Project	2007 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	Three-Year Total
whales										
			Sub-total: \$30,000			TBD			TBD	
Leatherback Sea Turtle Capacity Building Activities										
1. Two training workshops for Mexican fishermen on safe handling practices for de-hooking and disentangling leatherback turtles, as well as on other sustainable fishing practices	Fifty fishermen trained in sustainable fishing practices.	First workshop, June 2007. Second workshop, Aug. 2007	\$40,000	TBD			TBD			
			Sub-total: \$40,000			TBD			TBD	
Pink-footed Shearwater Capacity Building Activities										
1. Assessment of habitat use patterns and residency times on their wintering grounds in NA waters by using solar-	Recommendations for shearwater's protection during winter migration and wintering habitat	March 2008	\$15,000	TBD			TBD			

Tasks and Activities by Sub-Project	2007 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	Three-Year Total
powered satellite transmitters to track pink-footed shearwaters										
2. Development of pink-footed shearwater webpage	Online web site on pinkfooted shearwater migration and habitat use	Oct. 2007	5,000	TBD			TBD			
			Sub-total: \$20,000			TBD			TBD	
Monarch Butterfly Activities										
1. Support for Managers/Experts Workshop to assess monitoring existing programs and formulate recommendations for trinational monitoring program	Recommendations on the establishment of an integrated trinational monitoring and assessment project.	Aug. 2007	\$40,000	TBD			TBD			
2. Brochure to promote the Monarch butterfly and Monarch Butterfly	Brochure about the Trilateral Monarch Butterfly SPA Network	Parties review Feb. 2008. Publication, May	\$10,000	TBD			TBD			

Tasks and Activities by Sub-Project	2007 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	Three-Year Total
Sister Protected Areas Network as a symbol of trinational cooperation for conservation, and to facilitate public awareness of the Monarch butterfly's life cycle and the importance of protecting habitat in all three nations		2008.								
			Sub-total: \$50,000			TBD			TBD	
			Total Component A: \$140,000			TBD			TBD	
Component B. Capacity Building										
1. Strengthen the capacity and technical expertise of "key actors" in a Train the	Initiate a "Train the Trainers" Program, to continue the training of 50	Process will begin March 2007. Worksho	\$95,000	TBD			TBD			

Tasks and Activities by Sub-Project	2007 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	Three-Year Total
Trainers approach that will continue raising the capacities of local and regional wildlife authorities	wildlife managers and environmental authorities from States within the Selva Maya Priority Ecoregion	p Oct. 2007								
			Total Component B: \$95,000			TBD			TBD	
Component C. Ecosystem Monitoring Network										
North American Marine Protected Area Network: Marine Protected Area Capacity Building Project										
1. Support capacity building and exchange activities among practitioners for MPA monitoring personnel	Monitoring workshop in Canada	Though Spring-Summer 2007	\$30,000	TBD			TBD			
2. Monitoring of Vital Signs: Enable the collection and population of common/shared indicators in sister sites.	Data collection and integration into NOAA, Conanp, Parks Canada databases	Through out 2007	\$40,000	TBD			TBD			

Tasks and Activities by Sub-Project	2007 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	Three-Year Total
Monitoring of biophysical, governance, and socio-economic indicators										
3. Develop a monitoring web-based clearinghouse to facilitate communication and display information in a multi-scale fashion (MPA-ecoregion-B2B)	Development of web-based clearinghouse. Data from the country's databases will be integrated into the North American clearinghouse	June 2008, publication	\$20,000	TBD			TBD			
4. Support for one-day meeting to review progress and develop plan to consolidate NAMPAN. Includes airfare, ground transportation, lodging and meals for four travelers	Recommendation on the future Monitoring Network to the BCWG and the CEC Secretariat.	Feb. 2007	\$6,000	TBD			TBD			
			Total Compon			TBD			TBD	

2007 PROJECT DESCRIPTION

Tasks and Activities by Sub-Project	2007 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	2008 Outputs and Outcomes	Timing	Cost C\$	Three-Year Total
			ent C: \$96,000							
BCWG meeting	Update on 2007 projects, and discussion about future projects. Review Biodiversity Strategy.	May 2007	\$5,000	Update on 2008 projects, and discussion about 2009 projects		TBD	Update on 2009 projects, and discussion about 2010 projects		TBD	
Metadata for Ecoregional polygons at Level III: Description of the polygons will include: Fact sheet; physical environment; biological setting; and human activities	Electronic publication of Terrestrial Ecoregions Nested Map, Levels I, II and III	Dec. 2007	\$14,000	TBD			TBD			
			Total 2007: \$350,000			Total 2008: TBD			Total 2009: TBD	

Project 9	Sound Management of Chemicals				
Start date	1995			End Date	Ongoing
Planned Allocation	2007: \$433,000	2008: \$538,000	2009: \$463,000	Total	C\$1,434,000

Timeline	Start date	End date	Comments
Chlordane NARAP	1997	2003	EM&A to monitor
PCB NARAP	1997	2005	EM&A to monitor
DDT NARAP	1997	2006	EM&A to monitor
Mercury NARAP	1998	Projected 2010	Under implementation
Lindane NARAP	2006	Projected 2016	Under implementation
D&F&HCB NARAP	2006	Projected 2012	NARAP implementation will be completed by 2012 under the monitoring and assessment or capacity building activities. Activities envisioned for the Phase II will be implemented under the National Implementation Plans required by the Stockholm Convention.
North American Agenda for Chemicals Management (Strategies for Catalyzing Co-operation)	2006	Projected 2008	The SMOC Working Group will present a North American Agenda for Chemicals Management with strategies for catalyzing co-operation as the mechanism for implementation. The SMOC Working Group will present a plan for CEC participation in the SCC for Council evaluation in 2008.
Lead Actions	2006	Projected 2010	To be considered under tri- and bilateral actions outside the CEC as well as discrete actions under current CEC programs and projects.

Purpose and Background

The Sound Management of Chemicals (SMOC) initiative provides a framework for “regional cooperation for the sound management of the full range of chemical substances of mutual concern throughout their life cycles, including by pollution prevention, source reduction and pollution control.” Principally, it strives to build the three countries’ institutional and stakeholder capacity in these areas, with an emphasis on the needs of Mexico. In so doing, it also supports the goals of the World Summit on Sustainable Development: “to aim to achieve, by 2020, that chemicals are

used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment.”

Chemicals and their products are traded across North American borders every day. Chemicals in air, water and animals that cross borders freely also add to the chemical burden in each country. More specifically, the CEC SMOC initiative has been concerned with minimizing the risks of human and environmental exposure to *chemicals in use*, or previously used in and traded

as products (e.g., mercury, lindane); *categories of chemicals* including those produced as unintentional byproducts from disposal of traded products (e.g., dioxins and furans); and *industry sectors and technologies* common to the three countries (e.g., automotive, electronics). In general terms, the SMOC initiative endeavours to focus on chemicals in trade, their products and long-range transport of chemicals across borders.

The SMOC initiative has a long history. The CEC Council adopted Resolution 95-05 on the Sound Management of Chemicals (SMOC) on 13 October 1995, at its second regular meeting held in Oaxaca, Mexico. The Resolution made the development of North American Regional Action Plans (NARAPs) for certain persistent and toxic substances, a priority for the CEC's work. It also established a working group composed of two senior officials selected by each Party whose duties pertain to the regulation or management of toxic substances and who were tasked to work with the Commission for Environmental Cooperation (CEC) to implement the decisions and commitments set out in the Resolution.

The NARAPs reflect a shared commitment by the Parties to work cooperatively in building upon, and in some cases supporting, international environmental agreements and existing policies and laws. The history and status of the NARAPs is, briefly, as follows:

- DDT (Council Resolution 95-05) was one of the first targets of the SMOC initiative when it was launched. Canada, Mexico, and the United States approved the NARAP on DDT in 1997 with a goal of reducing Mexico's use of DDT by 80 percent by 2002. Efforts focused primarily on employing alternative methods of controlling malaria-transmitting mosquitoes and were so successful that DDT use was stopped in 2000. The results achieved under the DDT NARAP were shared with Central American countries. These activities were further funded through a joint project by the CEC, the Pan American Health Organization and the Global Environment Facility (GEF), which worked to prevent the reintroduction of DDT in Mexico and throughout the entire region of Central America. Development and implementation of the NARAP on DDT has been completed.
- Development and implementation of the NARAP on Chlordane (Council Resolution 95-05) has also been completed. The goal of phasing out registered uses of chlordane by 1998 and other goals of the NARAP were

achieved.

- Development and implementation of the NARAP on PCBs (Council Resolution 95-05) is complete. Implementation of work related to management of phase-out and disposal will be done domestically and under the Stockholm Convention.
- The NARAP on mercury (Council Resolution 00-06) is being implemented successfully. Work has focused on mercury monitoring, mercury in products and reducing mercury emissions. Implementation is ongoing and will likely continue until 2010.
- The draft Phase I NARAP on Dioxins, Furans and Hexachlorobenzene as called for in Council Resolution 99-01, is currently going through final national review prior to approval by the SMOC Working Group. Once it is finalized, it will be presented to Council for adoption. Implementation of Mexican capacity building for measuring dioxin and furans in a number of media has already occurred.
- The NARAP on Lindane and other HCH Isomers was approved in the fall of 2006 (Council Resolution 06-10) and is currently being implemented. A workshop on Alternatives to Lindane was successfully held in Mexico in 2006 and the Implementation Task Force will finalize the implementation plan as a means to guide implementation of NARAP actions until 2016. The Lindane NARAP Development Task Force deferred prioritization of projects related that NARAP until the Implementation Task Force met to discuss and prioritize actions on 28–30 November 2006.
- Lead was not nominated for NARAP designation. However, the SMOC Working Group has developed a Lead Safe Actions work plan and will implement selected activities bi- and trilaterally outside of CEC activities, as well as integrate other activities into ongoing CEC programs and projects that support the CEC's Strategic Plan priorities and work plan over the next three years.

Over the next several years, work on finalizing the NARAPs in development will continue, as will the SMOC Working Group's role in advising the Council and the Parties on the implementation of existing NARAPs. In addition, in accordance with the recently adopted Council Resolution 06–09, on Advancing the Work of Resolution 95-05, the CEC has begun formulating

new alternative *strategies for catalyzing cooperation* for the sound management of chemicals, along with a North American *chemicals management agenda*. Both the sharing and transfer of information and best practices under NARAPs and the work on *strategies for catalyzing cooperation* are seen as important means for enhancing national capacity for the sound management of chemicals.

Approach

The CEC remains committed to the full implementation of the successful NARAP process. The development of new *strategies for catalyzing cooperation* seeks additional and even more effective ways for the Parties to address chemicals management issues in North America, together. This approach will afford greater flexibility in the allocation of CEC resources to chemicals management issues. As well, it acknowledges that the CEC should work with other institutions that play a part in the safe management of chemicals in North America. These include the Great Lakes Binational Toxics Strategy and the Border Environment Cooperation Commission. There is good potential for the CEC to provide a forum for these institutions to develop coordinated regional approaches that also support global initiatives. As SMOC Working Group members, or their designees, participate in global fora, they can help develop synergies and avoid duplication of effort.

The SMOC initiative is being implemented primarily through the efforts of the SMOC Working Group. This body meets twice a year and confers periodically through conference calls. It re-examines and advises on the implementation plan for the SMOC initiative, and oversees special *task groups*, charging them to formulate projects, guide and assess progress on NARAP implementation, undertake research, and conduct other work as required. The Working Group is striving increasingly to coordinate and integrate the sound management of chemicals work better with other CEC initiatives. For example, it is working closely with the Trade and Environment Working Group on activities that support the *harnessing of market forces* project being conducted within the trade and environment priority of the CEC's work program. The SMOC Working Group will also collaborate with government agencies and stakeholders working on greening

This agenda itself will establish a long-term vision for the Parties' efforts on specific chemicals management issues, as well as identify shorter-term priorities for action. These actions may include work to be carried out through the CEC and/or through bilateral, trilateral, or multilateral initiatives outside the CEC.

the electronics industry. It is also important to note that work under this project and under the project *Monitoring and Assessment of Pollutants across North America* projects are mutually supportive.

In terms of formulating *strategies for catalyzing cooperation* and the *chemicals management agenda*, the SMOC Working Group is considering addressing a wide range of emerging issues, including work on specific chemicals (such as polybrominated diphenyl ethers or perfluoroalkyl sulfonates), the creation of a North American inventory of chemical substances, the application of chemical category approaches to the sound management of chemicals, and the application of pollution prevention approaches. Addressing emerging issues will include a focused effort to move toward development and implementation of pollution prevention programs and policies in Mexico. This will entail capacity building for chemical assessment, chemical analysis methodologies and risk communication, identifying common needs and solutions, and undertaking pilot work that could be designed to address specific sectors.

As the SMOC initiative moves forward, it will continue to be conducted in an inclusive, participatory and transparent manner. The SMOC Working Group will seek to engage stakeholders (including industry, business, trade unions, environmental nongovernmental organizations, academic institutions and other civil society groups) as active partners. In addition, stakeholders are encouraged to participate in the CEC through JPAC and other advisory groups, such as the National and Governmental Advisory Committees.

Implementation will also seek to leverage resources with other funding institutions.

Communications

The SMOC Working Group has a well-established relationship with its stakeholders, and seeks to enhance their engagement in current and future activities. This will be achieved through stakeholder participation at the level of project implementation; development of outreach materials; organizing public sessions at SMOC meetings; requesting holding joint meetings with other CEC' groups; and participating in conferences and workshops organized by others.

All NARAPs contain communications strategies as integral components of their actions. Education is a critical component for the North American public to understand and make informed decisions about environmental choices. Each NARAP highlights how it can best focus the efforts of the Parties to communicate essential information about NARAP substances and

the work of the CEC to the public. NARAP Task Forces work with the Secretariat's Communications department to disseminate information generated from actions of the NARAPs to the scientific community, stakeholders and the public in a culturally acceptable manner.

Information Management

Work under the SMOC program lends itself to production of NARAPs, technical reports and working papers to direct activities of the Task Forces, and as well to provide information or recommendations to the Parties. These documents undergo extensive intergovernmental, public and peer reviews, depending on the nature of the document. Most data generated via the NARAPs is of a technical nature and requires manipulation through

statistical analysis and trends development, as applicable. It is anticipated that there will be a need to provide electronic storage and retrieval mechanisms for items such as an updated inventory of mercury emissions in Mexico. Information products and reports developed through the SMOC program will be available in electronic format on the CEC web site.

Summary Quality Assurance Project Plans

Summary Quality Assurance Project Plan	
Project: 9-Sound Management of Chemicals, Task 1.a	
Deliverable (Information product): New Approach to North American Chemicals Management	
Information Product Category: Report	
Data Custodian: Luke Trip	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	December 2007
Stakeholder/Expert review SMOC Working Group Inter-governmental review	January 2007 September 2007
Party Review (1)	February 2007
External Review	
Public review	March 2007
Peer review	NA
Party Review (2)	September 2007
Party Clearance	February 2008

Publication	June 2008, (web)
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Summary Quality Assurance Project Plan	
Project: 9-Sound Management of Chemicals, Task 1.d	
Deliverable (Information product): Synthesis and Assessment of NARAP Implementation Report	
Information Product Category: Report	
Data Custodian: Luke Trip	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	January 2008
Stakeholder/Expert review (EM&A Standing Committee, SMOC Working Group)	February 2008
Party Review (1)	March 2008
External Review	
Public review	NA
Peer review	May 2008
Party Review (2)	July 2008
Party Clearance	July 2008
Publication	July 2008 (website)

Summary Quality Assurance Project Plan	
Project: 9-Sound Management of Chemicals, Task 2.a	
Deliverable (Information product): SMOC Links to Greening the Supply Chain	
Information Product Category: Background Paper	
Data Custodian: Luke Trip	
Quality Management Milestone	Target Completion Date

Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review SMOC Working Group	November 2007
Party Review (1)	December 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	December 2007
Publication	January 2008

Summary Quality Assurance Project Plan	
Project: 9-Sound Management of Chemicals, Task 2.b	
Deliverable (Information product): SMOC Links to the Clean Electronics Program	
Information Product Category: Background Paper	
Data Custodian: Luke Trip	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review SMOC Working Group	November 2007
Party Review (1)	December 2007
External Review	
Public review	NA

Peer review	NA
Party Review (2)	NA
Party Clearance	December 2007
Publication	January 2008

Summary Quality Assurance Project Plan	
Project: 9-Sound Management of Chemicals, Task 3.b	
Deliverable (Information product): Report on Pilot Project to Reduce Mercury Use in Hospitals	
Information Product Category: Background Paper	
Data Custodian: Luke Trip	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review Mercury Task Force SMOC Working Group	November 2007
Party Review (1)	December 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	December 2007
Publication	January 2008 (web)

Summary Quality Assurance Project Plan	
Project: 9-Sound Management of Chemicals, Task 4.a	
Deliverable (Information product): Lindane Implementation Plan	
Information Product Category: Background Paper	
Data Custodian: Luke Trip	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2006, February 2007
Stakeholder/Expert review SMOC Working Group Inter-governmental review	February 2007
Party Review (1)	March 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	April 2007
Publication	April 2007 (web)

Summary Quality Assurance Project Plan	
Project: 9-Sound Management of Chemicals, Task 5.a	
Deliverable (Information product): Dioxins/Furans and HCB NARAP	
Information Product Category: Report	
Data Custodian: Luke Trip	
Quality Management Milestone	Target Completion Date

Internal Review	
Secretariat review	Ongoing
Stakeholder/Expert review	
Inter-governmental review	March-April 2007
SMOC Working Group	March-April 2007
Party Review (1)	June-July 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	July 2007
Publication	September 2007 (web)

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
1. Convene SMOC Working Group to guide SMOC initiative and to formulate/implement new strategies for catalyzing cooperation (SCCs) and a North American Agenda for Chemicals Management.	a. Conduct annual SMOC Working Group meeting with stakeholders. The SMOC Working Group will exchange information and engage stakeholders in the further development of new strategies for North American chemicals management and the definition of a North American Agenda for Chemicals Management. Approximately 40 people will attend and 25 to 30 of them will receive support from the CEC.	March	\$80,000	a. Conduct annual SMOC Working Group meeting with stakeholders to enable final presentation of new strategies and the agenda in advance of the Council session. Output: The meeting will finalize the new North American approach to chemicals management for presentation to Council.	March	\$80,000	a. Conduct annual SMOC Working Group meeting with stakeholders to enable their participation in the implementation of the new strategies and the agenda for NA chemicals management. Output: Open and transparent dialogue will continue with stakeholders regarding chemical management issues of concern to North America.	March	\$80,000	\$240,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	for development of new strategies for North American chemicals management.									
	<p>b. Conduct bi-annual face-to-face SMOC Working Group planning session to discuss SMOC activities, including finalization of the new strategies for North American chemicals management. Approximately 15 people will attend and 5 to 7 of them will receive support from the CEC.</p> <p>Output: The meeting will lead to the development of final document relating to strategies for catalyzing cooperation in North America.</p>	Sept.	\$25,000	<p>b. Conduct bi-annual face-to-face SMOC Working Group planning session to guide implementation of NARAPs and other activities, and to continue developing the agenda for the approved strategies for catalyzing cooperation.</p> <p>Output: Implementation plan for SCC.</p>	Sept.	\$25,000	<p>b. Conduct bi-annual SMOC Working Group planning session via teleconference to guide implementation of NARAPs and other activities under the SCCs and the agenda.</p> <p>Output: Continued implementation of SMOC NARAPs and SCCs.</p>	Sept.	\$10,000	\$60,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	<p>c. Begin implementing the North American Agenda for Chemicals Management by developing a uniform inventory of toxic chemicals for North America—building capacity in Mexico to identify and quantify such substances in a manner similar to that underway in Canada and the United States (workshop). Approximately 15 people will attend and 8 to 10 of them will receive support from the CEC.</p> <p>Outputs: Approach and subsequent activities for developing a uniform inventory of</p>	Sept.	\$30,000	c. Continue implementing projects and activities defined under the North American Agenda.	Oct.- Dec.	\$40,000	c. Continue implementing projects and activities defined under the North American Agenda.	Jan-Dec	\$40,000	\$110,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	toxic chemicals are defined and incorporated into the 2008 implementation plan.									
	d. Assess and prepare a report on NARAP implementation. Outputs: First draft of the synthesis and assessment report regarding the status and trends of NARAP chemicals in North America along with complete data tables.	April-Dec.	\$50,000	Review, revise and finalize NARAP assessment. Outputs: Final draft of the synthesis and assessment report and final data tables. Report will be revised every five years.	Feb.-July	\$10,000	-	-	-	\$60,000
2. Strengthen linkages to other CEC program work	a. The SMOC Working Group and the T/E Working Group will meet to develop a collaborative project for <i>harnessing</i>	July-Dec.	\$20,000	a. The SMOC Working Group and the T/E Working Group will continue implementing the agreed-upon collaborative project for	June-Dec.	\$30,000	a. Harnessing market forces for sustainability. The SMOC Working Group and the Trade and Environment Working Group will finalize the	Jan.-July	\$20,000	\$70,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	<p><i>market forces</i> for sustainability in North America (proposed - analysis of mercury market in North America).</p> <p>Output: A project proposal will be developed that highlights links between Trade and Environment and SMOC relating to harnessing market forces for sustainability.</p>			<p>harnessing market forces for sustainability in North America.</p> <p>Output: Implementation of a pilot project that promotes the use of green goods/ services.</p>			<p>collaborative project for harnessing market forces for sustainability in North America.</p> <p>Output: Continued implementation of a pilot project that promotes the use of green good/ services. A report will be developed on how best to apply lessons learned to similar goods and services throughout North America.</p>			
	<p>b. The SMOC Working Group and the Clean Electronics Pollution Prevention Partnership (CEP3) Advisory Group will develop a collaborative project for greening the electronics</p>	July-Dec.	\$20,000	<p>b. The SMOC Working Group and the CEP3 Advisory Group will initiate the agreed upon collaborative project for greening the electronics industry in North America.</p> <p>Output: Implementation</p>	June-Dec.	\$30,000	<p>b. The SMOC Working Group and the CEP3 Advisory Group will conclude the collaborative project for greening the electronics industry in North America.</p> <p>Output: A report will be developed on</p>	Jan.-July	\$20,000	\$70,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	<p>industry in North America (proposed – brominated flame retardants in printed circuit boards).</p> <p>Output: A project proposal will be developed to highlight links between CEP3 and SMOC relating to greening the electronics industry. The CEP3 and SMOC principals will meet to discuss the project proposal and propose a path forward for implementation.</p>			of a pilot project that promotes the use of green technologies in the electronics industry.			how best to apply the lessons learned to similar industries throughout North America.			
3. Implement Mercury NARAP activities	a. Conduct meeting of the Mercury Task Force to exchange information on mercury related activities and review projects	Sept.	\$35,000	a. Conduct meeting of the Mercury Task Force by teleconference to advance mercury-related activities. Output:	Jan.- Dec.	\$18,000	a. Conduct meeting of the Mercury NARAP Task Force to exchange information on mercury-related activities, to	Sept.	\$35,000	\$88,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	<p>under the NARAP, to discuss implementation priorities for 2008–2009, and to determine which NARAP-related projects can be implemented through other fora, such as through partnerships with the UNEP Mercury Programme.</p> <p>Approximately 15 people will attend and 5 to 7 of them will receive support from the CEC.</p> <p>Output: The meeting will provide a path forward for future Mercury Task Force activities.</p>			The meeting will provide a path forward for future Mercury Task Force activities.			<p>review projects under the NARAP and to discuss procedures for closing out the NARAP.</p> <p>Output: Recommendations for drafting of the close out report.</p>			
	<p>b. Capacity Building: i) The Task Force will continue</p>	Jan.- July	\$27,000 [Co-funded by	<p>b. Capacity Building: The Task Force will begin implementing a</p>	Jan.- July	\$50,000	<p>b. Capacity Building: The Task Force will finalize implementation</p>	Jan.- Dec.	\$30,000	\$130,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	implementing the pilot project to reduce the exposure to mercury from products in Mexico in the hospital sector. Output: A report on how best to implement this project on a wide scale in Mexico including lessons learned. ii) The Task Force will begin updating Mexican emissions inventories for mercury based on new information available. Output: A report on mercury emissions in Mexico. These data will be collected in a format compatible with the North	Jan.- Dec.	\$25K grant from US EPA] \$23,000	pilot project to reduce risk of exposure to toxics, with a focus on mercury in another sector/ product as appropriate, (proposed, school environments in Mexico). Outputs: Initiation of the pilot project.			of the pilot project to reduce risk of exposure to toxics, with a focus on mercury. Outputs: A report will developed to disseminate the information learned.			

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	American Environmental Atlas and considered for future mapping in the Atlas.									
							c. Mercury Task Force will draft a “close-out” report summarizing its activities, including recommendations for outstanding NARAP actions and ongoing monitoring. Output: A report that highlights the lessons learned through the mercury NARAP and provides recommendations for any follow-up activities, if required.	March-Dec	\$30,000	\$30,000
4. Lindane NARAP activities	a. Information Exchange: The Lindane Task Force will meet <i>via</i> teleconference to	Jan.-Dec.	\$18,000	a. Information Exchange: The Lindane Task Force will exchange information on	April	\$35,000	a. Information Exchange: The Lindane Task Force will meet via teleconference to	Jan.-Dec.	\$18,000	\$71,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	finalize the implementation plan, exchange information and implement priority actions. Output: The implementation plan will provide a path forward for future Lindane Task Force activities.			lindane-related activities, review and prioritize projects under the NARAP. Output: A path forward for future Lindane Task Force activities will result.			exchange information and implement priority actions. Output: A path forward for future Lindane Task Force activities will result.			
	b. Capacity building under the Lindane NARAP. Projects to be prioritized by the Lindane Task Force. Outputs: TBD	Jan.- Dec.	\$40,000	b. Capacity building under the Lindane NARAP. Projects to be prioritized by the Lindane Task Force. Outputs: TBD	Jan.- Dec.	\$30,000	b. Capacity building under the Lindane NARAP. Projects to be prioritized by the Lindane Task Force. Outputs: TBD	Jan.- Dec.	\$40,000	\$110,000
5. D/F/HCB NARAP Activities <i>[Please note that actions under this category are subject to change based on</i>	a. Information exchange: The D/F/HCB Task Force will finalize the NARAP and develop an implementation plan that identifies actions to consider under	March	\$35,000	a. Information exchange: The D/F/HCB Task Force will exchange information on D/F/HCBs and discuss priorities for future implementation.	March	\$35,000	a. Information exchange: The D/F/HCB Task Force will exchange information on D/F/HCBs and discuss priorities for future implementation.	March	\$35,000	\$105,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
<i>deliberations of the Task Force and acceptance of the D&F HCB NARAP.]</i>	the NARAP and those that may be better suited for implementation under other fora. Approximately 15 people will attend and 5 to 7 of them will receive support from the CEC. Output: The finalized NARAP will be presented to Council and the implementation plan for the D/F/HCB NARAP will be developed.			Output: A path forward for future D/F/HCB Task Force activities will result.			Output: A path forward for future D/F/HCB Task Force activities will result.			
	b. Capacity Building: Conduct a workshop with North American experts to transfer technology on D&F emissions control to Mexico. Approximately 30 people will	April Sept.-	\$30,000	b. Capacity Building: The D/F/HCB will initiate a pilot project in Mexico to enhance capacity for controlling and reducing emissions of dioxins and furans. Output:	Mar - Dec	\$45,000	b. Capacity Building: Projects to be prioritized by the D&F Task Force. Outputs TBD	Jan-Dec	\$50,000	\$125,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
	attend and 15 to 18 of them will receive support from the CEC. Output: A successful workshop will enhance Mexican capacity to control D&F emissions.	Dec.		Pilot project initiated.						
6. Lead Safe Practices Actions	As proposed by the SMOC Working Group, actions for 2007 will be undertaken bi- or trilaterally outside of CEC activities.			a. Information Exchange: The Secretariat will contribute to a “North American Pollution Prevention Summit” session on lead. Output: The session will allow for exchange information regarding lead in ongoing domestic pollution prevention programs, with special emphasis on processes,	Sept.	\$50,000				\$50,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
				alternatives, product design, and risk communication.						
				<p>b. Capacity Building:</p> <p>i) A report will be developed to characterize sources of exposure to lead in North America. These data will be collected in a format compatible with the North American Environmental Atlas and considered for future mapping to the Atlas.</p> <p>Outputs:</p> <p>The report developed will highlight gaps in knowledge and make recommendations for future monitoring in the three countries. The data will provide a map</p>	July-Dec.	\$30,000	<p>b. Capacity Building:</p> <p>The report on tracking of trans-border movement of lead-containing products in North America will be finalized.</p> <p>The Parties will develop culturally acceptable communications materials to inform high-risk populations of the risks to lead exposure.</p> <p>Outputs:</p> <p>The report on tracking lead containing products across borders will be finalized.</p> <p>Communications materials will be developed to lower the risk of</p>	<p>Jan.- July</p> <p>March-Nov.</p>	\$55,000	\$115,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
				layer for the North American Atlas. A report will be initiated to evaluate tracking of transborder movement of lead-containing products in North America. ii) The Parties will initiate a pilot project on lead substitution and the North America market potential for lead-free Mexican pottery. Outputs: A preliminary report on tracking of lead-containing products will be developed. The project may promote the use of lead free glaze materials for pottery in Mexico.	Jan.- Oct.	\$30,000	exposure to lead in high-risk populations.			
			Total 2007:			Total 2008:			Total 2009:	Total three years:

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	3-Year Estimate
			\$433,000			\$538,000			\$463,000	\$1,434,000

Project 10	Promoting the North American Renewable Energy Market				
Start date	2005			End Date	2009
Planned Allocation	2007: C\$340,000	2008: C\$315,000	2009: C\$295,000	Total	C\$950,000

Purpose and Background

The purpose of this project is to enhance the development of the North American renewable energy market to attain the environmental, social, economic, and energy benefits that renewable energy provides. These benefits include: the increased reliability of the electric grid, diversification of energy resources to alleviate concerns about security of supply and recent increases in oil and natural gas prices, and environmental improvement through reductions of air pollutants and greenhouse gas emissions.

The North American renewable energy market faces a number of obstacles to its continued growth. In some locations renewable energy is cost-competitive with traditional resources, although it typically has a higher initial cost. The local, state/provincial, and national governments of the NAAEC Parties have different renewable energy purchasing requirements. Furthermore, state/provincial and national environmental regulators currently lack, but are working toward, standardized methods for estimating the environmental benefits of renewable energy policies.

Governments need to address some of the informational and transactional barriers that add to the cost of renewable energy, and more actively assist policymakers as they attempt to implement policies to promote renewable energy. The CEC has been sharing information and collecting data on renewable energy for the past four years. This work has led to the identification of options for expanding the use of renewable energy. Many of these options were identified in the Article 13 report, *Environmental Challenges and Opportunities of the Evolving North American Electricity Market*, initiated in 2000 and published in 2002.

To date, the CEC has:

- catalogued various North American definitions of renewable energy and green power and renewable energy portfolios;
- hosted workshops on green power marketing in Canada and Mexico;
- developed papers on market, policy, and financial mechanisms to expand the use of renewables;
- conducted initial work to document the status of green certificates and the harmonization of their standards, tracking, and definitions across North America;
- developed papers and posted a web-based collection of “how-to” methods and hosted workshops on calculating the environmental benefits (i.e., air emissions reductions) of renewable energy;
- developed a paper and produced a database on the existing and planned renewable energy capacity in North America, along with the policies supporting renewable energies shown by jurisdiction.
- assessed the wind energy potential of the Yucatan Peninsula in Mexico;
- identified types of biomass resources that could be used for low-impact renewable power generation, ethanol or hydrogen production, space heating and use as raw materials for industrial products, or for other uses, such as soil improvement (in collaboration with NRCan and the National Research Council of Canada);
- surveyed 100 of the largest electricity consumers in Mexico in 2001, and found that over 90 percent will purchase electricity from renewable sources;

- created, in 2005, a multidisciplinary, multi-stakeholder, trilateral expert committee (Renewable Energy Experts Committee, REEC); and
- produced a report, *Fostering Renewable Electricity Markets in North America*, documenting programs, technologies and policies that could foster renewable energy sources in North America.
- released the report *Reviewing Gaps in Resource Mapping for Renewable Energy in North America* following review by the REEC.
- started exploring linkages and potential synergies on renewable energy activities in remote communities with the Department of Indian and Northern Affairs Canada;
- begun developing a web-based calculator for the three countries using existing emission factors and other sources.

By supporting the increased production and trade in renewable energy across North America, the project responds to the objectives of the NAAEC to promote sustainable development, and to support the environmental goals and objectives of NAFTA. Moreover, renewable energy has a number of environmental benefits including reduced air pollutant and greenhouse gas emissions. A functioning market for renewable energy systems can address the key challenges of sustainable development, promote energy diversification and security, and most notably foster economic development whilst reducing the environmental impact of energy consumption and production.

The three national governments, state/provincial and local governments, NGOs, and private industry are working to develop renewable energy resources. For example, the US EPA Clean Energy Programs help consumers improve their knowledge about their Clean Energy options by providing objective information, creating networks between the public and private sectors and by offering technical assistance. The US EPA also developed a Green Power Partnership program that provides assistance and recognition to organizations that demonstrate environmental leadership by choosing green power. In addition, the United States' National Renewable Energy Laboratory (NREL) has documented most existing, planned, and potential sources of renewable energy in the United States. The United States has a database listing most of the state laws and policies related to renewable energy. This CEC project would leverage all of this work.

In January 2006, a new government was elected in Canada. The government has stated its interest in ensuring future generations enjoy clean air, clean water and clean energy and is developing a new environmental agenda that will address pollution and greenhouse gas emissions. In addition to these efforts, the Canadian government, represented by Natural Resources Canada and Environment Canada, is actively involved in the International Energy Agency's new Renewable Energy Technology Deployment (RETD) Implementing Agreement. Canada has also been a member of the Renewable Energy and Energy Efficiency Partnership (REEEP) since 2005. At the sub-national level, provincial and local governments in Canada have instituted a number of legislated Renewable(s) Portfolio Standards (RPS) and RPS-like targets as well as other instruments to promote the use of renewable energy use. The NGO community in Canada continues to be active in promoting renewable energy sources. For example, the Canadian Renewable Energy Alliance (CanREA) released a *Framework for a Model National Renewable Energy Strategy for Canada* in July 2006.

In Mexico, the federal government, through the National Development Plan, the Energy Program and the Environment and Natural Resources Program 2001–2006, established a goal to install an additional 1000 MW of renewable energy. The private sector has also invested in projects for the development of renewable energy: 1200 MW from wind, 160 MW from hydro, 40 MW from biogas of landfills and 14 MW from manure biogas. Mexico is developing renewable energy by:

- establishing a Green Fund for the large-scale development of renewable energy (World Bank–GEF, US\$70M).
- undertaking an action plan to overcome barriers for wind generation projects in Mexico (GEF/UNDP/Energy Ministry and the Institute of Electric Research).
- developing a national program for rural electrification.
- supporting projects within the Clean Development Mechanism.
- enacting in 2005 the *Ley de Desarrollo Sustentable de la Caña de Azúcar*, which promotes cogeneration of electric energy and the use of ethanol as fuel and oxygenation agent for gasoline.
- developing economic instruments in the Treasury Ministry to foster renewable energy.
- initiating, through the *Fideicomiso de Riesgo Compartido* (Firco), program, the use of renewable energy technologies in agriculture.
- joining with the United States in efforts to implement a program

dedicated to apply and demonstrate the benefits of non-conventional energy.

The Mexican government is working with international organizations to foster the development of renewable energy, including signing an Agreement with the Renewable Energy and Energy Efficiency Partnership (REEEP).

Approach

The project will enhance North American trade in renewable energy as a “green product”. The CEC’s role is to improve regional and national coordination and promote policy coherence on renewable energy issues. To ensure a conducive setting for the renewable energy market to grow, the project tasks cover both policy-related as well as technical aspects. However, tasks are mutually supporting and are aimed at providing information for project developers, investors, decision makers, and others to assist with increasing the use of renewable energy.

The Renewable Energy Experts Committee will provide technical advice to Council and the Secretariat as they implement the tasks. Task 2 will enhance the capacity of Mexican officials to develop renewable energy projects. This will be done through a meeting of government officials (of all levels) interested in developing project, national regulators, and industry. The goal is to share lessons from Canada and the United States as well as create a dialogue amongst participants. Task 3 will help the Parties identify areas in which renewable energy development is possible, and will help ensure that developers, investors, decision makers, and others have easy access to reliable information regarding potential sources of renewable energy, including those in more remote areas. Task 4 will provide, for the same audience, information and case studies on best methods for developing and financing small-scale renewable energy projects. Task 5 builds previous

Communications

Effective communication is integral to the success of this project. Specifically, it will be necessary to describe in simple terms the steps envisaged to enhance the development of the North American market for renewable energy, to share best practices on developing renewables, and to take actions that foster the trade of renewable energy by promoting the

Finally, the Joint Public Advisory Committee (JPAC), in Advice to Council No. 04-05, urged the CEC Council to promote aggressively the use of renewable energy to achieve its objectives for environmental protection and improved human health and the well-being of citizens of North America. This project responds to this advice.

work undertaken by the CEC by pairing information on existing and planned renewable energy resources with the renewable energy laws and policies in the jurisdictions where those resources are located. This will help policy makers, and others, in all three countries better understand the linkages between laws and policies, and the development of renewable energy resources. Task 6 will highlight existing opportunities and obstacles associated with policies and programs that aim to foster renewable energy markets. It will assist the Parties in sharing information and building capacity on voluntary mechanisms such as renewable energy certificates programs and RPS. Task 7 will provide web-based tools to calculate the environmental benefits of renewable energy. This will help all segments of the North American society justify further development of renewable energy resources. Finally, Task 8 will examine best practices for addressing the technical issues associated with integration of renewable energy sources into the grid.

The Parties’ environmental and energy agencies, industry, the utilities, certification agencies, renewable energy associations, NGOs and others researching these issues in North America, will be consulted and/or be involved in the project. Linkages to the North American Energy Working Group (NAEWG) will also be made as opportunities arise.

transfer of renewable energy certificates and other market-based approaches across international boundaries. Information on potential renewable energy resources in North America, and a discussion paper documenting the use of RPS and voluntary programs such as Renewable Energy Certificates (REC) will increase the understanding of opportunities for green power in the North American market. This topic area also supports various cross-marketing

initiatives related to the Mapping North American Environmental Issues and Encouraging Green Purchasing projects. Given the extent of project output, additional financial support for a general brochure, web site development,

specific fact sheets and work required to *bundle* various components into a thematically coherent package of activity will be provided from the Communications budget.

Information Management

The project calls for the provision of interactive mapping services and expertise not currently supported by the Secretariat. Under the project Mapping North American Environmental Issues, increased capacity is planned to include map layers on transmission lines, renewable resources, as well as existing and planned development. However additional contracted

expertise will likely be needed. This project will also require the addition of functions of the CEC web site to manage and provide access to structured collections of reports, documents and links on particular topics.

Summary Quality Assurance Project Plans

Summary Quality Assurance Project Plan	
Project: 10-Promoting the North American Renewable Energy Market, Task 3	
Deliverable (Information product): Web site of business models, including sources of financing	
Information Product Category: Electronic information product	
Data Custodian: Chantal Line Carpentier	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	July 2007
Stakeholder/Expert review – Trade and Environment (T&E) Working Group, REEC	August 2007, July 2007
Party Review (1)	September 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	October 2007

Publication	October 2007
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Summary Quality Assurance Project Plan	
Project: 10-Promoting the North American Renewable Energy Market, Task 4	
Deliverable (Information product): Financing Gap Analysis	
Information Product Category: Background paper	
Data Custodian: Chantal Line Carpentier	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review – T&E Working Group, REEC	October 2007
Party Review (1)	November 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	December 2007
Publication	December 2007

Summary Quality Assurance Project Plan	
Project: 10-Promoting the North American Renewable Energy Market, Task 5	
Deliverable (Information product): Voluntary Mechanism Background Papers	
Information Product Category: Background papers	
Data Custodian: Chantal Line Carpentier	
Quality Management Milestone	Target Completion Date

Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review – T&E Working Group, REEC	October 2007
Party Review (1)	November 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	December 2007
Publication	December 2007

Summary Quality Assurance Project Plan	
Project: 10-Promoting the North American Renewable Energy Market, Task 6	
Deliverable (Information product): Background paper reviewing non-air environmental benefits of using renewable energy	
Information Product Category: Background paper	
Data Custodian: Chantal Line Carpentier	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review – T&E Working Group, REEC	October 2007
Party Review (1)	November 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA

Party Clearance	December 2007
Publication	December 2007

Summary Quality Assurance Project Plan	
Project: 10-Promoting the North American Renewable Energy Market, Task 6	
Deliverable (Information product): Environmental and Health Benefits Estimator	
Information Product Category: Electronic information product	
Data Custodian: Chantal Line Carpentier	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review – T&E Working Group, REEC	October 2007
Party Review (1)	November 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	December 2007
Publication	December 2007

Summary Quality Assurance Project Plan	
Project: 10-Promoting the North American Renewable Energy Market, Task 7	
Deliverable (Information product): Fostering the Biofuels Market in North America	
Information Product Category: Background paper	
Data Custodian: Chantal Line Carpentier	

Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review – T&E Working Group, REEC	October 2007
Party Review (1)	November 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	December 2007
Publication	December 2007

Summary Data and Information Quality Assurance Plans

Data and Information Quality Assurance Plan - Summary Project: 10-Promoting the North American Renewable Energy Market, Task 2
Database/Dataset/Online service description: Database of challenges in measuring RE resources
Data Custodian: Chantal Line Carpentier
Category: working
Key dates: Delivered September 2007 Secretariat review September 2007 REEC review September 2007 Party Review October 2007 Party Clearance November 2007

<p>Data and Information Quality Assurance Plan - Summary Project: 10-Promoting the North American Renewable Energy Market, Task 3</p>
<p>Database/Dataset/Online service description: Updated database of cost ranges by source</p>
<p>Data Custodian: Chantal Line Carpentier</p>
<p>Category: ongoing</p>
<p>Key dates: Delivered November 2007 Secretariat review October 2007 Party Review November 2007 Available online December 2007</p>

<p>Data and Information Quality Assurance Plan - Summary Project: 10-Promoting the North American Renewable Energy Market, Task 4</p>
<p>Database/Dataset/Online service description: Databases of existing policies and potential RE capacity</p>
<p>Data Custodian: Chantal Line Carpentier</p>
<p>Category: ongoing</p>
<p>Key dates: Delivered October 07 Secretariat review October 2007 Party Review November 2007 Available online December 2007</p>

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
1. Support the Renewable Energy Experts Committee (REEC)	Continue supporting the Experts Committee. Outputs: Experts Committee Annual Meeting and quarterly conference calls allowing the Committee to advise the CEC's work on Renewable Energy (RE). Agendas and proceedings will be translated and posted on the CEC web site.	Jan-Dec.	\$22,000	Continue supporting the Experts Committee. Outputs: Experts Committee annual meeting and quarterly conference calls allowing the Committee to advise the CEC's work on RE. Agendas and proceedings will be translated and posted on the CEC web site.	Jan.-Dec.	\$25,000	Continue supporting the Experts Committee. Outputs: Experts Committee annual meeting and quarterly conference calls allowing the Committee to advise the CEC's work on RE. Agendas and proceedings will be translated and posted on the CEC web site.	Jan.-Dec.	\$25,000	\$72,000
2. Build the capacity of Mexican officials to develop renewable energy projects	Convene a meeting of industry experts and government officials (federal, state, municipal) interested in developing renewable energy projects in their jurisdictions. (30 participants) The purpose of the meeting is to convey the lessons learned in Canada and the United States; as well as create a dialogue among industry, regulating authorities, and those interested in developing projects.	March/ April	\$50,000							\$50,000
3. Support information,	Continue supporting collaborative work among	Jan.-Oct.	\$30,000	Continue identifying capacity building and	Jan.-Dec.	\$40,000	Depending on the results of the assessment;	Jan.-Dec.	\$30,000	\$149,700

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
technology development and transfer and capacity building for estimating and measuring renewable energy resources	<p>organizations, agencies and institutions to develop and make information available on renewable energy resources, estimates and measurements for remote areas and complex terrain. Support capacity building and technology transfer to increase the capacity of agencies across North America to map RE resources.</p> <p>Continue populating the section of the CEC web site with links to national and subnational RE capacity information being collected across the three countries.</p> <p>Outputs: Capacity building in agencies and institutions, government or otherwise, to map RE resources in a compatible way across sites.</p> <p>A working database of challenges in measuring RE resources especially in remote areas and complex terrains where challenges remain.</p>		\$45,000 \$4,700	<p>technology transfer needs and find partners to leverage resources and capacities.</p> <p>Continue providing and/or organizing capacity building and exchanges of experiences among agencies and institutions, to facilitate their in-house mapping of RE resources in a compatible way across sites.</p> <p>Assess need to continue the collaborative work on complex measuring issues; continue or complete the work, as appropriate.</p> <p>Outputs: A richer database of case studies documenting successes and failures in measuring RE resources especially in remote areas and complex terrains where challenges remain.</p> <p>The CEC is increasingly recognized as the one stop shop for reliable information in renewable energy in North America.</p>			<p>continue or complete the work on complex measuring issues.</p> <p>Outputs: Depending on assessment</p>			
4. Document best practices for developing	Organize a stakeholders consultation meeting to determine how the CEC	Jan.-Dec.	\$30,500	Depending on the outcome of the 2007 meeting, continue to	Jan.-Dec.	\$60,000	Continue to update and populate databases as	Jan.-Dec.	\$60,000	\$180,500

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
small-scale and remote renewable energy projects	<p>can facilitate the development of RE projects in indigenous and remote communities. (20 participants)</p> <p>Collect, develop and post on the web model business and financial plans for all stages of renewable energy project development (prospecting, pilot, pre-commercialization, scaling up etc.), and sources of RE by application (rural electrification/off the grid, customer-owned capacity, etc.).</p> <p>Update and expand the database by cost range per KWh for each RE source.</p> <p>Begin developing web page with links to sources of financing per jurisdiction in North America. The database will include, for instance, for each program, the type of energy source, its size, and the stage of development of the project, as well as other requirements for accessing financing.</p> <p>Outputs: Web site of business</p>		<p>\$12,000</p> <p>\$10,000</p> <p>\$8,000</p>	<p>provide and/or organize capacity building and exchanges of experiences among indigenous and remote communities and supporting institutions, to facilitate their development of RE resources.</p> <p>Continue to collect, develop and post on the web model business and financial plans for all stages of renewable energy project development and sources of RE by application.</p> <p>Continue developing the database by cost range per KWh for each RE source.</p> <p>Continue populating the web site with links to sources of financing per jurisdiction in North America.</p> <p>Outputs: The CEC increasingly serves as a repository for information on developing and financing renewable energy projects in North America. A “how-to” guide to finance small-scale projects is developed and broadly distributed.</p>			<p>needed.</p> <p>Develop a lessons learned document on innovative financing of RE project in North America.</p> <p>Identify policies and practices that could help alleviate the risks associated with these small-scale projects.</p> <p>Outputs: The CEC increasingly acts as a repository for information on developing and financing renewable energy projects in North America. Lessons learned document available throughout North America.</p>			

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>models for small-scale renewable energy projects, including links to financing sources by jurisdiction.</p> <p>Updated database of cost ranges by source.</p>									
5. Supplement the informational database of “existing and planned renewable energy capacity” and “laws and policies supporting RE development”	<p>Refine the databases to include information on innovative financing mechanisms and inventories in Task 3, including, but not limited to, First Nations’ partnerships, cooperatives, innovative house mortgages, and others.</p> <p>Continue maintaining the database of laws and policies that support RE development and updating the map and links to policies across North America.</p> <p>Refine the database of existing and planned capacity to include information on grid versus non-grid potential, and on thermal renewable energy sources.</p> <p>Using information collected within this Task</p>	Jan.- Dec.	\$13,500	<p>Continue to maintain the databases and update the maps.</p> <p>Other activities as determined by the REEC.</p>	Jan.- Dec.	\$45,000	<p>Continue to maintain the databases and update the maps.</p> <p>Other activities as determined by the REEC.</p>	Jan.- Dec.	\$45,000	\$113,500

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>and in Tasks 3 and 5, develop a policy gap analysis that will inform private and public decision makers on possible ways they can facilitate the financing of small-scale projects.</p> <p>Outputs: “Laws and Policies” databases of existing policies and potential RE capacity by source, updated with First Nations initiatives and new policies. “Existing and Planned Capacity” database updated and including grid versus off-grid capacity. Financing gap analysis.</p>									
6. Document programs for fostering renewable energy markets	<p>Drawing on the <i>Fostering Renewable Electricity Markets in North America</i> document, and other information collected by the CEC, encourage the development of renewable energy markets in North America.</p> <p>Following a REEC recommendation, explore the market for biofuels, including their impacts on the environment, on</p>	Jan.- Dec.	\$41,300	<p>Continue to encourage development of voluntary programs across North America for fostering renewable energy markets, as well as other activities identified by the REEC.</p> <p>Develop paper on key market demand and supply drivers for thermal renewable energy technologies.</p> <p>Outputs:</p>	Jan.- Dec.	\$45,000	<p>Continue to encourage development of voluntary programs across North America for fostering renewable electricity markets, as well as other activities identified by the REEC.</p> <p>Develop paper on key market demand and supply drivers for renewable energy.</p> <p>Outputs: A paper on key market</p>	Jan.- Dec.	\$45,000	\$131,300

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>agriculture and on trade.</p> <p>Outputs: A background paper on the biofuels market in North America, its corresponding hurdles and what is required to overcome them.</p>			A paper on key market demand and supply drivers for thermal renewable energy technologies.			demand and supply drivers for renewable fuels.			
7. Develop capacity to calculate the environmental benefits of renewable energy	<p>Review methods to include and measure other environmental and health benefits associated with renewable energy.</p> <p>Update the web-based tool, which was developed in 2006 for assessing greenhouse gases and smog precursors stemming from the use of renewable energy compared to the provincial/US-Mexican states status quo, to incorporate new emission factors and, if possible, other environmental and health impacts of RE.</p> <p>Outputs: Background paper reviewing non-air environmental benefits of using renewable energy. Updated web-based tools to measure the environmental and health benefits of renewable</p>	Jan.- Sept.	\$14,000 \$10,000	<p>Continue development of web-based tools for assessing the air emissions and other environmental impacts of renewable energy, as well as health impacts.</p> <p>Review methods to include and measure other environmental and health benefits associated with renewable energy.</p> <p>Outputs: Tools available for measuring the environmental and health benefits of renewable energy.</p>	Jan.- Dec.	\$25,000	<p>Update and promote the tools to assess the air emissions and other environmental impacts of renewable energy, as well as health impacts.</p> <p>Outputs: Tools available for measuring the environmental and health benefits of renewable energy.</p>	Jan.- Dec.	\$25,000	\$74,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	energy for each country and type of projects.									
8. Facilitate the integration of renewable energy resources into the grid	Through the development of case studies, provide information on best practices to facilitate the integration of renewable energy resources into the grid. Generate outreach material to facilitate the adoption of best practices Outputs: Case studies and fact sheets documenting the integration of intermittent renewable energy resources into the grid.	Jan.- Dec.	\$14,000 \$10,000	Encourage adoption of the best practices that offer the greatest potential opportunities through case studies. Outputs: Case studies and fact sheets documenting innovative ways that have proven useful in improving grid access.	Jan.- Dec.	15,000	Encourage adoption of the best practices that offer the greatest potential opportunities through case studies. Outputs: Case studies and fact sheets documenting innovative ways that have proven useful in improving grid access.	Jan.- Dec.	15,000	\$54,000
9. Evaluate project results and effectiveness	Develop a process for evaluating the success of this project.	Oct.- Dec.	\$15,000	Evaluation of the project to confirm achievement of objectives and results, and to assess cost-effectiveness. Outputs: Project evaluation to inform decisions on project extension and/or refinement of the project, and/or closure.	Nov.- Dec.	\$10,000				\$25,000
			Total \$340,000			Total \$315,000			Total \$295,000	Total \$950,000

Project 11 Encouraging Green Purchasing

Start date	January 2003		
Planned Allocation	2007: C\$160,000	2008: C\$130,000	2009: C\$130,000

End Date	December 2009
Total	C\$420,000

Purpose and Background

The purpose of this project is to help increase the proportion of “green products and services” in the procurement decisions of institutions including governments at all levels, universities, hospitals, and private companies, and thus reduce their impact on the environment and human health. The project aims to promote the improvement of regional and national coordination and greater policy coherence concerning the purchase of green office supplies, energy from renewable resources, and green cleaning supplies. In practical terms, it supports the development of information, tools and practical approaches for use by institutions. The project in its entirety addresses the sustainable development and the environmental conservation and protection objectives of the NAAEC and NAFTA.

“Green products and services” are defined as those having beneficial environmental and energy attributes that are made from recycled materials, that are derived from energy-efficient production processes, or that contain little or no hazardous or toxic constituents. Applying environmental criteria to procurement decisions for even a fraction of the one trillion dollar annual North American procurement market would stimulate the demand for green products and services and produce significant environmental benefits. Governmental agencies at all levels, corporations, universities, and nonprofit organizations are buying green products in increasingly larger proportions in accordance with their mandates, corporate policies, and as a result of their awareness of the energy and environmental benefits to be gained from the use of these products in place of “non-green” alternatives.

The Parties to the NAAEC attach strong importance to the enhancement of North American markets for green products and services. They are committed to increasing their own procurement and use of such products and services, and to encouraging other government agencies and

nongovernmental entities to do the same.

Currently, Canada, Mexico, and the United States participate in the CEC’s North American Green Purchasing Initiative (NAGPI). NAGPI is composed of representatives of the three parties, state and local governments, third-party certification organizations, non-profit organizations, and academia working on green purchasing issues in North America. NAGPI’s mission is “to improve, promote, and facilitate the development of green purchasing tools and activities across North America to create markets for environmentally preferable products and services from sustainably managed companies, thereby producing tangible economic, social, and environmental benefits.”

This project builds on and supports the work of NAGPI. To date, the CEC, through NAGPI, has secured the commitment and consistent participation from the three countries, compiled a set of case studies and green purchasing policies, developed a database of supporting tools and procurement policies across North America, developed a green purchasing self-assessment tool for organizations, and received support from the environmental ministers. Three fact sheets on green cleaning products, paper product, and green electricity have also been produced. It is intended that information multipliers will disseminate these to their constituents. Additional fact sheets are currently being produced on office machines and green procurement in general.

NAGPI has a variety of governmental and nongovernmental members who have identified the three product areas targeted by this project for increased research, information sharing, and development of metrics and environmental assessment tools. In addition, NAGPI is open to all green purchasing programs across North America and has consistently integrated

new organizations as interest arises.

Beyond these CEC efforts, governments, nongovernmental organizations and other institutions across North America are themselves involved in encouraging and assisting institutions in purchasing green products and services. For example, the US Environmental Protection Agency has an Environmentally Preferable Purchasing program. The primary purpose of this program is to help Executive agencies in the United States government prevent waste and pollution by considering environmental impacts along with price and performance and other traditional factors when deciding what to buy. As part of this effort, the US EPA has created an Environmentally Preferable Purchasing Database containing environmental information on over 600 products. For its part, the Canadian federal government has implemented a Policy on Green Procurement, effective 1 April 2006. It has long supported green purchasing through its Environmental Choice program. Since 2001, Natural Resources Canada has administered the Energy Star initiative in Canada. Public Works and Government Services Canada (PWGSC), through its Office of Greening Government Operations and in

close collaboration with Environment Canada and Natural Resources Canada, has developed a number of tools to aid in the implementation of the new Policy on Green Procurement and to assist federal employees with making green purchases. Mexico's Semarnat began a project to research markets for green office supplies and equipment in Mexico toward the end of increasing purchasing of these products.

Outside of government, the Center for the New American Dream operates an Institutional Purchasing program to help institutions incorporate environmental and human health considerations into their purchasing decisions. This program has, among other things, allowed the creation of training workshops on how to prepare an environmental purchasing policy, develop useful contract language, review proposals, and use eco-labels effectively. The Center also produced a report for the CEC, titled *Environmental Purchasing Policies 101*, which summarizes common elements found in current environmental purchasing policies and provides sample policy language.

Approach

The project will be carried out with the guidance of the NAGPI Steering Committee. NAGPI is an open structure in which groups, institutions and agencies are engaged in the promotion, research or buying of green products and services in North America. The nongovernmental members of NAGPI play a key role in the design and implementation phases of the action plans and self-assessment tool. Canada, Mexico, and the United States can share information, give support to each other's projects, and regionalize their actions at the North American level in order to encourage greener trade throughout the continent. Purchasers, producers, NGOs, researchers and certification bodies can also participate and help identify capacity development needs. The Secretariat has been working with the Parties and NAGPI to develop a green purchasing strategy, consistent with the Parties' international obligations, including those under NAFTA Chapter 10.

In 2006, the project built on work by the CEC and other organizations by focusing on three specific types of products: electricity from renewable resources, green office supplies, and green cleaning supplies. Action plans for each of these products and services were developed in 2005 with the aim

of ensuring the increased institutional purchase of "green alternatives" within each of these three product categories. The three action plans were consolidated into a "master plan," for which implementation began during 2005 and will continue through 2007.

The action plans and master plan will provide a model for developing plans for work in 2006 and 2007 which will foster institutional and/or other users' purchases of other types of green products and services. Delays in project approval may require that some activities may continue into 2008. Thus far the efforts have focused on producing useful tools and materials for the NAGPI. The next step is to reach out to the other networks, to avoid duplication of effort, and ultimately to procurement agents.

Implementation includes at least one pilot project in Mexico on green cleaning products and perhaps a second one on renewable energy. The green cleaning pilot project was launched in 2006 and will continue through 2007. These pilot projects are expected to lead to the development of a model approach for the CEC to use in addressing other types of green products and services in the future.

The full web-based Eco-SAT green purchasing self-assessment tool was completed in 2006. This tool allows users to compare their green purchasing programs to best practices. Project activities in the future will center on maintaining a database of best green purchasing practices identified by practitioners and users of the tool. Future work may involve making Eco-

SAT customizable to a group, focusing only on those products or services that are of interest to the user.

The project will take advantage of market-based approaches to promote environmental protection and sustainability, as appropriate.

Communications

The project's success hinges on effective awareness-raising and information dissemination. The primary target audiences for the action plans (Task 1-2) are institutional purchasers of the three selected product areas. The target audience for the self-assessment tool (Task 3) is broader and includes large and small businesses, institutions, and individuals. Significant networks already exist promoting "green" consumption/procurement on the part of private sector and government. NAGPI's goal is to coordinate and disseminate information for all these entities so as to avoid duplication and to facilitate sharing of work. In support of this project a key task is to raise awareness of both the public and target audiences. Now that several information products have been developed, the NAGPI steering committee has decided to focus on outreach to the member network. This will involve such activities as placing articles in trade journals and hosting the NAGPI fifth anniversary conference in 2007.

Communication activity will target government audiences, procurement decision makers, and media in general. Strategies include; dissemination of project specific information, including fact sheets about specific products; information bulletins on product area strategies (trade, environment and general media), and promotion of the Eco-SAT web site and milestone news and updates as appropriate (products potential outcomes, participants).

Given the extent of potential communications outputs envisaged by the *master plan* to promote green purchasing in North American general and specific communication elements (e.g., general brochure, fact sheets, and project-specific media and information materials) will be given additional support from the CEC Communications budget.

Information Management

All green purchasing projects involve web site work to make the different reports and documents available to the public. Additionally, finalizing the self-assessment and information-sharing tools involves database management skills, as information will be updated regularly. Further expansion is planned of the current Eco-SAT tool to compare their performance against best practices. Similar capacities will also be required to develop a web-based training program.

Summary Quality Assurance Project Plans

Summary Quality Assurance Project Plan	
Project: 11–Encouraging Green Purchasing, Task 1	
Deliverable (Information product): Eco-Markets survey summary results	
Information Product Category: Background paper	
Data Custodian: Chantal Line Carpentier	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review – Trade and Environment Working Group, NAGPI	October 2007
Party Review (1)	November 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	December 2007
Publication	December 2007

Summary Quality Assurance Project Plan	
Project: 11–Encouraging Green Purchasing, Task 1	
Deliverable (Information product): Methodologies to quantify environmental and economic impacts	
Information Product Category: Background paper	
Data Custodian: Chantal Line Carpentier	

Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review – Trade and Environment Working Group, NAGPI	October 2007
Party Review (1)	November 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	December 2007
Publication	December 2007

Summary Quality Assurance Project Plan	
Project: 11–Encouraging Green Purchasing, Task 2	
Deliverable (Information product): Web-based tool to compare the certifications by product type	
Information Product Category: Electronic information product	
Data Custodian: Chantal Line Carpentier	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review – Trade and Environment Working Group, NAGPI	October 2007
Party Review (1)	November 2007
External Review	
Public review	NA
Peer review	NA

Party Review (2)	NA
Party Clearance	December 2007
Publication	December 2007

Summary Quality Assurance Project Plan	
Project: 11–Encouraging Green Purchasing, Task 3	
Deliverable (Information product): EcoSAT	
Information Product Category: Electronic information product	
Data Custodian: Chantal Line Carpentier	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	Ongoing
Stakeholder/Expert review – Trade and Environment Working Group, NAGPI	Ongoing
Party Review (1)	As substantive edits are made
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	As substantive edits are made
Publication	NA

Summary Data and Information Quality Assurance Plans

Data and Information Quality Assurance Plan - Summary
Project: 11–Encouraging Green Purchasing, Task 2
Database/Dataset/Online service description: Database of green goods and services providers
Data Custodian: Chantal Line Carpentier
Category: Ongoing
Key dates: Delivered October 2007 Secretariat review October 2007 Party Review November 2007 Party Clearance December 2007 Available online December 2007

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
1. Facilitate implementation of the master plan derived from the action plans developed in 2005	Conduct monthly NAGPI conference calls	Jan.-Dec.	\$4,000	Conduct monthly NAGPI conference calls to compile a list of additional product categories to focus on in the future.	Jan.-Dec.	\$99,000	Conduct monthly NAGPI conference calls to compile a list of additional product categories to focus on in the future.	Jan.-Dec.	\$99,000	\$317,000
	Hold the NAGPI fifth anniversary green meeting. Reach out and invite all stakeholders. Review accomplishments and define activities (event will feature a few paid speakers, 100 participants)	Fall	\$70,000	Hold the annual NAGPI meeting to review accomplishments, establish goals for upcoming years, and to develop and present to the Parties a rationale for the application of tools, methods, and lessons learned concerning the additional product categories and or targeted audience for the procurement policies.	Summer		Hold the annual NAGPI meeting to review accomplishments, establish goals for upcoming years, and to develop implementation plan for the new priorities selected.	Summer/fall		
	Initiate outreach activities listed in the action plan for the three products (i.e., green cleaning products, paper products, green electricity).	Jan.-Dec.					Start implementation of activities to increase procurement of new goods and services and/or by different actors (e.g., industry, subnational governmental, and nongovernmental level).	Fall/winter		
	Partner in EcoMarkets survey measuring green procurement activities in North America	Nov.	\$15,000	Continue implementing and/or begin new Mexican pilot project and training; conduct outreach.	Jan.-Dec.					
Continue assessing methodologies to quantify environmental and economic impacts of		May	\$20,000	Continue implementing activities listed in the implementation plan including potential pilot projects in Mexico.	Jan.-Dec.		Continue implementing and/or begin new Mexican pilot project and training; conduct outreach.			

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>(increased) green procurement in the three product areas.</p> <p>Continue implementing the Mexican pilot project and training purchase agents; conduct outreach to industry and other public agencies.</p> <p>Outputs:</p> <p>EcoMarkets survey summary results available.</p> <p>Background paper on methodologies to quantify environmental and economic impacts.</p> <p>Outreach and training materials distributed and presented to selected audiences, in partnership with key North American players.</p> <p>Training provided to purchasing agents.</p>	Jan.-Dec.	\$10,000	<p>Outputs:</p> <p>Will result in better coordination and planning.</p> <p>Outreach and training materials distributed and presented to selected audiences, in partnership with key North American players.</p> <p>Rationale for future work presented to Parties for approval.</p> <p>Selection of products and services and/or audience for future procurement work.</p> <p>Lessons learned from the three products' work so far.</p>			<p>Outputs:</p> <p>Will result in better coordination and planning.</p>			
2. Develop a central resource of green procurement information tools	Complement existing, and make available, detailed database of green goods and services across North	Spring	\$12,300	<p>Add more product types to the database of green goods and service.</p> <p>Update and expand the certification</p>	Jan.-Dec.	\$25,000	<p>Add more product types to the database of green goods and service.</p> <p>Update and expand the</p>	Jan.-Dec.	\$25,000	\$79,800

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	America. Complement existing comparisons of the various North American product certifications to allow consumers of green goods and services to make more informed purchasing decisions. Outputs: A database of green goods and services providers A study on the critical factors (for consumers and producers) in comparing green product certifications and standards.	March-Dec.	\$20,000	comparison tool Outputs: Expanded database of green good and service providers.	Summer		certification comparison tool Outputs: Expanded database of green good and service providers.			
3. Improve self-assessment and information sharing tools (Eco-SAT)	Eco-SAT updated with best practices in green procurement. Eco-SAT updated with templates of good procurement policies.		\$8,700	Maintain a database of best practices in green procurement. Provide templates of good procurement policies.		\$6,000	Maintain a database of best practices in green procurement. Provide templates of good procurement policies.		\$6,000	\$20,700
			Total 2006: \$160,000			Total 2007: \$130,000			Total 2008: \$130,000	Total \$420,000

Project 12	Harnessing Market Forces for Sustainability				
Start date	2006 (started in 1999 and was set aside in 2005)			End Date	Ongoing
Planned Allocation	2007: \$133,000	2008: \$130,000	2009: \$135,000	Total	C\$398,000

Purpose and Background

The purpose of this project is to explore and expand the potential for using market based mechanisms to promote environmental conservation and protection, while increasing sustainable trade across North America. It aims to strengthen the development of market-based mechanisms through the refinement of methodologies and approaches for their practical application. It continues to show how the combined value of stewardship mechanisms, private-public partnerships, economic incentives and financial mechanisms, can work together for a better environment. At the same time, it strives to broaden understanding of advantages and disadvantages, and to communicate lessons learned, to decision-makers so that the NAFTA partners can better benefit from the expanded use of market-based mechanisms to achieve environmental goals.

The CEC’s previous work on shade-grown coffee, eco-palm fronds, grass-fed cattle and bison, tourism, and renewable energy provide successful examples of applying market-based approaches to increase environmental protection and conservation while greening trade in North America. They show how the triple goals of sustainable land use, poverty alleviation, and economic and trade development can be mutually supportive.

This project continues to consolidate and streamline the methodologies developed from the CEC’s previous work, and applies them within related projects of the CEC work program. In 2006 the project screened various products and services that could foster markets promoting species and habitat conservation. In 2007, a more precise implementation strategy will be

developed and implementation of that plan will begin. The general framework of how such projects are developed is included in the following section.

In addition to the specific product or service promotion, the CEC is making its methodology and a guide available to stakeholders for applications more broadly in North America also continue.

Building Capacities to Conserve Critical Spaces and Species:

The (NAAEC Article) 10(6) and Biodiversity Conservation Working Groups will jointly identify areas of priority for the application of market-based mechanisms for the promotion of species and habitat conservation. The process for application in this area is described in the following section.

Other projects that might benefit are *Tracking Pollutant Releases and Transfer Registers* and *Sound Management of Chemicals*.

Approach

In brief, following on the success of the CEC's previous work, the methodology begins by reviewing the various market-based mechanisms that have been or could be used to support identified objectives, such as species protection or cleaner production processes. Then, the environmental effects of producing or collecting a good in a sustainable way are compared. Next, buyer preferences and demand are determined by estimating consumer willingness to pay a price premium or other forms of production substitution incentives. The methodology next examines, along with all stakeholders along the marketing chain, common obstacles, including information failures, higher market entry and transaction costs, and difficulties in accessing capital markets and in tracking changes in external markets. Then, it explores existing and other potential market-based and financial mechanisms that can foster production and trade in these green goods and services. Means are studied and developed to help consumers differentiate sustainable products and services in the marketplace. Work is also oriented towards the study of capacity building activities and financial mechanisms that can help producers face difficulties in accessing working capital and in shifting or expanding production operations to meet the environmental expectations of consumers. The final step involves identifying how the governments can support these mechanisms by using fiscal and other measures to correct environmental externalities and market failures.

According to the OECD, efforts can include setting differential tax rates, tax

Communication

There is significant communications potential related to the demonstration of how market mechanisms, and related private-public partnerships, incentives and financial instruments can be harnessed to promote environmental sustainability. The preliminary steps in this project require communication with producers, conservation policy communities, governments, NGOs, research, and private sector audiences. Project outputs—i.e., ranked products/services, information on best practices, and market information—must be communicated to these key audiences. At a broader level, and over a longer term, public awareness is best raised through commodity/species-focused communication and marketing activities that engage

rebates, tax exemptions or other measures to provide incentives to green markets. Procurement policies could also provide additional outlets for the products and therefore boost demand and allow producers to capture economies of scale in production and distribution. Potential synergies with the Green Procurement project shall be continuously explored.

The Secretariat will assist the 10(6) Working Group in defining how this project will support the other projects within the CEC work program, identified above. This will be accomplished through 10(6) Working Group consultations that will involve relevant experts of the Parties and advisory groups at appropriate stages in the implementation of these other projects. Opportunities for supporting additional projects in later years will also be assessed.

In addition, the methodology mentioned above is being refined and streamlined into a “how-to” guide to facilitate its adaptation to other projects in the CEC work program, as described above. The web-based “how-to” guide, if well publicized and supported, can also have a multiplier effect by facilitating the development of these projects by all stakeholders in North America

production/commercial partners and market networks. Given the number of partners and market-specific activities already engaged in this area, a primary concern for the CEC is to add value, and to make clear the CEC's specific contribution to these initiatives. A specific effort will be needed to raise the visibility of the Eco-Kit to favor its use and thus the proliferation of these projects in North America.

Information Management

Requirements to be determined.

Summary Quality Assurance Project Plans

Summary Quality Assurance Project Plan	
Project: 12–Harnessing Market Forces for Sustainability, Task 1	
Deliverable (Information product): Methodological “How-to” Guide (web-based report)	
Information Product Category: Background paper (web publication)	
Data Custodian: Chantal Line Carpentier	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review	October 2007
Party Review (1)	November 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	December 2007
Publication	December 2007

2007 PROJECT DESCRIPTION

Summary Quality Assurance Project Plan	
Project: 12–Harnessing Market Forces for Sustainability, Task 1	
Deliverable (Information product): Methodological “How-to” Guide Outreach Material (Brochure explaining the guide)	
Information Product Category: Outreach	
Data Custodian: Chantal Line Carpentier	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review	October 2007
Party Review (1)	November 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	December 2007
Publication	December 2007

Summary Quality Assurance Project Plan	
Project: 12–Harnessing Market Forces for Sustainability, Task 2	
Deliverable (Information product): Biodiversity Conservation Market Implementation Plan	
Information Product Category: Background paper	
Data Custodian: Chantal Line Carpentier	
Quality Management Milestone	Target Completion Date
Internal Review	

2007 PROJECT DESCRIPTION

Secretariat review	March 2007
Stakeholder/Expert review	March 2007
Party Review (1)	April 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	May 2007
Publication	May 2007

Summary Quality Assurance Project Plan	
Project: 12–Harnessing Market Forces for Sustainability, Task 3	
Deliverable (Information product): SMOC Scoping Study	
Information Product Category: Background paper	
Data Custodian: Chantal Line Carpentier	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	October 2007
Stakeholder/Expert review	October 2007
Party Review (1)	November 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA

2007 PROJECT DESCRIPTION

Party Clearance	December 2007
Publication	December 2007

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timin g	Cost C\$	Total 3-Year
1. Continue updating and disseminating methodology for developing sustainable markets	<p>A document produced in 2002, <i>Lessons Learned from the Work of the CEC on Environmental Goods and Services</i>, which reviewed lessons learned from previous green goods and services activities, will be expanded and redesigned as a “how-to” guide. This guide will serve those who wish to use the experience captured in the lessons learned and will contain case studies exemplifying their application. The “how-to” guide will be promoted to ensure its fullest use.</p> <p>Add small and medium-size enterprise (SME) products offering and contact information to the “how-to” guide, thus removing some information and market access constraints facing these smaller market players.</p> <p>Support workshops and</p>	Jan.-Sept.	\$25,000	<p>Continue developing a virtual market of green producers in North America. First, criteria will be developed for identifying green or environmentally preferable producers. List products and contact information for these companies such that companies, procurement agents, and individuals in North America can easily find providers of environmentally preferable goods.</p> <p>Explore how the “how-to” guide could also include consumer offers to buy specific goods such that producers can bid on the offer to purchase, leaving the final bid price open.</p>	Jan.-Dec.	\$30,000	Continue updating case studies and promotion of the “how-to” guide. Pass it on to collaborators.	Jan.-Dec.	\$10,000	\$70,000

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	<p>exchanges among experts who have developed such projects and can add to the “how-to” guide.</p> <p>Outputs: A web-based report that can serve as a “how-to” guide to replicate similar projects in North America. Brochure explaining the guide, its main functions, and the potential to post additional case studies.</p>									
2. Develop a market for the “habitat conservation” project started in 2006	<p>Conduct scoping study on potential products and services that meet the project criteria.</p> <p>Organize meeting of stakeholders (producers, intermediaries, decision-makers, etc.) for selected product or service market.</p> <p>Following recommendations from the scoping study and, with the concurrence of the Parties, implement activities to promote a sustainable market that furthers species and habitat conservation.</p> <p>Outputs: Report on potential products and services to</p>	<p>Jan.</p> <p>April</p> <p>April-Dec.</p>	<p>\$24,000</p> <p>\$26,000</p> <p>\$45,500</p>	Continue implementing activities, as approved in the implementation plan developed in 2007.	Jan.-Dec.	\$70,000	<p>Continue implementing activities, as approved in the implementation plan developed in 2006.</p> <p>Start actions and plans to move the project to our partner(s).</p>	Jan.-Dec.	\$70,000	\$235,500

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timin g	Cost C\$	Total 3-Year
	be selected for the project. Implementation plan for the product or service identified in the 2006 scoping study. TBD based on implementation plan									
3. Begin process for next market development	In collaboration with the SMOC program and in consultation with the Trade and Environment Working Group, select other area(s) of focus for 2008. Conduct a scoping study of the goods or services selected above, including actors involved in the production, certification (if any), transportation, import/export, distribution, financing, and consumption. NGOs, associations and other groups with an interest in the area(s) will also be reviewed, as well as their specific activities and goals, to identify potential synergies and areas of possible cooperation for this project. Output A paper scoping out possibilities for future	Sept.- Dec.	\$7,500	Bring a selection of stakeholders identified in the scoping paper together to explore the potential synergies identified. Choosing from among the potential synergies, develop a full proposal for 2008–2010.	Jan.- Dec.	\$30,000	Start implementing the proposal after its review by the Trade and Environment Working Group.	Jan.- Dec.	\$55,000	\$92,500

2007 PROJECT DESCRIPTION

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	projects.									
			Total 2007: \$133,000			Total 2008: 130,000			Total 2009: 135,000	Total: 398,000

Project 13	Trade and the Enforcement of Environmental Laws		
Start date	January 2006		
Planned Allocation	2007: C\$280,000	2008: TBD	2009: TBD

End Date	December 2009
Total	TBD

Purpose and Background

There are three principal objectives for this project:

- to expedite and facilitate the movement of legal materials across borders;
- to stop, in advance and at borders, illegal shipments of hazardous waste and materials, ozone-depleting substances, protected species and wildlife and other illegal materials that could threaten human health or the environment in the territories of the NAFTA parties; and
- to improve enforcement capacity to ensure that persons or entities that ship or attempt to ship such illegal materials are appropriately penalized, and expand waste recycling and minimization capacity to ensure that exports and imports contribute to recycling and minimization..

The project will help remove materials harmful to human health and the environment from commerce, and allow for their appropriate management. It will also help create a “level playing field” for business across all three countries by helping to ensure successful prosecution of violations of environmental laws. The project will also help eliminate the potential for unfair advantages from lack of effective enforcement of environmental laws. Finally, the project will make possible the electronic exchange of data on export notifications and consents to improve enforcement.

NAAEC Article 1(d) directs the Parties to support the environmental goals and objectives of NAFTA, which include creating an expanded and secure market for goods and services in a manner consistent with environmental protection and conservation, promoting sustainable development, and strengthening the development and enforcement of environmental laws and regulations. Since 1996, the CEC has identified the need for improved capacity to track and enforce laws regulating the transborder movement of hazardous wastes and ozone-depleting substances (ODS), and for cooperative

approaches concerning the enforcement of domestic laws that implement the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES). In this vein, the CEC has supported a number of capacity building and information exchange programs for environment and customs officials in the areas of: ODS smuggling, wildlife protection and improving cooperation on the tracking and management of transboundary hazardous waste shipments. The CEC has also assisted the Universidad Panamericana, the World Conservation Union, Pace University, judicial institutes and other sponsors in hosting international symposiums comparing judicial practices across North America and in selected nations abroad. This project is designed to continue that work in a more concerted way.

The project overall responds to a variety of stakeholders: government agencies, trade associations, transporters and nongovernmental organizations who are interested in strengthening cooperation on the development and improvement of environmental laws, regulations, procedures, policies and practices and who are working to enhance compliance with, and enforcement of, environmental laws and regulations.

Approach

The objectives of the project will be accomplished largely by ensuring that customs, environmental, and law enforcement officials are informed of environmental laws affecting trade, that exporters and others have easy access to export requirements for environmentally sensitive materials, and that customs and other law enforcement officials are better able to expedite legal shipments across borders.

The project facilitates the sharing of existing laws and policies related to trade in environmentally sensitive materials. It will expand the existing hazardous-waste-focused US-Mexico Border Compliance Assistance Center to a North American Center that provides import/export information to importers and exporters on the range of environmentally regulated goods and materials. Providing the regulated community with the information, resources and services it needs can help it meet and exceed environmental compliance. In developing the training material and modules, the CEC will leverage work done by, among others, the United Nations Environment Program under its Green Customs Initiative, Universidad Panamericana, the World Conservation Union, Pace University, and judicial institutes in the three countries. When completed, the training materials will be transportable; officials from each of the three Parties, the CEC Secretariat, academia, industry, NGOs, and others will be able to use them to provide the training. The Parties envision handing off the project to others by 2007.

The project has three principal components:

Component A: Improve the exchange of electronic and other information on North American environmentally related trade data, laws, and policies

This component helps to improve information exchange opportunities between government agencies, and helps ensure that exporters, importers and other members of the regulated community are educated and informed of customs requirements for these types of materials, so as to expedite their transborder movement. It will also help ensure that each Party's customs (including port and border inspectors), environmental, and law enforcement officials are informed of the other countries' laws and policies that relate to

trade in materials potentially harmful to human health and the environment. Finally, this component will lay the policy and IT foundation that will make possible the electronic exchange of data on export notification and consent.

Component B: Provide training to customs and other law enforcement officials (including border and port inspectors)

This component helps ensure safe, expeditious, and compliant trade in environmentally regulated materials that can legally cross borders. It will also help prevent illegal trade in environmentally regulated materials that cannot legally cross borders. This will be accomplished by training each party's customs and other law enforcement officials to detect, identify, analyze, and enforce against illegal shipments of hazardous waste and materials, ozone-depleting substances, protected species and wildlife and other illegal substances that could threaten human health or the environment.

Component C: Build capacity in legal and judicial systems to support effective enforcement of environmental laws

This component supports the domestic implementation of law enforcement activities beyond the actual point of entry of illegal substances. It aims to inform judges and prosecutors generally of environmental laws, and specifically of laws related to trade in materials that could harm human health or the environment. It will also provide prosecutors with the skills needed for apprehending persons who attempt to trade illegally in such materials.

Component A benefits environmental, trade, and the economic objectives by improving regional coordination of import/export policies and by providing border inspectors with better access to information. Component B promotes both trade and environmental goals by providing the CEC Parties and others with tools to expedite trade in legal goods and to stop trade in illegal goods. Component C provides support for the domestic implementation of law enforcement activities beyond the actual point of entry of illegal substances.

Communications

The project has extensive communications elements embodied throughout, including providing a better understanding of the issues inherent in the safe and efficient movement of goods and materials across our borders, and the importance to our economic, health and environmental well-being. Providing information to trade and border officials, partners and the private sector in a credible and transparent manner is expected to lead to improved compliance with relevant environmental laws. Three distinct audiences are envisaged in relation to this project: participants/government agencies; private sector (commercial trading community); and the public. Each has specific communications needs requiring distinct materials. At the implementation stage, training materials and models are the key elements required for

participants and government agencies; to the extent appropriate, project-specific CEC materials may complement various agency communications with private sector audiences; and finally, more general public education on the part of the CEC can complement—from an international perspective—other national initiatives. Note there is high and established interest on part of public and commercial/private sector audiences to the extent these issues entail security, conservation, and or cost issues. General communication materials (including project fact sheets and public outreach products) will serve to describe the project's integrity and to make clear the CEC's contribution to this trilateral effort. Component and training materials require a common project overview and common CEC identification.

Information Management

Component A: The CEC have undertaken a project to develop a suite of messages that once developed would support a completely electronic process of notification and tracking associated with the import and export of hazardous wastes and hazardous recyclable materials. To minimize the effort associated with the development of the said data standards, and to ensure that the developed data standards are harmonized with universal data standards, this project is being developed in coordination with a UN/CEFACT (United Nations Center for Trade Facilitation and Electronic Business) project that is developing a similar suite of messages. Technical advice will be required in

describing, modeling and possibly re-engineering the business process in which the data exchange currently occurs for the transboundary shipments of hazardous waste in North America.

Component B: Technical advice will be needed in the development of an e-learning tool that can be adapted and used by the North American governments in the training of their environmental enforcement officials and customs inspectors on environmentally controlled substances.

Summary Quality Assurance Project Plans

Summary Quality Assurance Project Plan	
Project 13–Trade and Enforcement of Environmental Laws, Task A-1	
Deliverable (Information product): Background paper on the benefits for common data standards for managing transboundary hazardous waste shipments	
Information Product Category: Background paper (legal information)	
Data Custodian: NA	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	January 2007
Stakeholder/Expert review	
Party Review (1)	February 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	March 2007
Party Clearance	March 2007
Publication	May 2007

Summary Quality Assurance Project Plan Project:
Project: 13-Trade and-Enforcement of Environmental Laws, Task A-2
Deliverable: Prototype of a compliance assistance center for the import/export of Ozone-depleting Substances (ODS)
Information Product Category: Background paper
Data Custodian: Ignacio Gonzalez

Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	April 2007 – gather information May 2007 – outline of web design August 2007 – draft prototype Nov 2007 – final prototype
Stakeholder/Expert review	August 2007 – draft prototype November 2007 – final prototype
Party Review (1)	September 2007 – draft prototype
External Review	
Public review	NA
Peer review	NA
Party Review (2)	December 2007 – final prototype
Party Clearance	Final version of the compliance center to be completed in 2008
Publication	Final version of the compliance center to be completed in 2008

Summary Quality Assurance Project Plan	
Project 13–Trade and Enforcement of Environmental Laws, Task B-1	
Deliverable (Information product): Online Ozone-depleting Substances and Hazardous Waste Training Materials	
Information Product Category: Background paper	
Data Custodian: NA	
Quality Management Milestone	Target Completion Date
Internal Review	

Secretariat review	September 2007
Stakeholder/Expert review (Focus group review by Experts from environmental and customs agencies in the three countries)	September 2007
Party Review (1)	January 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	September 2007
Party Clearance	December 2007
Publication	December 2007

Summary Quality Assurance Project Plan	
Project 13–Trade and Enforcement of Environmental Laws, Task C-1	
Deliverable (Information product): Innovative methods for securing compliance with environmental laws	
Information Product Category: Report	
Data Custodian: Tim Whitehouse	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	February 2007
Stakeholder/Expert review	March 2007 (Enforcement Working Group)
Party Review (1)	May 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	June 2007

Party Clearance	September 2007
Publication	September 2007

Summary Quality Assurance Project Plan	
Project: 13-Trade and-Enforcement of Environmental Laws, Task C-1	
Deliverable: Finalize web-based portal on legal mechanisms for exchanging information between countries.	
Information Product Category: Background paper	
Data Custodian: Tim Whitehouse	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	July 2007
Stakeholder/Expert review	July 2007 (EWG review)
Party Review (1)	September 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	September 2007
Party Clearance	October 2007
Publication	October 2007

Summary Quality Assurance Project Plan	
Project: 13-Trade and-Enforcement of Environmental Laws, Task C-2	
Deliverable: Background paper on the judiciary and environmental law	
Information Product Category: Background paper	
Data Custodian: Ignacio Gonzalez	

Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	February 2007 – Outline April 2007 – First Draft June 2007 – Final Draft
Stakeholder/Expert review	February 2007 – Outline April 2007 – First Draft June 2007 – Final Draft
Party Review (1)	May 2007 – First Draft
External Review	
Public review	NA
Peer review	NA
Party Review (2)	July 2007 – Final Draft
Party Clearance	July 2007
Publication	August 2007

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
Component A: Improve electronic and other information exchange on North American environmentally related trade data, laws, and policies										
1. Assess current information tracking methods and practices	Continue implementing activities related to improving electronic and other information exchange on environmentally related trade data, laws, and policies by developing the elements necessary to conduct a pilot project on the exchange of notice and consent information as outlined in the CEC publication, <i>Crossing the Border: Opportunities to Improve the Tracking of Transboundary Hazardous Waste Shipments in North.</i>	Jan.-Dec.	\$55,000	Implement pilot project on the electronic sharing of notice and consent data and develop recommendations for next steps. Outputs/Outcomes: A pilot project with an assessment of the accomplishments and results of the project, and needs for follow up and for continuation.	Jan.-Dec.	TBD	TBD	TBD	TBD	TBD
	Outputs/Outcomes: Develop file schemes for hazardous waste notices and									

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	consents and finalize background paper on the benefits of common data standards for managing transboundary hazardous waste shipments.									
2. Educate and inform industry about North American import and export laws to expedite legal transborder movement of goods and materials	Expand existing compliance assistance centers to include import/export of ozone-depleting substances (ODS) and, if resources allow, for protected wildlife; and identify opportunities to expand the center to other environmentally regulated goods. Implement recommendations from the 2006–2007 survey study on options for improving the border compliance assistance center (www.bordercenter.org). Outputs/Outcomes: An improved	Jan.- Dec.	\$40,000	Conduct outreach activities with industry and other potential users to promote and get feedback on ways to improve the North American compliance assistance center. Implement options to expand the center to other environmentally regulated goods. Outputs/Outcomes: An integrated North American compliance assistance centre for transboundary shipments in identified priority areas.	Jan.- Dec.	\$35,000	TBD	Jan.- Dec.	TBD	TBD

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	border compliance assistance center; and expansion of the border center for the import/export of ODS and, if resources allow, for protected wildlife.									
			Total Component A: \$95,000			Total Component A TBD			Total Component A TBD	Total Component A TBD
Component B: Provide training to customs and other law enforcement officials										
1. Develop new training materials	Finalize Spanish and French versions of online training regarding the import and export of ozone-depleting substances (ODS) Finalize development in draft of a prototype training course for hazardous waste. Conduct focus group meeting and input on the final development of the ODS and hazardous waste online training.	March-Dec.	\$80,000	Implement recommendations from 2007.	Jan.-Dec.	TBD	TBD	Jan.-Dec.	TBD	TBD

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
<p>Develop a permanent implementation, evaluation and feedback mechanism for hazardous waste and ODS online training.</p> <p>Outputs/Outcomes:</p> <p>A complete set of training materials and delivery mechanism for both ozone-depleting substances and hazardous waste.</p> <p>A feedback mechanism to guide refinement of approaches and materials.</p> <p>Recommendations on whether to continue to develop this project to include other materials and substances.</p>										
			<p>Total Component B:</p> <p>\$80,000</p>			<p>Total Component B:</p> <p>TBD</p>			<p>Total Component B:</p> <p>TBD</p>	<p>Total Component B:</p> <p>TBD</p>
<p>Component C: Build capacity in legal and judicial systems to support effective enforcement of environmental laws.</p>										

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
1. Develop training plan to support effective enforcement of environmental laws	Continue to support efforts to promote collaboration between environmental enforcement agencies in the three Countries in order to identify and apprehend those persons who attempt to trade illegally in environmentally regulated materials. Outputs/Outcomes: Finalize publication on innovative materials for securing compliance with environmental laws. Finalize web-based information portal on legal mechanisms for exchanging information between countries.	Jan.- Dec.	\$65,000	Implement next steps based on 2007 program work.		TBD	-	-	-	TBD
2. Support seminar on environmental law and the judiciary	Prepare a background paper and support the seminar for Mexican judges on	Jan.- Dec.	\$40,000	Assist the Mexican Judicial Institute to identify partners and opportunities for the delivery of a seminar	Jan.- Dec.	\$40,000				\$80,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	environmental law. Outputs/Outcomes: Seminar conducted for Mexican judges on environmental law. Background paper prepared on the judiciary and environmental law.			for Mexican judges on environmental law. Outputs/Outcomes: Seminar for Mexican judges on environmental law. Seminar proceedings.						
			Total Component C: \$105,000			Total Component C: TBD			Total Component C:	Total Component C: TBD
			Total 2005: \$280,000			Total 2006: TBD			Total 2007: TBD	Total TBD

Project 14	Guidelines for Risk Assessment of Invasive Alien Species and Their Pathways		
Start date	May 2005		
Planned Allocation	2007: C\$250,000	2008: C\$290,000	2009: TBD

End Date	December 2008
Total	TBD

Purpose and Background

This project seeks to protect North America's marine, freshwater and terrestrial ecosystems from the harmful effects of invasive alien species (IAS) by developing a common, science-based approach to prevention through the development of risk assessment guidelines applicable to aquatic and terrestrial pathways of introduction and high-risk species. The goal is to develop a trinational approach for selected invasive alien species and related trade pathways that satisfies the North American Free Trade Agreement (NAFTA) requirements for risk assessment, as outlined in Chapter 7, Section B: Sanitary and Phytosanitary Measures. The project will also enable all three countries to develop mutually supportive legal and policy frameworks.

During implementation, the CEC will consult with the NAFTA Sanitary and Phytosanitary Committee to ensure that the approach satisfies these requirements. The CEC also will consult with the North American Plant Protection Organization (NAPPO), as appropriate, to help avoid overlap and ensure consistency in trilateral invasive alien species work.

This project will be accomplished by:

- Sharing existing information and information management systems related to risk assessment and strategies for managing risks from IAS;
- Consolidating common risk assessment guidelines to be tested using one common pathway and species; and
- Building capacity through the mutual exchange of scientific and technical expertise and knowledge.

The issue of IAS is both terrestrial and aquatic. The first year of this project focuses on aquatic IAS as the immediate priority. Terrestrial species will be addressed in the second and third year.

The impacts of invasive alien species can be severe, devastating healthy ecosystems and undermining the local economies they support. Once established, aquatic invasive species can displace important native ones, drive rare species to extinction, decimate biodiversity and trophic structure of coastal ecosystems, compromise the ecological integrity of marine protected areas, destroy commercial and recreational fisheries, impede traditional cultural uses of coastal resources, and damage infrastructure (e.g., Zebra mussels clogging pipes). The societal costs of biological invasions can be staggering. Similar concerns exist for terrestrial invasive alien species.

Increasing trade within North America raises the risk of expanded transboundary introductions of alien species among the neighbouring NAFTA countries of Canada, Mexico and the United States. Consequently, this project is specifically designed to focus on trade-related pathways of introduction in North America. A single localized invasion in one country can represent a significant international threat across North America, as can pathways that routinely move alien species from one country to another. The prevention and management of IAS thus requires comprehensive, integrated and sustained international collaboration.

The CEC has undertaken or planned a significant amount of work on IAS issues. For example, the CEC partnered with the *Comisión Nacional para el Conocimiento y Uso de la Biodiversidad* (National Commission for Biodiversity Awareness and Use—Conabio) to develop the Mexican Information System on Aquatic Invasive Species. This database includes taxonomic information, geographic distributions, and other scientific information. The CEC has developed a directory of projects, institutions and experts working on aquatic IAS in Canada, Mexico and the United States. Also, the CEC developed a resource guide aimed at providing participants in

CEC's activities and member countries with background information to: 1) understand the cause and consequences, as well as status and trends, of biological invasion in North America's aquatic and marine systems; 2) understand the need for bi- and trilateral cooperation to prevent and manage introductions of IAS; 3) identify opportunities for such cooperation; and 4) contribute to and support well-informed policy decisions that will help minimize the spread of IAS into and within North America, which received the highest ranking value of the 29 Priority Areas for Action set forth in the CEC's Biodiversity Strategic Plan.

As part of the work funded in 2004, the CEC identified capacity building needs related to specific pathways and destinations that are of common North American concern. Some of the resulting recommendations from this work will serve to guide future cooperative actions. The CEC will continue its work to raise the capacity of its country members to gather, systematize, and analyze information on aquatic IAS, by addressing two key priorities, information exchange and increased capability to prevent and control aquatic IAS.

The Parties have long regulatory and nonregulatory histories related to protecting against IAS. Recent experience, however, has shown that many

Approach

The project is designed to provide basic information for decision makers in North America to help them face one of the major causes of biodiversity loss worldwide. The issue of IAS is given priority in the CEC Strategic Plan and in the CEC's Biodiversity Strategic Plan. It is also an issue that cuts across all three CEC priorities: information for decision making, capacity building and trade and environment.

The CEC is well positioned to foster a trilateral, risk-based approach—one that considers the likelihood of new IAS becoming established, their potential spread, and the degree of harm they may cause. Diverse tools, methods, and cooperative bi- and trilateral arrangements are needed to prevent IAS from becoming established in North America. The CEC's work on IAS will complement, and build upon, work underway in all three countries, as well as through other international organizations.

The CEC will continue its work to raise the capacity of its member countries to gather, systematize and analyze information on aquatic and terrestrial IAS,

IAS affect multiple sectors of the economy and environment. Often different sectors and/or pathways are regulated by different federal and state/provincial entities across the three governments. Given the cooperative nature of its work, the CEC will help identify gaps in the overall IAS coverage and ensure more effective communication and information sharing related to technologies and methodologies against IAS. This project promotes such information sharing and it builds upon the United States' Aquatic Nuisance Species Task Force Generic Non-indigenous Aquatic Organisms Risk Analysis Review Process, which has been in place for 10 years, and applies it trinationally.

Lastly, the project responds to stakeholder concerns. In 2006, the Joint Public Advisory Committee (JPAC) expressly advised the Council to focus cooperative work on IAS issues, including "directing the Secretariat to focus trilateral efforts on developing the appropriate tools to determine acceptable levels of risk and scientific uncertainty...."

by addressing two key priorities: 1) information exchange and 2) increased capability to prevent and manage aquatic IAS.

The ad hoc task group met in January 2006, in Merida, Yucatan, to develop the outline of the trinational Risk Assessment Guidelines and to select two pilot species. With regard to increased capability to prevent aquatic IAS introductions, the CEC developed a common set of guidelines for North American risk assessment for both, pathways of introduction and aquatic IAS. Fish aquarium trade was chosen as the pathway of common concern, and the suckermouth catfish (*Plecostomus*) and the snakehead were selected as the two pilot species.

The Secretariat is supporting the development of a Mexican information system on alien invasive species, as well as the collection, integration, compatibility and analysis of the environmental, economic and social information required by the ad hoc task group during the evaluation phase of this field test.

The “single species” and “single pathway” approach makes best use of CEC’s limited resources and will also provide an opportunity to field test at a North American scale a risk assessment process for alien species previously tested at a national scale (e.g., the US Aquatic Nuisance Species Task Force’s risk analysis process).

The aquatic IAS test case will:

- highlight the importance of the regional approach to aquatic IAS management;
- share and utilize existing databases of aquatic IAS of major concern in North America, documenting causes of introduction, spread, movements, invasiveness indices, etc;
- assess tools used in risk assessment to measure the social, economic and environmental impacts of one pathway and one IAS;

- identify biodiversity components at risk due to aquatic IAS of common concern; and
- share the lessons learned to best deal with aquatic IAS.

The overall results of this approach shall provide CEC’s member countries with the required information to develop better collaborative action plans to prevent and manage aquatic IAS. The final product of this effort will be a risk assessment process for aquatic alien species that has been field tested, on one species and one pathway, on a North American scale.

In 2007, the project will begin to scope potential projects, for consideration by Council, related to terrestrial invasive alien animals and/or wildlife disease and trade-related pathways for their introduction.

Communications

Project objectives include dissemination of the information gathered in the test cases and assembled in the *clearinghouse* for invasive species. There is an obligation to communicate these and other results, together with project

milestones to partners and relevant audiences. To the extent public, educational objectives are identified, a broader reach and strategy will disseminate results and information.

Information Management

The project particularly seeks to strengthen the capacity of countries to share information regarding invasive species. There are minimal implications for information management for the Secretariat.

Summary Quality Assurance Project Plan

Summary Quality Assurance Project Plan	
Project: 14-Guidelines for Risk Assessment of Invasive Alien Species and Their Pathways, Task 1	
Deliverable (Information product): Report on the test case of the two selected species (<i>Plecostomus</i> and snakehead), and a screening process for the aquarium trade pathway	
Information Product Category: Report	
Data Custodian: Hans Herrmann	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review	March–May 2007
Stakeholder/Expert review	NA
Party Review (1)	April 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	June 2007
Party Clearance	June 2007
Publication	July 2007

Summary Quality Assurance Project Plan	
Project: 14-Guidelines for Risk Assessment of Invasive Alien Species and Their Pathways, Task 4	
Deliverable (Information product): List of Terrestrial Invasive Species of Common Concern	
Information Product Category: Background paper	
Data Custodian: Hans Herrmann	
Quality Management Milestone	Target Completion Date

Internal Review	
Secretariat review	September 2007
Stakeholder/Expert review	NA
Party Review (1)	October 2007
External Review	
Public review	NA
Peer review	NA
Party Review (2)	November 2007
Party Clearance	November 2007
Publication	December 2007

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
1. Test and evaluate the CEC risk analysis guidelines at both the pathway and species level	Translate and distribute the North American risk analysis guidelines for and the results of the test case into French and Spanish. Continue supporting the collection, integration, compatibility and analysis of the environmental, economic and social information required by the <i>ad hoc</i> task group during the evaluation phase of this field test. Outputs: Report on the test case of the two selected species, a screening process for the aquarium trade pathway.		\$75,000	-	-	-	-	-	-	\$75,000
2. Develop a Distributed Information System	Identify and provide access to existing distributed information systems in North America to share information related to this aquatic test case. Continue support to the Mexican Information System for Invasive Species, and work towards a North American clearinghouse Outputs: Strengthened Clearinghouse for Invasive Species in Mexico and greater accessibility to information.	Jan.- Dec.	\$80,000	Identify and provide access to existing distributed information systems to share information related to terrestrial test case. Outputs/Outcomes: A North American distributed information system on terrestrial invasive species of common interest		\$50,000				\$130,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
3. Establish a trinational <i>ad hoc</i> task group on terrestrial invasive alien animals, wildlife disease and trade-related pathways of introduction	Establish an <i>ad hoc</i> task group on terrestrial IAS. Provide recommendations for initial revision of the North American guidelines for Aquatic IAS and applicability for this test case. Outputs/Outcomes: Ad hoc group established Criteria developed for selecting a trade-related pathway of introduction and an IAS or wildlife disease of concern to two or more countries. Agreement on the nominated test species and pathway. Document to be used in conducting the test risk assessments of one pathway and one species.	Jan.-June	\$25,000				-	-	-	\$25,000
4. Conduct risk assessment on one terrestrial invasive alien animals and/or wildlife disease and one pathway of introduction	Identify a list of terrestrial invasive alien animals and/or wildlife diseases—primarily focused on pathways of introduction. Select a terrestrial invasive alien animal or wildlife disease and a trade-related pathway of introduction. Conduct test risk assessments on one pathway and one species using the revised guidelines document. Outputs/Outcomes: List of invasive alien	Jan.-Dec.	\$70,000	Continue to conduct test risk assessments on one pathway and one species.	Jan.-Dec.	\$100,000	-	-	-	\$170,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	terrestrial animal species, wildlife diseases and trade-related pathways of concern to two or more countries. A chosen wildlife disease or invasive alien animal species. A chosen trade-related pathway of introduction.									
5. Finalize the North American risk assessment (voluntary) guidelines for trade-related pathways terrestrial invasive alien animals and/or wildlife disease (based on test case work)	-	-	-	Translate and distribute the North American risk analysis guidelines and the results of the test case into French and Spanish. Outputs: Results of test risk assessment Finalized North American risk assessment guidelines.	Dec.	\$40,000	-			\$40,000
6. Develop a management plan focused on a specific organism within a trade-related pathway	-	-	-	Facilitate the development of a cooperative management plan to prevent/control the impact of an IAS of common concern on a trade-related pathway. Outputs: Establish <i>ad hoc</i> task group to develop a joint management plan. Develop the first collaborative plan, based on the identified species and pathway of common	Jan.- Dec.	\$100,000	-	-	-	\$100,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
				concern. Identify priorities for capacity building and information sharing.						
			Total 2007: \$250,000			Total 2008: \$290,000			Total 2009: TBD	Total TBD

Project 15 Ongoing Environmental Assessment of NAFTA

Start date	1994		
Planned Allocation	2007: C\$140,000	2008: C\$200,000	2009: C\$135,000

End Date	Ongoing
Total	C\$475,000

Purpose and Background

The purpose of this project is expressed in NAAEC Article 10(6)d, which commits the Parties to consider the environmental effects of NAFTA on an ongoing basis, and in the CEC Strategic Plan on Trade and Environment, which calls for broadening the understanding of trade and environment linkages to promote policy coherence, both at the domestic and regional levels in North America. The project also supports the Strategic Plan objectives of increasing the capacity of the three countries to identify and address trade-related environmental concerns, and to improve regional and national coordination, including coordination between the CEC and the NAFTA Free Trade Commission.

The CEC’s efforts to document the environmental effects of trade liberalization in North America have resulted in reviews and assessments that are utilized by trade and environment officials, nongovernmental organizations and the public to inform both trade and environmental policies in the three countries. A decade of experience shows that the environmental effects of NAFTA are difficult to isolate from those stemming from global trends toward trade liberalization and economic growth. Thus the focus of the CEC’s ongoing work is on trade liberalization in North America instead of on NAFTA effects alone.

Understanding is broadened through informal exchanges among the NAAEC Parties on the environmental assessment of trade. Pursuant to Article 10(6)d, the Parties share information, methodologies, and experiences in conducting environmental reviews of trade and investment agreements, with a view to assessing the environmental effects of NAFTA and other agreements more effectively. This sharing of methodologies and practices among the Parties enables them to build upon each other’s work.

The CEC’s work thus far has contributed to better understanding of trade and environment linkages; improved and informed environmental reviews of future trade and investment agreements by the Parties; and improved environmental assessments of NAFTA by the CEC and the Parties. These benefits are expected to continue to accrue and to lead to greater policy coherence both at the domestic and regional levels in North America by helping the Parties make better policy choices concerning trade and environment issues. They will also help the CEC direct future work toward the concerns that most require attention. The project will further provide the CEC and the Parties with improved tools to conduct assessments on the environmental impacts of NAFTA in North America.

Approach

The project has two components: *Component A: Environmental Assessment of NAFTA*; and *Component B: Support Information Sharing between Canada and the United States and with Mexico*. Component A is described below; the Article 10(6) Working Group [now called the Trade and Environment Working Group (TEWG)] will develop a methodology to carry out the activities for component B.

The Parties and the Secretariat will bring a sharper focus to the CEC’s environmental assessment work by monitoring emerging trends in the state of the environment in North America, sharing methodologies and best practices, developing partnerships with other organizations, and promoting transparency and stakeholder involvement.

As in past, sectoral thematic analyses will be the subjects of biennial North American symposia on “Assessing the Environment Effects of Trade.” Each symposium involves selecting one or more themes for the event, creating an advisory group to guide the Secretariat in developing terms of reference for a call for papers, inviting researchers and members of civil society to submit proposals, and having the advisory group select the best of those received for presentation at the symposium. The last symposium, which took place in fall 2005, focused on the impact of investment and economic growth on the environment (see <http://www.cec.org/symposium/>). For the fourth symposium, to be held in conjunction with the 2008 Regular Session of Council, the Parties have decided to focus on the environmental impacts of liberalization in the services sector.

The symposia and work on assessment data will build on previous three symposia and the CEC environmental assessment framework developed by the CEC over the 1994–1999 period and updated as needed. The experience and work of outside experts will be accessed through their participation in the symposia and by engaging them as authors research papers.

Based on the results of the symposia, and according to the environmental priorities set by the Council, future work will be oriented toward analyzing the commercial flows of goods and services having the most significant impacts on the environment and on biodiversity. Research will be directed toward projects promoting information exchange, creating evaluation methodologies and identifying better environmental practices in selected sectors, in order to contribute to sustainable development in North America. The project will also explore how work undertaken in other CEC programs

Communications

Communications on this project in 2007 will focus on continuing to disseminate the 2005 symposium results, encouraging awareness and follow-up with key audiences, and launching the call for papers for the fourth North American Symposium on Assessing the Environmental Effects of Trade. The

Information Management

For Component A, the information concerning the symposia is distributed in CD format, published on the CEC web site, as well as in printed copies. For

can inform work on environmental assessment of NAFTA.

The CEC has always conducted its work in this area in an inclusive and transparent manner by engaging a broad and balanced spectrum of civil society stakeholders, mainly through the symposia. Stakeholder groups have continually called for improved communication between trade and environment officials in the context of the CEC’s work. Greater involvement by the Parties (particularly the Trade and Environment Working Group) in shaping the symposia, responds to stakeholders’ calls for collaborative work that addresses current trade and environment issues. In addition, the symposia seek to involve stakeholders directly in the work of the CEC; they are attended by stakeholders from all three countries and the authors of the papers often represent a number of stakeholder groups from the three countries.

The CEC will carry out this work in collaboration with the Parties, OECD, UNEP, UNCTAD, WTO/CTE, North American universities, and various NGOs. The work will draw upon lessons learned from both *ex post* and *ex ante* environmental assessments of trade liberalization and changes in trade flows associated with NAFTA.

The output of this project will be examined, in conjunction with the Information for Decision-making pillar, to determine if the assessment work could help guide the *Reporting on the State of the North American Environment* project.

promotion of this 2008 symposium will be done throughout 2007 and the symposium hosted at the beginning of 2008. Materials promoting the symposium will go primarily to policy makers, academics and NGOs.

Component B, information exchange on environmental reviews of NAFTA will occur between the Parties.

Summary Quality Assurance Project Plans

Summary Quality Assurance Project Plan	
Project: 15–Ongoing Environmental Assessment of NAFTA, Task 1	
Deliverable (Information product): 4th Symposium Proceedings	
Information Product Category: Report	
Data Custodian: Chantal Line Carpentier	
Quality Management Milestone	Target Completion Date
Internal Review	
Secretariat review – proposals	February 2007
Secretariat review – final papers	November 2007
Secretariat review – proceedings	May 2008
Stakeholder/Expert review – Advisory Group (proposals)	February 2007
Stakeholder/Expert review – Advisory Group (papers)	November 2007
Party Review (1)	May 2008
External Review	
Public review	NA
Peer review	NA
Party Review (2)	NA
Party Clearance	June 2008
Publication	June 2008

Summary Data and Information Quality Assurance Plans

Data and Information Quality Assurance Plan - Summary Project: 15–Ongoing Environmental Assessment of NAFTA, Task 3
Database/Dataset/Online service description: Database of sectoral pollution intensities and trade flows
Data Custodian: Chantal Line Carpentier
Category: ongoing
Key dates: Delivered, October 07 Secretariat review, October 2007 Party Review, November 2007 Party Clearance, December 2007 Available online, December 2007

Implementation Plan

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
Component A: Environmental Assessment of NAFTA										
1. Organize and host the fourth North American Symposium on Assessing the Environmental Effects of Trade: Services and the Environment	Promote the call for papers.	Winter		Host the fourth symposium in conjunction with the 2008 Regular Session of Council.	Jan.-Feb.	\$130,000	Organize the review and selection of proposals by the advisory group.	Spring	\$115,00	\$372,500
	Organize the review and selection of proposals by the Advisory Group.	Spring								
	Contract authors selected to prepare and present papers at the 2008 symposium.	Spring	\$100,000	Compile symposium proceedings and distribute them.		\$20,000	Issue and promote the call for papers.			
	Review draft papers.	Fall		Outputs Involvement of a broad array of stakeholders in the symposium.			Contract authors selected to prepare and present papers at the 2010 symposium.			
	Publicize the symposium and develop partnerships.	Fall/ Winter	\$7,500	A new proceedings with 10 new papers documenting the environmental impacts of NAFTA. New research findings disseminated to all stakeholders. Themes and sectors selected for the fifth symposium.			Review draft papers. Publicize the symposium and develop partnerships.			
	Outputs: A call for papers.					Outputs A large number of high quality proposals are submitted for support by the CEC. Involvement of a broad array of stakeholders in the symposium. Effective promotion of the symposium				
2. Examine emerging environmental	NA	-	-	Conduct background review of analytical studies and data for	Jan.-Dec.	\$20,000	NA	-	-	\$20,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
trends and conduct monitoring and sectoral analyses [Note: activity occurs every two years.]				the selected sectors to facilitate writing the terms of reference. Output Background information available to citizens of North America who wish to make a contribution to the fifth symposium.						
3. Explore mechanisms to assess the environmental impacts of NAFTA	Following recommendations received at the CEC third symposium, the CEC will begin building a database structured to assess data and information for monitoring the effects of NAFTA and for conducting environmental assessments generally. The CEC assessment framework will be reviewed and improved to integrate better information and approaches into sectoral analysis, including methods used by the United States and Canada. Begin utilizing data and developing	On-going	\$20,000	Promote the use of data and develop strategies and partnerships to fill any information gaps identified in 2006–2007. Outputs: Improved CEC assessment framework.	Ongoing	\$10,000	Continue to ensure the best methodology is being used to conduct environmental assessment. Outputs: Improved CEC assessment framework.	Ongoing	\$5,000	\$35,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	strategies to fill any information gaps identified in 2006. Outputs: Database of sectoral pollution intensities and trade flows.									
4. Build partnerships with other organizations	Continue to build synergies and share information. Explore means by which the CEC could improve access to information necessary for conducting environmental assessments of trade agreements in North America.	Jan.- Dec.	\$2,500	Continue to build synergies and share information.	Jan.-Dec.	\$10,000	Continue to build synergies and share information.	Jan.- Dec.	\$5,000	\$17,500
5. Support Trade & Environment Working Group (TEWG)	Continue supporting the TEWG. Outputs: Conduct regular conference calls, updating the TEWG on trade and environment-related activities. Host working group annual meeting.	Jan.- Dec.	\$10,000	Continue supporting TEWG. Outputs: Conduct regular conference calls, updating the TEWG on trade and environment-related activities. Host working group annual meeting.	Jan.-Dec.	\$10,000	Continue supporting TEWG. Outputs: Conduct regular conference calls, updating the TEWG on trade and environment-related activities. Host working group annual meeting.	Jan.- Dec.	\$10,000	\$30,000

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
Component B: Support information sharing between Canada and the United States and with Mexico on methodologies for conducting environmental reviews of trade agreements.										
1. Share experiences between Canada and the US and with Mexico, as appropriate	Canada and the US continue to share information and with Mexico, as appropriate Outputs: Informal exchanges help inform domestic reviews underway in the US and Canada, and work underway internationally in other fora. These exchanges also help inform the CEC's ongoing environmental assessment work.	Jan.-Dec.	\$0 (Parties)	Canada and the US continue to share information and with Mexico, as appropriate. Outputs: Informal exchanges help inform domestic reviews underway in the US and Canada, and work underway internationally in other fora. These exchanges also help inform the CEC's ongoing environmental assessment work.	Jan.-Dec.	\$0 (Parties)	Canada and the US continue to share information and with Mexico, as appropriate. Outputs: Informal exchanges help inform domestic reviews underway in the US and Canada, and work underway internationally in other fora. These exchanges also help inform the CEC's ongoing environmental assessment work.	Jan.-Dec.	\$0 (Parties)	\$0 (Parties)
2. Parties develop a viable approach for sharing information with and from the Secretariat on environmental assessment	Continue to share information among the NAAEC Parties and with other international organizations re: Canadian and US efforts to conduct and use the results of environmental assessments. Outputs: Improved environmental assessments of	Jan.-Dec.	\$0	Continue to share information among the NAAEC Parties and with other international organizations re: Canadian and US efforts to conduct and use the results of environmental assessments. Outputs: Improved environmental assessments of	Jan.-Dec.	\$0	Continue to share information among the NAAEC Parties and with other international organizations. Outputs: Improved environmental assessments of NAFTA by the CEC and the Parties. Better informed trade and environmental	Jan.-Dec.	\$0	\$0

Tasks	2007	Timing	Cost C\$	2008	Timing	Cost C\$	2009	Timing	Cost C\$	Total 3-Year
	NAFTA by the CEC and the Parties. Better informed trade and environmental policies in the three Parties.			NAFTA by the CEC and the Parties. Better informed trade and environmental policies in the three Parties.			policies in the three Parties.			
			Total 2006: \$140,000			Total 2007: \$200,000			Total 2008: \$135,000	Total \$475,000